

# Amanah Metaphor in Medical Waste Prevention Effects Environmental Cost Accounting

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## Abstract

This study aims to determine the application of environmental cost accounting in Islamic Hospitals which is framed in the concept of the metaphor of Amanah as an effort to prevent medical waste that can damage the environment. The object of this research is the Faisal Islamic Hospital in Makassar. This study is qualitative approach with a case study approach. The results showed that Faisal Islamic Hospital has maintained and maintained the environment in accordance with Standard Operating Procedures (SPO). Faisal Islamic Hospital has implemented environmental cost accounting which includes identification, recognition, measurement, presentation, and disclosure. The policies implemented by the hospital are a form of vertical accountability to Allah swt and horizontal accountability to humans and the environment. The theoretical and practical benefits of this research are as material for further research that can be developed by their respective ideas and creativity and can be used as material for hospital considerations regarding the application of Environmental Cost Accounting as a form of social responsibility towards the environment, especially in terms of hospital waste management.

**Keywords:** Environmental Cost Accounting, Medical Waste Management, Amanah Metaphor

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## 1. Introduction

The hospital is a service company that is indispensable in the survival of human life. Hospital is a health service institution that provides individual health services, comprehensively providing inpatient, outpatient, and emergency services. (Departemen Kesehatan, 2009). Hospitals in providing public health services certainly produce solid, liquid, and gaseous waste that comes from medical services and has the potential to pollute the environment and transmit diseases. (Rahno et al., 2015; Sukirman & Suciati, 2019). Law No. 32/2009 concerning the Protection of Environmental Management defines that waste is the residue or waste from a business or production activity. Waste from production activities produced by hospitals include solid waste, liquid waste, clinical, and there is also infectious waste containing toxic or B3 materials. (Ministry of Health, 2009). When the waste from hospital operations is not managed properly, then the waste can affect human health and environmental sustainability, so that the hospital has the potential to cause environmental pollution around the place of operation and result in disease transmission. (Mardikawati et al., 2014).

In accordance with Government Regulation No. 74/2001, B3 waste produced by hospitals needs to be managed to prevent or reduce the risk of B3 impacts on the environment, human health, and other

living creatures. (Sukirman & Suciati, 2019). Article 59 of law No. 32/2009 concerning Environmental Protection and Management explains that everyone who produces Hazardous and Toxic (B3) waste is obliged to manage the waste produced and in the case of everyone who is unable to manage waste by themselves, the management is left to other parties. Some of the obstacles that occur in the management of B3 waste from health care facilities today, among others, are the limited number of B3 waste management companies that already have permits from the Ministry of Environment and Forestry.

The Ministry of Environment and Forestry in September 2018 reported that 95 hospitals had licensed incinerators with a total capacity of 45 tons/day. An incinerator is a combustion furnace to treat solid waste, which converts solid material (garbage) into gas matter and ash (bottom ash and fly ash). While data from E-Monev, medical waste in September 2019 by the Directorate of Environmental Health of the Ministry of Health, there are 43% of hospitals whose medical waste treatment meets the standards, 83% of hospitals do waste sorting, and 96% of hospitals have environmental documents. On the other hand, some hospitals incinerators but are not operational because they are licensed. As for the treatment of liquid waste resulting from hospital operational activities, it is expected that each hospital has its own wastewater treatment facility such as a Waste Water Treatment Plant (IPAL) to facilitate and optimize hospital health efforts from contamination of medical waste. (Anam & Ramlah, 2020)

All hospitals will of course incur costs related to the management of their medical waste. With these costs, the hospital applies environmental accounting so that the costs resulting from the management of medical waste can be properly recorded and posted in the company's financial statements. (Debora & Ismail, 2013; Ibrahim & Souleiman, 2018). Environmental costs need to be reported separately based on their cost classification. This is done so that environmental cost reports can be used as information to evaluate the company's operational performance, especially those that have an impact on the environment (Anis et al., 2020). Some companies have incurred environmental-related costs, but environmental costs have not been grouped by category. As a result, environmental costs are hidden (Abdullah & Yuliana, 2018). The reason for the existence of companies that group environmental costs with those that do not group environmental costs all depend on the knowledge of costs by company managers (Astuti & Nugroho, 2016; Carroll & Lord, 2016; Sari et al., 2017). The importance of environmental accounting demands full awareness of companies, especially hospitals that have benefited from the environment (Burhany, 2014; Sakdiyah, 2018).

Environmental costs or environmental costs are classified into four categories, namely prevention costs, detection costs, internal failure costs, and external failure costs. (Hansen & Mowen, 2012). Of the four environmental cost classifications, the calculation of costs in handling waste requires a systematic and correct accounting treatment and also requires a method of recognizing, measuring, appraising, presenting, and accounting disclosures in a company. (Indrawati & Rini, 2018; Rakos & Antohe, 2014). Financial accounting standards in Indonesia do not require all companies to disclose environmental information. The company considers that the disclosure of costs related to the environment is still voluntary in the financial statements and depends on the company itself (Abdullah et al., 2020). The application of environmental accounting in hospital activities is the first step in solving these environmental problems. The application of environmental accounting encourages the hospital's ability to minimize the environmental problems it faces (Putri et al., 2020).

Faisal Islamic Hospital is a company engaged in the field of public health services. The services and operational activities of Faisal Islamic Hospital have the potential to generate waste. Seeing that the waste produced by hospitals is B3 waste that can harm the environment, it is very necessary to have good waste management. Faisal Islamic Hospital already has a Waste Water Management Installation (IPAL) so that it can facilitate hospitals in waste management and can prevent environmental damage. During the waste management process, some costs must be incurred by the Faisal Islamic Hospital to finance waste management activities which are the costs of preventing environmental pollution. Seeing the importance of waste management and environmental costs that occur in the waste management process, this study

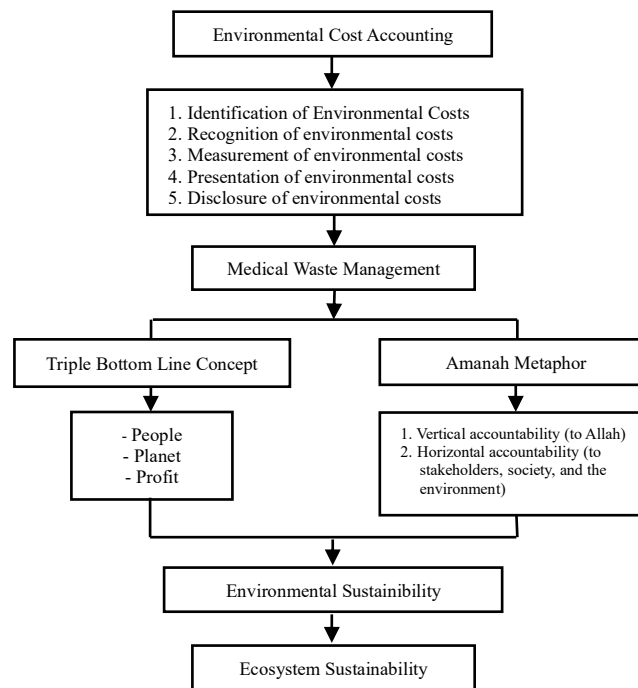
reveals the components of environmental costs as part of efforts to prevent medical waste. Given that the existence of a healthy environment is very important, it is natural for hospitals to be responsible for preserving the environment in which they operate so that the quality of the environment does not decrease. This study also reveals a comprehensive model of accountability, namely vertical accountability to God and horizontal accountability to humans and the environment.

The Amanah metaphor is a way of thinking and seeing that affects the way a person interprets and understands social reality (Triyuwono, 2000). Amanah in the economic context states that all resources belong to God and humans are someone who is given the mandate to spread the sacred mission assigned to them. The purpose of a company or organization in Islam is to spread mercy to all creatures. That goal is not limited to the life of the individual world, but also the life after this world. The goal to create a more humanist, emancipatory, transcendental, theological organization is interpreted as a metaphor for amanah. (Triyuwono, 2006). The Amanah metaphor provides fundamental implications for the concepts of management and accounting. This metaphor is derived from an "axiom" which says that basically, humans function as khalifatullah fil ardhi (God's representative on earth). The conclusion of the Amanah metaphor is the concept used to design the form, structure, and management of the organization where the organization is an instrument used by the caliph to carry out his noble duties on earth, namely providing welfare for all humans and the universe.

The term triple bottom line was first popularized by John Elkington (1997) in his book *Cannibal with Forks: The Triple Bottom Line of 21st Century Business*. This concept formulates that business continuity and company growth do not solely depend on operating profit (profit), but also real actions taken by the company towards the environment (planet) and justice (people). (Michael et al., 2019). Everything is done for the sake of creating sustainable development (sustainable development). (Aulia & Kartawijaya, 2013). The triple bottom line has a basic foundation that refers to three aspects, namely People, Planet, and Profit (Elkington, 1997). The Triple Bottom Line is an important element that must be considered by the company, by not only paying attention to the economic side but also the positive and negative impacts on society and the environment. The relationship between the three aspects of the Triple Bottom Line where profit is an additional income used to ensure the survival of the company, people are the people who are one of the supporting elements that determine the sustainability of the company, and the planet is the environment that has a cause-and-effect relationship with the company. (Michael et al., 2019). So it can be stated that the company must be able to balance the economy to provide benefits to the community and maintain the environmental balance of each of its activities

Recording of financing to manage the waste that is removed from the remaining production is allocated in certain stages, each stage requiring an accountable cost, and the recording stages can be carried out before the accounting period runs by the production process carried out by the company. (Aminah, 2014). The grouping in the environmental analysis stage as specified in the Statement of Financial Accounting Standards (PSAK) in 2015 explains that the first thing to do when they want to determine costs for managing costs for overcoming environmental pollution that may occur in the company's operational activities is to identify these negative impacts. Based on the classification of environmental costs by Hansen and Mowen (2009), environmental costs are divided into four categories, namely prevention costs, detection costs, internal failure costs, and external failure costs. If it has been identified, then it is recognized as an account or expense account when the benefits are received from the amount that has been spent on environmental financing. Technically, recognition means the official recording (journaling) of a quantity (amount of rupiah) of measurement results into the accounting system so that the amount of rupiah will affect an item and be reflected in a financial report. Measurement is more related to the problem of determining the amount of rupiah (cost) that is recorded. for the first time at the time of the transaction. Furthermore, at the presentation stage, it sets out ways to report elements or items in a set of financial statements so that the elements or items are sufficiently informative. The final step in the accounting process is the presentation of information in the form of a full set of financial statements. The

disclosure relates to the way of disclosure or explanation of informative things that are considered important and useful for users other than what can be stated through the main financial statements. (Suwardjono, 2005).



**Figure 1. Research Model**

Every company's operational activities will produce waste and this waste can have a negative impact which can cause pollution to the community and the surrounding environment if not managed properly. This study uses the triple bottom line concept expressed by Elkington in his book entitled *Cannibal with Forks: The Triple Bottom Line of 21st Century Bisnis* in 1997 which says that the triple bottom line consists of elements of people (companies that care about social and the surrounding environment), Planet (the company's ability to preserve nature/earth), and profit (the company seeks to increase profits for the company). Then framed in the concept of Amanah which is one of the characteristics of the Prophet. The concept of Amanah is closer so that all forms of decisions and actions taken can be harmonized with kaffah Islamic values. If it is then integrated with waste management problems, this concept wants to emphasize that the solution to these problems is carried out with an Islamic values approach. In general, the concept of this Amanah contains three important values, namely vertical accountability to Allah swt and horizontal accountability to humans, and accountability to institutions or institutions. In connection with the impact caused by the company, it is necessary to apply environmental cost accounting to identify, recognize, measure, present, and disclose the company's environmental costs by existing regulations. Therefore, the concept of Amanah is offered as a solution to restore the essence of social responsibility to the environment in the management of medical waste so that it is in accordance with kaffah Islamic values. Thus it will lead to environmental sustainability.

## 2. Research Design and Method

The type of research used is a qualitative research type, which describes aspects related to the object of research in depth (Sugiyono, 2012). This research was conducted at the Faisal Islamic Hospital Makassar. The type of approach used in this research is a case study approach. Case studies are included in descriptive analysis research, namely research that focuses on a particular case to be observed and analyzed carefully to completion. The case in question can be singular or plural, for example in the form

of individuals or groups. It is necessary to carry out an in-depth analysis of various factors related to certain cases so that an accurate conclusion is finally obtained (Gumanti et al., 2016). The type of data used in this study is subject data obtained through research respondents in the form of informants from the finance and environmental sanitation installations and documentary data. Informants are people who will provide information about the situation and condition of the research background. The informants were chosen because they were considered to have competence in knowing the operational activities at the Faisal Islamic Hospital Makassar.

The data collection technique used in this research is a field study, namely by conducting a survey (interview using a recording device) on an object directly as a research informant. Documents in this study are in the form of words and pictures that can answer research problems. The data were obtained through observation, interviews, internet searching, and library research, and were analyzed using a qualitative descriptive method, namely using the data obtained and then described thoroughly. The process of data analysis is carried out from data collection until the completion of the data collection process

### 3. Results and Discussion

#### *Result & Discussion*

##### Waste Management Concept at Faisal Islamic Hospital

The rapid growth of the healthcare industry in Indonesia makes a significant contribution to waste generation. In providing health services to the community, hospitals will directly produce waste and some of it is hazardous waste. Where the waste requires special handling before disposing of it into the environment. There are two forms of waste generated from the operational activities of the Faisal Islamic Hospital. This was stated by Mr. Risal Haruna as the Head of the Environmental Sanitation Installation that :

“Faisal Islamic Hospital in its operational activities produces two types of waste, namely liquid waste and solid waste. Now, if there is solid waste, there is a medical and non-medical waste”

Hospital waste generated from the operational activities of the Faisal Islamic Hospital in the form of liquid waste and solid waste, both medical and non-medical. The management of the waste is a diverse, especially medical waste because it is infectious. based on the results of the interview revealed by Mr. Risal Haruna as the head of the Environmental Sanitation Installation that:

“The liquid waste produced is managed by using a Waste Water Treatment Plant (WWTP)”.

In its management, there is such a thing as inlet, process, and outlet. All liquid that comes out of the place or room that produces liquid waste is called an inlet, then it is processed in the WWTP which has six holding tanks to filter and precipitate the dirt, after that the wastewater treatment process uses an anaerobic-aerobic biofilter." He further explained that:

“In terms of solid waste, solid waste consists of medical and non-medical waste. For medical solid waste management, we use incinerator machines in collaboration with third parties. We at Faisal Islamic Hospital do have an incinerator but it doesn't operate because we don't have an operational permit so we work tripartitely, namely working with PT Primanru Jaya, then PT Primanru Jaya is working with the medical waste destroyer at Kima 10. Because right now in south Sulawesi there is already an incinerator from the provincial environment in Kima 10. Now PT Primanru Jaya only transports it and then it is brought to Kima 10 to be destroyed. For non-medical solid waste, there are four stages of management, namely stockpiling, temporary storage, transportation to temporary storage

places (TPS), final collection, and transportation to Antang TPS and we have collaborated with the city government so that non-medical waste is transported every day by truck. and dumped at the TPS in Antang"

Based on the results of the interview, Faisal Islamic Hospital manages its liquid waste using the Wastewater Management Installation or IPAL.. Liquid waste that is distributed to the Waste Water Management Installation (IPAL) includes waste from the kitchen, treatment room/polyclinic, bathroom, and other units/installations in the hospital. The process of managing liquid waste at the Faisal Islamic Hospital uses an anaerobic-aerobic biofilter. Meanwhile, the management of solid medical waste at the Faisal Islamic Hospital involves a third party because the hospital does not yet have an incinerator machine operating permit. The hospital cooperates with PT Primanru Jaya, which is a company that collects and transports hazardous and toxic waste (B3 waste) which has a permit from the Ministry of Environment and Forestry and the Ministry of Transportation. In contrast to medical solid waste management, non-medical waste management at Faisal Islamic Hospital consists of a series of stages, namely the stage of stockpiling, temporary storage, transportation to TPS, collection, and final transportation. The temporary storage place for medical waste has been separated from the non-medical waste and the final transportation for non-medical waste is brought to the TPS in Antang which is transported by the Makassar City Sanitation Service officer.

Hospital medical and non-medical waste management is really needed for the comfort and cleanliness of the community environment and the hospital itself, to prevent health problems. Waste management is an effort to reduce the volume of hazardous waste generated by reducing waste at the source. At Faisal Islamic Hospital, reducing waste at the source is the first effort implemented, namely the presence of a Waste Water Management Installation (IPAL) to prevent and reduce waste generated from its operational activities. Reduction of waste at the source is an effort to reduce the volume of hazardous waste that will come out of the environment.

#### Environmental Cost Accounting in Faisal Islamic Hospital Identification of Hospital Environmental Costs

Faisal Islamic Hospital identifies all medical activities that have the potential to cause environmental impacts and allocates costs for environmental management. This was stated by Mrs. Lely as the head of accounting and verification that:

"Regarding the costs incurred by hospitals related to waste management, there are several costs such as the cost of WWTP or wastewater management itself, the cost of drainage work, the cost of retribution for waste, the cost of transporting the medical waste, the cost of cleaning services, and the cost of electricity. But the electricity costs here are accumulated into the overall electricity costs in this hospital because we can not calculate the electricity costs separately."

Mr. Risal Haruna as the Head of the Environmental Sanitation Installation also said that:

"We as the hospital have identified the costs incurred for waste management, including the cost of transporting B3 medical waste by a third party company every month because the hospital has not yet obtained an incinerator machine permit, in addition, there is also a laboratory test cost for checking the quality of wastewater, maintenance costs for tools, systems, equipment, and WWTP channels, then there are electricity costs, but if the electricity costs are accumulated into the overall electricity cost".



From the results of the interview, the Faisal Islamic Hospital has identified the costs incurred in managing its waste, but the hospital has not classified it specifically because the identification of costs is still based on the type of activity.

#### Hospital Environment Cost Recognition

Elements of costs that have been identified will be recognized as an account and recognized as costs when the benefits have been received from the amount that has been spent on environmental financing. At the time of transporting medical waste at Faisal Islamic Hospital by a third party PT Primanru Jaya, the hospital recognized the cost of transporting the waste as debt. After the hospital obtains evidence that the medical waste has been managed and destroyed by the relevant parties, then the waste cost will be paid through the bank. This means that the Faisal Islamic Hospital recognizes the costs after getting the benefits from the waste management process. The cost recognition method used by Faisal Islamic Hospital is called the Accrual Basis.

#### Hospital Environmental Cost Measurement

Measurement is more related to the problem of determining the amount of rupiah that is recorded at the time of the transaction. Hospitals in measuring costs related to waste management are based on per kilogram of waste produced and then processed using monetary units, by determining the amount of rupiah to be paid. Faisal Islamic Hospital in measuring the costs incurred for waste management using monetary units that refer to the results of the realization of the previous period's budget and the costs incurred. The Faisal Islamic Hospital assumes that the realization of the previous period's budget is a valid lesson and experience to be used as a reference in measuring the value and amount of costs that will be allocated related to environmental management in the next period. The Basic Framework of PSAK 2015 paragraph 101, explains that the measurement basis that is usually used by companies in preparing financial statements is historical cost. However, until now there is no standard measurement of environmental costs in terms of waste management costs, so the measurement of environmental costs is more based on policies implemented and determined by hospitals.

From table 1. related to environmental costs, the next researcher tries to classify the environmental cost components of the Makassar Faisal Islamic Hospital based on Hansen and Mowen's theory as shown in table 2 :

**Table 1. Costs Related to Medical Waste Management at Faisal Islamic Hospital**

Liquid waste	solid waste
<ul style="list-style-type: none"> <li>• st of checking the quality of chemical wastewater</li> <li>• WWTP channel maintenance costs</li> <li>• WWTP rehabilitation costs</li> <li>• Maintenance costs for wastewater pipe installation</li> <li>• Maintenance costs for control and settling tanks</li> <li>• Cost of fish pond maintenance (indicator tub)</li> <li>• Cost of cleaning equipment</li> <li>• Miscellaneous expense</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of large plastic bags</li> <li>• Garbage trolley cost</li> <li>• Trash Cost</li> <li>• TPS maintenance costs</li> <li>• The cost of transporting medical and non-medical waste by third parties</li> <li>• Miscellaneous expense</li> </ul>

**Table 2. Classification of Costs according to Hansen and Mowen**

No.	Hansen and Mowen Theory	Islamic Faisal Hospital Makassar
1.	Prevention costs, namely prevention costs are costs for activities carried out to prevent the production of waste or waste that can damage the environment	<ul style="list-style-type: none"> <li>- IPAL line maintenance costs</li> <li>- Maintenance costs for wastewater pipe installations</li> <li>- Maintenance costs for control and settling tanks bak</li> <li>- Cost of fish pond maintenance (indicator tub)</li> <li>- Miscellaneous expense</li> </ul>
2.	Detection costs are costs for activities carried out to determine that products, processes, and other activities in the company have met applicable environmental standards or not.	<ul style="list-style-type: none"> <li>- Cost of checking the quality of chemical wastewater</li> <li>- The cost of transporting medical and non-medical waste by third parties</li> </ul>
3.	Internal failure costs are costs for activities carried out because they produce waste and waste, but are not disposed of to the outside environment.	<ul style="list-style-type: none"> <li>- Big plastic bag cost</li> <li>- Garbage trolley cost</li> <li>- Trash cost</li> <li>- TPS maintenance costs</li> <li>- WWTP rehabilitation costs</li> </ul>
4.	External failure costs are costs for activities carried out after releasing waste or waste into the environment	There have been no costs incurred by the Faisal Islamic Hospital regarding the cost of its external failure

#### Hospital Environment Cost Presentation

Faisal Islamic Hospital presents environmental costs along with costs associated with managing its waste. Because Faisal Islamic Hospital does not yet have a special report on environmental cost reports, the presentation is carried out together as sub-sub-operational costs. That way, it will make it easier for readers of financial statements to understand and compare the performance achieved. Therefore, the hospital does need to create a special account related to environmental costs in its financial statements, make it easier to track any costs incurred, and later it is hoped that the readers or users of financial statements, both internal and external parties, believe that the hospital has managed its waste. well as indicated by the existence of special costs related to the cost of waste management.

#### Hospital Environment Cost Disclosure

Disclosure activities are a form of perfection in the accounting process. Disclosure has the meaning of not covering or hiding. Faisal Islamic Hospital discloses costs related to waste management in the hospital's operational report. Although the disclosure of environmental costs is not yet specific or does not have a special account and report, it is hoped that it will be useful for knowing the transactions that occur during hospital waste management activities. With the disclosure by the hospital, it can increase the confidence that the Faisal Islamic Hospital has managed its waste properly which is indicated by the special costs related to waste management. That way it will be easier to know the performance and responsibility of the hospital to the environment.

#### Environmental Cost Accounting Based on a Amanah Metaphor to Prevent Medical Waste

The environment is one of the most important parts of this earth. The environment is very important for the survival of all creatures on this earth (Sela et al., 2020). In addition, an environment full of trees and plants can also reduce the occurrence of natural disasters, therefore we must protect, maintain, and preserve the environment so that the environmental ecosystem is maintained and protected from disasters and damage that can harm many parties. (Michael et al., 2019). Given that the existence of a healthy environment is very important, it is natural for us as humans to be responsible for preserving the environment so that the quality of the environment does not decrease. Moreover, we as Muslims have been given a mandate by Allah swt to protect and preserve the environment, as Allah swt has explained Q.S. Al-Baqarah 2:30 which means:



Remember when your Lord said to the Angels: "Indeed I want to make a caliph on earth." They said: "Why do you want to make (the caliph) on earth a person who will do mischief on it and shed blood, while we always glorify you by praising you and purifying you?" God said: "Verily I know what you do not know."

Q.S. Al-Baqarah 2:30 explains that Allah swt created man and placed him on earth as a caliph who has the mandate to protect nature and its contents and not destroy it. Balance and harmony must be maintained so as not to be damaged (Harahap, 2015). From the verse, it is known that humans were created by Allah swt as caliphs on this earth who were given the Amanah and mandate by Allah swt to protect and maintain the universe and not damage the creation in it. This mandate must be carried out as a form of worship to Allah swt because Allah swt has given favors and life to all creatures on this earth. (Masruri, 2014). Faisal Islamic Hospital is a public health service that is a source of waste generation so that Faisal Islamic Hospital has the mandate to manage its waste properly so as not to damage the environment.

Faisal Islamic Hospital is a public health service company located in the middle of a densely populated residential area and has the potential to produce waste that may be harmful to the community and the environment where the hospital operates. Environmental pollution and production waste are one of the negative impacts of hospital operational activities, therefore hospitals need to manage the waste produced properly so that the waste does not damage the environment (Rimbano, 2019). Hospitals must realize that the importance of maintaining and maintaining the environment as a form of hospital responsibility vertically to Allah SWT who created the entire universe and its contents and as a form of responsibility to fellow living creatures, be it humans/society, animals, and the environment. Regarding the responsibility imposed on hospitals for the emergence of environmental problems from their operational activities, creating a healthy environment should be one of the missions of organizations engaged in health. (Aminah & Noviani, 2014). In carrying out the waste management process, the hospital will incur costs related to the costs of managing medical and non-medical waste. With these costs, hospitals need to implement environmental accounting as a control of the hospital's responsibility for the environment (Agustina, 2010). When the company wants to improve its environmental performance, accounting must be involved in it to carry out the functions of collecting, calculating, analyzing, and reporting environmental costs and other transactions related to the environment so that it can be used by management to manage environmental aspects. (Hasiara et al., 2018).

The application of environmental cost accounting aims to find out how much environmental costs are incurred in managing the waste by using an accounting system so that it can minimize the costs incurred and can control the company's responsibility in protecting the surrounding environment. (Ibrahim & Souleiman, 2018; Khoirina, 2016). Environmental cost accounting needs to be reported separately based on the cost classification. This is done so that environmental cost reports can be used as information to evaluate the company's operational performance, especially those that have an impact on the environment (Winarto & Rachmawati, 2020). The allocation of waste costs to products or production processes can provide benefits for the motivation of managers or their subordinates to reduce pollution as a result of the production process. If it is related to the concept of Amanah and refers to the results of interviews by the head of the Environmental Sanitation Installation that the environmental cost accounting at the Faisal Islamic Hospital is following the Standard Operating Procedures (SPO) for medical and non-medical waste management on the sixth point, namely weighing the waste and recording it on the card. controls that have been provided. With the costs incurred related to waste management, Faisal Islamic Hospital has also implemented environmental accounting by identifying, accounting, measuring, presenting, and disclosing environmental costs. Until now there is no standard rule regarding environmental cost accounting treatment, so its application is still based on the policies implemented by the hospital. As explained in Q.S. Al-Anfal 8:27 which means:

"O you who believe, do not betray Allah and the Messenger (Muhammad) and (also) do

not betray the mandates entrusted to you, while you know.”

Q.S. Al-Anfal 8:27 explains that Allah swt commands all mankind to carry out the mandate that has been given as a form of accountability to Allah swt because in Islam everything entrusted to humans is a amanah. Humans were created as caliphs on this earth who carry out the mandate from Allah swt to manage the earth including its contents and are responsible according to their position as caliphs, so this mandate must be fulfilled.

Based on table 3, it can be seen that Faisal Islamic Hospital has been responsible for the environment in which they operate. Hospital waste management is also in accordance with the applicable Standard Operating Procedures (SPO). Faisal Islamic Hospital uses a Waste Water Management Installation (IPAL) to manage liquid waste and a third party PT Primanru Jaya to manage solid waste because Faisal Hospital does not yet have an incinerator machine operating permit. Hospitals also spend money to maximize their waste management so that the hospital environment is not damaged and causes environmental pollution due to the waste produced. With the costs incurred, the Faisal Islamic Hospital also applies environmental accounting by identifying, recognizing, measuring, presenting, and disclosing environmental costs. However, hospitals have not classified environmental costs based on the type of cost, because until now there is no standard rule regarding environmental cost accounting treatment, so its application is still based on the policies implemented by the hospital.

**Table 3. Integration of the Metaphor of Amanah Concept in Environmental Cost Accounting**

No.	Amanah Metaphor Concept	Realization on Environmental Cost Accounting
1.	Vertical accountability	<ul style="list-style-type: none"> <li>Faisal Islamic Hospital provides WWTP to manage liquid waste. The costs incurred are: <ul style="list-style-type: none"> <li>- WWTP channel maintenance costs</li> <li>- WWTP rehabilitation costs</li> <li>- Maintenance costs for wastewater pipe installations</li> <li>- Maintenance costs for control and deposition basins</li> <li>- Cost of fish pond maintenance (indicator tub)</li> </ul> </li> <li>Faisal Islamic Hospital cooperates with a third party PT Primanru Jaya to manage solid waste. The costs incurred: <ul style="list-style-type: none"> <li>- The cost of transporting medical and non-medical waste by third parties</li> </ul> </li> </ul>
2.	Horizontal accountability	<p>Faisal Islamic Hospital does waste treatment to maintain good relations with the community and the environment. In addition, to protect the environment, waste treatment is carried out under hospital SOPs. The costs incurred:</p> <ul style="list-style-type: none"> <li>- Cleaning equipment costs</li> <li>- The cost of a large plastic bag</li> <li>- Garbage trolley cost</li> <li>- Trash cost</li> <li>- TPS maintenance costs</li> <li>- Miscellaneous expense</li> </ul>

#### 4. Conclusions

Faisal Islamic Hospital manages its waste by using the concept of reduction at the source which is an effort to reduce the volume, concentration, toxicity, and level of danger of waste that will come out into the environment. The existence of a Waste Water Management Installation (IPAL) machine to manage liquid waste, which will prevent and reduce the occurrence of waste that comes out of the production process or operational activities. Faisal Islamic Hospital has carried out its medical waste management properly based on applicable regulations. Faisal Islamic Hospital has carried out the stages of the

accounting treatment for the cost of managing the waste produced properly. This is evidenced by the identification, recognition, measurement, presentation, and disclosure of environmental costs carried out by the accounting and verification section. Faisal Islamic Hospital has carried out waste management by the Hospital's Standard Operating Procedures and has carried out the mandate of vertical accountability to Allah swt and horizontal accountability to humans and the environment. This is evidenced by the cost of WWTPs, cleaning equipment costs, and the cost of transporting solid medical waste by third parties because Faisal Hospital does not yet have an incinerator machine operating permit.

The application of environmental cost accounting at the Faisal Islamic Hospital is still based on the policies implemented by the hospital because until now there are no standard rules regarding environmental cost accounting treatment. It is hoped that further researchers will be able to find rules or standards that regulate accounting treatment and the allocation of costs related to waste management so that they can be compared with existing conditions. This is an effort to improve the quality of the environment and responsibility for the environment around the hospital. Hospitals must realize the importance of maintaining and maintaining the environment as a form of vertical hospital responsibility to Allah swt who created the entire universe and its contents and as a form of responsibility to fellow living creatures, be it humans/society, animals, and the environment.

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