

**IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT ACCOUNTING AS A
FORM OF CORPORATE SOCIAL RESPONSIBILITY AT PKU MUHAMMADIYAH
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rigelnurul@unisayogya.ac.id**ABSTRACT**

Environmental Management Accounting is the responsibility of a company to the environment, a record of environmental costs as the company's responsibility to the environment around the company. The purpose of this study was to analyze the application and disclosure of environmental accounting in the waste management of PKU Muhammadiyah Nanggulan Hospital. The research method used in this research is descriptive qualitative research. Based on the results of research conducted, PKU Muhammadiyah Nanggulan Hospital has not implemented environmental management accounting optimally. Environmental activities carried out by PKU Muhammadiyah Nanggulan Hospital are waste management activities generated from hospital operations. PKU Muhammadiyah Nanggulan Hospital has not implemented environmental management accounting in theory, but has implemented it in practice. PKU Muhammadiyah Nanggulan Hospital does not have a special budget for environmental costs, but the cost budget is recorded as a whole in the Hospital Budget Realization Report.

Keywords:

Environmental management accounting, Hospital Waste Treatment, Corporate Social Responsibility

INTRODUCTION

The issue of environmental pollution is an international issue included in the issue of Sustainable Development Goals (SDGs) which is a world problem that occurs in almost all countries, including developing countries including Indonesia. Issues related to the environment such as eco-efficiency, global warming and industrial activities that have a direct impact on the Company's environment both internally and externally (Silaban, D.A, 2019) [1]. One of the negative externality impacts of business and industrial activities is the impact of waste generated, especially from the hospital industry. Every hospital operational activity certainly produces production waste and has a major impact on the community environment (Agustia, D) [2]. Waste is defined as the residue of a business or production activity while pollution is defined as the entry or inclusion of living things, substances, energy, or other components into the environment by human activities so that it exceeds the established environmental quality standards (Law No. 32 of 2009) [3].

Data from the Ministry of National Development Planning/Bappenas shows that there is an increase in the use of Personal Protective Equipment (PPE) in 2020-2021 to 3-4 times the previous level. There are several cases of medical waste in landfills found including syringes, medicine bottles, transfusion tubes, infectious plastic wrap, transparent plastic used for medicine medical gloves, PPE, hospital notes (Maruapey, R. 2022) [4].

The problem of managing hazardous and toxic waste in hospitals in Yogyakarta occurred because the third party's license was revoked because it did not carry out the procedure properly and was hampered by problems with permits from the central government (detiknews, 2018) [5]. Even in Yogyakarta, B3 waste is produced around 4 tons every day [6]. The case that occurred in this incident could occur because the hospital's waste treatment process was not optimal and had not implemented the Green Hospital concept where one of the technical steps was waste management.

If hospital waste is not managed properly, it will damage the environment, especially hazardous and toxic waste (B3 waste). Hospitals are required to manage and process their waste before disposal. If not managed properly, it will damage the environment, cause air and water pollution, disrupt ecosystems and biota in water. Healthcare waste management requires increased attention and diligence to avoid adverse health

outcomes associated with poor practices, including exposure to agents and infectious (Yogyakarta Health Office, 2023) [7].

The underlying concept in handling environmental problems is Corporate Social Responsibility (CSR) which leads to environmental protection. CSR as a form of corporate responsibility to the environment as a form of company to improve community relations and the environment and environmental protection, Environmental protection has a focus on sustainable natural resource use solutions to reduce the Company's impact on the environment. All applications of environmental protection incur costs called Environmental Cost Accounting. Accounting as an information provider tool is required to be responsive to changes in environmental issues. Environmental accounting regarding is defined as the prevention, reduction and or avoidance of impacts on the environment, starting from the remediation of events that cause disasters for these activities. Environmental management accounting involves many things such as cost accounting, life cycle costing, strategic planning for environmental management and benefit assessment [8]. Classification of environmental costs according to Hansen & Mowen (2009) [9], namely: environmental prevention costs, environmental detection costs, environmental internal failure costs, environmental external failure costs by calculating them in the company's annual financial statements with the aim of reducing the environmental impact of waste generated.

Research on the implementation of environmental accounting has not been widely carried out in hospitals, so far research has been carried out in manufacturing industry companies. Some previous research as a reference in research conducted by Kasmawati, Wulandari F., Ahmad S, Bahri, S. (2021) [10], examines the Implementation of Environmental Management Accounting in Companies in PT Kawasan Industri Makassar (KIMA) with a qualitative paradigm method with an interpretive approach to companies in the Makassar Industrial Estate. The results showed that environmental accounting or CSR activities in companies in PT KIMA, especially PT Wijaya Karya Beton and PT Anugrah Cemerlang Indonesia, have generally fulfilled the theory or concept of the Triple Bottom Line which includes three main elements, namely, profit, people and planet. The economic responsibility (profit) of both companies can be seen in the products produced from their business operations. Research conducted by Franciska, MR, Sondakh, JJ, Tirayoh, ZV. (2019) [11] examining the application of environmental cost accounting at PT Royal Coconut Airmadidi using qualitative methods shows that the Application of Environmental Cost Accounting at PT Royal Coconut Airmadidi in terms of Submission, Assessment, Submission, and Disclosure of Environmental Accounting is the same as existing Financial Accounting Standards.

However, the company has not made a special financial report on environmental cost reports. Research conducted by Maruapey, R (2022) on the application of environmental and social accounting at the Sele Be Solu Regional General Hospital, Sorong City, West Papua with this study aims to determine the suitability of waste treatment at Sele Be Solu Regional General Hospital, Sorong City with Permenkes No. 18 of 2020 and how the suitability of environmental cost reporting with Government Accounting Standards (SAP). The results found are that Sele Be Solu Hospital in its waste treatment procedures is in accordance with Permenkes No. 18 of 2020, and in its financial reporting is in accordance with PSAP in 2021 but there is a discrepancy in identifying costs related to environmental activities with PSAP No. 1 of 2021 paragraph 27 and the disclosure is not in accordance with PSAP in 2021.

The greater impact of the company's activities also affects environmental issues and nature conservation. Not much different from social accounting, environmental accounting also tries to highlight social aspects, and nature conservation as a form of social responsibility. The formulation of problems and objectives in this study is to analyze the application of environmental management accounting as a form of Corporate Social Responsibility at PKU Muhammadiyah Nanggulan Hospital. The research themes that have been produced by the research team so far are related to hospital business processes, hospital financial management, hospital unit costs, and hospital control systems. In this study, researchers are interested in examining green accounting and environmental cost management. The research team leader's field of expertise is accounting in the field of hospitals and government while the research team members have financial management expertise. The results of this research can later be used as recommendations for the management of environmental management accounting at PKU Muhammadiyah Nanggulan Hospital. Problem Formulation

- 1) How is Environmental Management Accounting implemented at PKU Muhammadiyah Nanggulan Hospital?
- 2) How is Corporate Social Responsibility implemented in PKU Muhammadiyah Nanggulan Hospital?

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OBJECTIVES

The purpose of this research is to analyze the application of Environmental Management Accounting in PKU Muhammadiyah Nanggulan Hospital as a form of CSR in PKU Muhammadiyah Nanggulan. The research themes that have been produced by the research team so far are related to hospital business processes, hospital financial management, hospital unit costs, and hospital control systems. In this study, researchers are interested in examining green accounting and environmental cost management. The research team leader's field of expertise is accounting in the field of hospitals and government while the research team members have financial management expertise. The results of this research can later be used as recommendations for the management of environmental management accounting at PKU Muhammadiyah Nanggulan Hospital.

METHODOLOGY

This type of research is qualitative research with a descriptive approach. Descriptive research describes the respondent's opinion as it is in accordance with the research question and then analyzed with the words behind the respondent behaving like that, reduced, triangulated, concluded and verified (Husaini and Purnomo, 2009) [11]. According to Moleong (2022) [12] qualitative research is research that intends to understand phenomena and naturalistic about what is experienced by research subjects, for example perception behavior, motivation, action and others. Qualitative research is research that intends to understand phenomena and naturalistic about what is experienced by research subjects, for example perception behavior, motivation, action and others, holistically (whole) by means of descriptions in the form of words and language in a special natural context by utilizing various natural methods. The object of research in this study is PKU Muhammadiyah Nanggulan Hospital Yogyakarta. Data collection techniques in this study were carried out through observation, interviews and documentation. To get accurate and precise data, researchers will conduct in-depth direct interviews with informants who have competence and in accordance with the data needs related to the implementation of environmental management accounting management at PKU Muhammadiyah Nanggulan Hospital. This hospital has maximum facilities and services to the community so that the waste produced is not small and has a social impact on the waste produced by the hospital. The types and sources of data in this study are subject data in the form of respondents' opinions and documentary data in the form of financial reports. While the source of data in research is the subject where the data is obtained. This study uses primary data sources and secondary data sources obtained by various data collection methods, as follows:

Primary data, according to Sekaran and Bougie (2017) [12], primary data is data collected for research from the actual place where the event occurred. In this study, primary data is obtained from research subjects by direct observation and interviews with policy makers, waste management units and accounting departments that produce interview data. In addition, other primary data are observation notes, documentation in the form of pictures taken from the research results. 2. Secondary data is data obtained from the literature by looking for a reference framework and theoretical basis both in odors, regulations, and other relevant sources. According to Sekaran and Bougie, secondary data is data obtained through existing sources, Secondary data used in this study include: a. Hospital profile data and hospital business processes b. Data on the types of hospital medical waste and the management of these wastes c. Hospital financial reports. Hospital financial reports Data analysis is the process of systematically searching and compiling data obtained through interviews, field notes, breaking it down into units, synthesizing, arranging into patterns, choosing which ones are important, choosing which ones to study and making conclusions so that they are easily understood by oneself and others (Sugiyono, 2014) [13]. The flow of activities that need to be done according to Gunawan (2013) [14] in analyzing data, among others:

1. Data reduction, data reduction includes summarizing activities, looking for key things, focusing on important things and looking for patterns and themes. Data reduction will provide a clearer picture and facilitate the data collection process. Data reduction carried out by researchers is after researchers obtain data objectively in accordance with the results and interviews and documentation (observation) at PKU Muhammadiyah Nanggulan Hospital. From the results of interviews and observations obtained sourced from policy makers, waste management units, and accounting units, then the data is reviewed and sorted out the data needed after the focus of the research, after which a summary is made of each interview and documentation (observation). From the results of the summary, the following reduction was carried out: a) Selecting data that is in accordance with the problem under study b) Categorizing data in several groups of data in similar units c) Making data codes according to the data groups that have been made previously the above activities can be carried out using a computer to make it easier for researchers to provide a clear picture of the results of observations on the object under study.

2. Exposure of data, data exposure is a collection of information that is arranged to allow drawing conclusions and taking action, the data will be presented in the form of a network matrix and description as support. The purpose of presenting data is to facilitate understanding of the situation that occurs and planning the next step, the research presents data from the results of research from the initial stage, namely data reduction from interviews and documentation, after obtaining the results of reducing the data, the researcher has obtained a clear picture of the results of interviews and documentation then poured into descriptions, tables and so on according to research needs. Conclusions and verification, conclusions made at the beginning are temporary conclusions that can change if the evidence found is not valid at the next data collection stage. If the evidence is valid and there is supporting and consistent evidence during field research and data collection, then the conclusion is a credible conclusion. Data verification can be done with decisions based on data reduction activities and data exposure which is the answer to the problems raised in the study according to research needs.
3. Conclusions and verification, conclusions made at the beginning are temporary conclusions that can change if the evidence found is not valid at the next stage of data collection. If the evidence is valid and there is supporting and consistent evidence during field research and data collection, then the conclusion is a credible conclusion. Data verification can be done with decisions based on data reduction activities and data exposure which is the answer to the problems raised in the research.

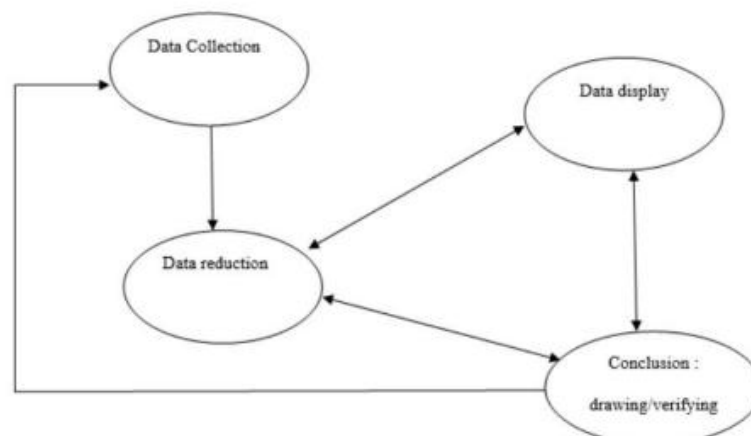


Figure 1: Research flow diagram

The data validity test in the study used triangulation techniques. Triangulation is a test conducted to check the validity of data by utilizing other things outside the data to check as a comparison to the data (Maleong, 2012) [15]. The triangulation used by researchers in research is source triangulation, because in this study the source of information obtained through several parties and the informants chosen are not the same function, so the researchers used source triangulation. The conceptual framework of the research conducted at Muhammadiyah Nanggulan Hospital was designed in such a way by the research team by categorizing hospital waste into medical waste and non-medical waste. Medical waste is generated from the service sector while non-medical waste is generated from the administrative and financial sectors.

RESULTS AND DISCUSSION

General Description of PKU Muhammadiyah Nanggulan Hospital

PKU Muhammadiyah Nanggulan General Hospital is one of the health care institutions located in the northern part of Kulon Progo. The establishment of RSU PKU Muhammadiyah Nanggulan was based on the initiative of the Muhammadiyah Nanggulan Branch Committee which was very concerned about the health care needs of the community. PKU Muhammadiyah Nanggulan General Hospital is owned by the Muhammadiyah Association and has obtained an operating license as a class D general hospital based on Decree number 445/03/VI/2015. ES PKU Muhammadiyah Nanggulan has a Vision and Mission, namely

Vision: Become an Islamic, Superior, Trusted and Professional Hospital.

Mission:

1. Developing human resources who have a strong commitment, professional abilities and Islamic morals.
2. Improve quality health services and infrastructure in accordance with Hospital Accreditation Standards
3. Providing health services in accordance with the demands of the Quran and the Sunnah of the Apostle
4. Carrying out the mandate of the association in developing the da'wah of amar ma'ruf nahi munkar.

Destination

1. Providing disease healing and health rehabilitation services
2. Implementing health improvement and disease prevention efforts
3. Carry out education and training for the community both inside and outside the Hospital
4. Developing human resources who have strong commitment, professional skills and Islamic morals.
5. Continuous development and advancement of the institution and employees

The organizational structure of RS PLU Muhammadiyah Nanggulan is as follows:

Organizational Structure of PKU Muhammadiyah Nanggulan Hospital

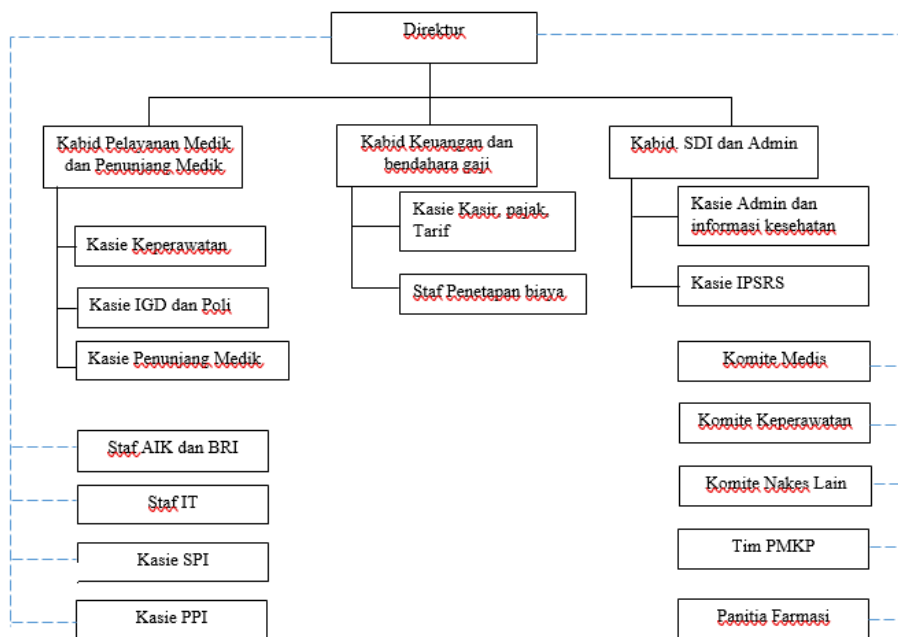


Figure 2. Organizational structure of PKU Muhammadiyah Nanggulan Hospital

Waste management activities carried out by PKU Muhammadiyah Nanggulan Hospital. There are two types of waste, both medical and non-medical. Medical waste is managed by PT Artama Sentosa Indonesia. Medical waste collection is carried out once a week with an average waste weight of 50-60 kilograms. Medical waste is in the form of used infusion devices, infusion syringes, drug packs, gloves, and other solid waste that cannot be disposed of in ordinary trash. Solid waste generated before being processed is separated according to the type of waste. Meanwhile, liquid waste is processed in the Waste Water Management Plant (WWTP). Waste management is carried out in several stages according to the type of waste. 1). The stages of infectious and non-infectious solid waste management are collection, sorting, and transportation. 2). Stages of liquid waste management This liquid waste is managed through the Wastewater Management Installation (WWTP), this waste management process starts from the collection stage, where every liquid waste originating from rooms in the Hospital will be accommodated in the control tub, then flowed through the pipe to the reservoir and then

flowed into the *biofilter* tube which will then be managed in the WWTP through several processes and testing according to applicable quality standards. Liquid waste inspection is carried out at the Kulonprogo Health Laboratory every three months.



Figure 3 Liquid and Solid Waste Containers PKU Muhammadiyah Nanggulan

Based on the results of the research conducted, PKU Muhammadiyah Nanggulan Hospital has not implemented environmental management accounting optimally. These accounting stages include identification, recognition, measurement, and disclosure. The following are the stages of environmental accounting treatment of PKU Muhammadiyah Nanggulan Hospital which are compared with generally accepted theories and principles.

1. *Identification*

- a. Preventive costs. Prevention costs consist of employee training, product planning and equipment selection. In 2023 PKU Muhammadiyah Nanggulan Hospital did not issue environmental prevention costs, seen from the 2023 Budget Realization Report regarding expenditures for courses, training, socialization and technical guidance the cost was Rp.0.00.
 - b. Environmental detection costs. Environmental detection costs consist of laboratory test costs, waste disposal costs and waste collection. The environmental detection costs incurred by PKU Muhammadiyah Nanggulan Hospital for sampling the quality of wastewater amounted to Rp.30,206,314. These costs are included in the costs grouped into WWTP costs.
 - c. Internal failure cost. Internal environmental failure costs consist of waste management costs, including costs incurred for salaries for staff, and maintenance costs for waste treatment plants. The total cost of internal environmental failure costs incurred by PKU Muhammadiyah Nanggulan Hospital amounted to Rp.20,400,000 The cost is all costs incurred for salaries for waste management and hospital environmental cleanliness in 2023.
 - d. External failure cost. The external failure cost of PKU Muhammadiyah Nanggulan Hospital is the cost of transporting infectious waste transported by PT Artama Sentosa Indonesia. The transportation fee is IDR 25,000/kilogram.
2. *Recognition*. Based on the research results, PKU Muhammadiyah Nanggulan Hospital recognizes that it has provided costs for waste management even though cash has not been issued. Based on the notes on the Hospital's budget plan, environmental costs are recorded as package or delivery service expenditure, labor service expenditure and measurement service expenditure in the PKU Muhammadiyah Nanggulan Hospital budget plan.
 3. *Measurement*. Based on the results of observations, PKU Muhammadiyah Nanggulan Hospital in measuring and assessing costs incurred uses rupiah monetary units with reference to the realization of costs in the previous period and at the cost incurred. PKU Muhammadiyah Nanggulan Hospital has a waste management tool, namely the Waste Water Management Installation (WWTP) which is a fixed asset.
 4. *Presentation*. Based on the results of the researcher's observations, PKU Muhammadiyah Nanggulan Hospital on the presentation of environmental costs, presents environmental costs together with the costs of package or shipping expenditures, expenditures for labor services and expenditures for carving services in the budget plan report. There is no detailed presentation related to the waste management of PKU Muhammadiyah Nanggulan Hospital.
 5. *Disclosure*. Based on the researcher's observations, the disclosure of environmental costs PKU Muhammadiyah Nanggulan Hospital does not yet have a special account or special report on environmental costs related to hospital waste management.

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PKU Muhammadiyah Nanggulan Hospital issued a budget for costs related to waste management. The budget is recorded in the Hospital Budget Realization Report (LRA) in 2022. The budget owned by the PKU Muhammadiyah Nanggulan Hospital environment waste management is Rp145,000,000, then the costs that have been incurred or realized related to waste management are Rp 127,500,000, so it can be seen that the costs incurred do not exceed the amount of budget provided. The difference between the budget and the realization is Rp.17,500,000.

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CONCLUSION

PKU Muhammadiyah Nanggulan Hospital issued a budget for costs related to waste management. The budget is recorded in the Hospital's Budget Realization Report (LRA) in 2022. The budget owned by the Asy-syifa West Sumbawa Regional General Hospital related to waste management is RP.145,000,000, then the costs that have been incurred or realized related to waste management are Rp.127,500,000, it can be seen that the costs incurred do not exceed the amount of the budget provided. The difference between the budget and the realization amounted to .17,500,000.

PKU Muhammadiyah Nanggulan Hospital has not implemented environmental accounting in theory, but has implemented it in practice. Because based on the results of observations and research that has been carried out, there is no special treatment for environmental cost reporting carried out by the Asy-syifa Regional General Hospital of West Sumbawa. PKU Muhammadiyah Nanggulan Hospital does not have a special environmental cost budget, but the cost budget is recorded as a whole in the 's budget realization report. The costs incurred did not exceed the budget provided, the difference between the budget and the realization amounted to Rp. 36,373,013.

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