



ANALYSIS OF IMPLEMENTATION AND REPORTING OF ENVIRONMENTAL COST ACCOUNTING AT PT. SEMENT PUGER JAYA RAYA SENTOSA

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ABSTRACT

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Environmental accounting is a practice or activity that has a role in providing accounting information and can be influenced by the company on environmental problems that are realized in the form of financial and non-financial reports. Environmental costs are costs incurred by the company to prevent environmental damage or costs incurred in the event of environmental damage caused by company waste. This study aims to analyze the application and reporting of environmental cost accounting at PT. The Puger Jaya Raya Sentosa Cement is in accordance with the current PSAK, Law, and theory. This study uses primary data obtained through observation and interviews, secondary data obtained through documentation and company record data. Data analysis techniques in this study using descriptive analysis, which describes by analyzing and comparing the findings with PSAK no. 33 years revised 2011 on General Mining Accounting.

Based on the results of data analysis conducted that PT. Cement Puger Jaya Raya Sentosa has not fully implemented the environmental cost accounting concept in accordance with PSAK No. 33 concerning Accounting for General Mining. This is because PT. Cement Puger Jaya Raya Sentosa has made recognition and measurement in accordance with PSAK No. 33 of 2011. However, in the presentation the company still has not presented the environmental management costs in the statement of financial position and presented the environmental management costs in the report specifically, but reported in the general financial statements included in the Cost of Production Report , and entered Other Costs in the Profit Report /loss.

INTRODUCTION

The environment is an important part of life both for personal, family, community, company and government life. According to Law No. 32 of 2009, the environment is a unit with all objects, power, circumstances, and living things, including humans and their behavior that affect the survival and welfare of humans and other living creatures. However, problems regarding the environment often occur and are no longer a new issue in this era of globalization. Environment issues with waste pollution, for example, many companies that have terminated operations due to environmental concerns by the company such as PT. Lapindo Brantas with mud that never stops causing environmental damage (Ikhsan, 2008).

The company is a form of organization that carries out activities using available resources to achieve the goals that have been set (Mulyani, 2013). The company's goal in the economic aspect is oriented to gain or profit, while in the social aspect, the company must contribute directly to the community and the surrounding environment (Oktarina, 2013). Company profit-oriented will try to use its resources to the maximum extent possible to earn profits for the survival of the company, resulting in the surrounding environment and whether it is positive or negative (Mulyani, 2013).

Waste is the remainder resulting from a production process both industrial and domestic (household waste) which has no economic value so that the existence of such waste can pollute the environment. UU No. 32 of 2009 concerning the Protection of Environmental Management, waste is defined as the residue of a production and/or activity, while pollution is defined as the entry or inclusion of living things, substances, energy and/or other components into the living environment by human activities so that it exceeds the standard environmental quality standards. has been established. Waste of the production process can be solid, liquid or gas, which has the possibility that such waste is harmful to the environment so we need a special handling and management of the company so as not to cause negative impacts on the environment in which it operates (Mulyani, 2013).

Environmental accounting is a field of accounting that functions and identifies, recognizes, measures, assesses, presents, and discloses environmental accounting. in this case, pollution and waste from the production process is one example of the negative impact that require environmental accounting system as control terh adap corporate responsibility of the company's operational results (Mulyani, 2013). The purpose of implementing environmental accounting is to improve the efficiency of

environmental management by assessing environmental activities from the point of view of environmental costs and benefits or effects (Ikhsan, 2008).

The Indonesian Institute of Accountants (IAI), which is a forum for professional accountants, seems that there is still no serious attention in relation to the development and establishment of environmental accounting standard procedures to be used as guidelines for companies in making reports on environmental accounting (Ikhsan, 2008). However, IAI implicitly explained that the annual report should accommodate the interests of the decision makers. This is explained in PSAK No. 1 of 2009, Paragraph (9) which contains the presentation of financial statements.

PT Cement Puger Jaya Raya Sentosa as an environmentally sound company, has been equipped with AMDAL, RKL, and RPL documents which have been approved by the Governor of East Java with number 660/198/207.1/2008. PT Cement Puger Jaya Raya Sentosa is a quality cement producer in Indonesia, which produces quality portland cement. Since 2012, PT. Cement Puger Jaya Raya Sentosa is capable of producing 300 thousand tons of cement, with a capacity of 800 tons per day. PT Cement Puger Jaya Raya Sentosa recognizes costs for waste management as part of production costs. So there is no

separation between production costs and costs incurred due to production (environmental costs) and there is no specific disclosure or information regarding these environmental costs. So the production costs become larger and less profit earned since PT Cement Puger Jaya Sentosa set the selling price based on the market. In addition, as a result of the absence of separation of records, among others, the company cannot identify how much waste treatment costs incurred each time it is produced. Recognition of waste management costs based on PSAK 33 can be recognized as an expense as a result of mining production activities or as an asset as a result of exploration and development activities.

Based on the description above, the researcher is interested in examining the problem of environmental costs in his research which will reveal the application of environmental cost accounting at PT. Cement Puger Jaya Raya Sentosa. This research tries to reveal the recording system of waste management generated the company and will be conducted in the study entitled "Analysis and Reporting Application of Environmental Cost Accounting at PT. Cement Puger Jaya Raya Sentosa".

LITERATURE REVIEW

Understanding Accounting Information Systems

Environmental accounting is defined as the prevention, reduction or avoidance of environmental impact, moving from a couple of occasions, beginning of restoration of the events that lead to disaster on such activities. Effect of an environmental burden on the environment is of business operations or other human activity is potentially a thorn that can hinder the maintenance of a good environment (Ikhsan, 2008).

Objectives of Accounting Information Systems.

The purpose of environmental accounting is to increase the relevant information made available to those who need or can use it (Hadi, 2012) . Another objective of the importance of environmental accounting disclosures includes the interests of public organizations and public companies that are local .

Environmental Accounting Function

The importance of using environmental accounting for companies or other organizations is explained in the functions and roles of environmental accounting. These functions and roles are divided into two forms (Ikhsan, 2008).

RESEARCH METHODS

Research Objects

1. Internal functions are functions related to the company's own internal parties. Internal parties are parties that carry out business, such as consumer households and production households and other services.
2. External functions are functions related to aspects of financial reporting. This external function gives the company the authority to influence stakeholder decision making.

Production Waste Environmental Pollution

Pollution of the environment can occur anywhere at a very fast rate, and the burden of pollution is getting heavier due to industrial waste from various chemicals including heavy metals. There are various kinds of environmental pollution according to the place where it occurs (Ayu, 2017), including:

1. Soil Pollution
2. Water Pollution
3. Air Pollution
4. Noise Pollution

Waste is a discharge of a production process that are no longer used. Based on the form of waste is grouped into several groups, namely as follows:

1. Solid waste
2. Liquid waste
3. Air waste

The type of research used is qualitative research. The object of research is a company engaged in cement production, namely PT.Cement Puger Jaya Raya Sentosa with the assumption that the company has the potential for large social impacts, including the problem of environmental waste.

Data Source

The data sources of this research are primary data and secondary data.

Data Analysis Technique

This study uses a qualitative descriptive analysis technique, where the researcher describes the results of his findings derived from the data collected through the observation process in the object of research which will then be compared with the method of applying environmental accounting in theory which has been developing in academic circles. The steps of data analysis to be carried out by researchers are as follows:

1. Identify and analyze the application and reporting of environmental cost accounting including the definition, recognition, measurement, presentation and disclosure of costs incurred for environmental management at PT Cement Puger Jaya Raya Sentosa.
2. Doing a comparison between the application and reporting applied by

the object of research with IAS 33 on Akuntansi General Mining, ranging from the recognition, measurement, presentation and disclosure.

3. Withdrawal of Conclusions, giving conclusions on the analysis that has been carried out and recommending fish to the company to use and publish, so that it can be useful for PT. Cement Puger Raya Raya Sentosa.

DISCUSSION AND RESULT

Based on the analysis that has been done with data obtained from companies related to environmental cost accounting, it can be seen that PT. Cement Puger Jaya Raya Sentosa has fulfilled its obligations in environmental conservation efforts. However, costs arising from such activities have not been grouped by type, so that the reporting was mixed up with the cost of production. This makes it difficult for managers and investors to identify costs related to the company's environment. Based on the results of interviews, the researchers conducted direct observations to determine and ensure the costs incurred in waste management by PT. Cement Puger Jaya Raya Sentosa, as follows:

Air Waste:

1. Engine maintenance *dust collector*, the costs incurred for the

maintenance and repair of machinery *dust collector* yang used by companies as an engine to filter the emissions produced gas companies prior to release into the air.

2. Machine costs *Back House*, the costs incurred for the purchase of machinery *Back House* yang used by companies as an engine appendages of machines *dust collector* for filtering gas emissions that produce the company before being released into the atmosphere .
3. Laboratory Test Costs (emissions test), the costs incurred for checking the content of emission gases.
4. Employee Salary costs, costs yang labor incurred by the company for part handling and supervision of production waste.
5. Coal Insurance Costs, costs incurred for coal transportation insurance on the way to the company.

Other Fees:

1. Employee training costs, costs incurred by the company as a form of environmental prevention costs by conducting employee training.

Environmental Cost Recognition

Recognition related to the transaction problem will be recorded or not into the recording system, so that in the end the transaction will affect the company's

financial statements. PT Cement Puger Jaya Raya Sentosa, recognizes the transaction as a waste management fee if the cost has already provided benefits or has been used in the company's activities in managing the environment. Based on observations, the environmental costs incurred by the company are charged to production costs and will appear in the profit/loss report and the cost of goods manufactured report in sub-factory overhead costs and direct labor costs. Based on PSAK 33 Revised 2011 states that environmental costs can be recognized as:

1. Assets (deferred expense) if the estimated costs for environmental management are incurred as a result of export and development activities.
2. Expenses if the estimated costs for environmental management that arise as a result of mining production activities.

PT Cement Puger Jaya Raya Sentosa, recognizes the transaction as a waste management fee if the cost has already provided benefits or has been used in the company's activities in managing the environment. The allocation of environmental cost funds is carried out at the beginning of each period in the form of a budget allocation (cost plan). When compared with IAS 33 revisions in 2011, PT Cement Puger Jaya Sentosa recognize

cost management of the environment, as burdens as a result of mine production activities. This is due to costs incurred derived from limestone mining activities in Gunung Kapur Sadeng.

Environmental Cost Measurement

Measurement is the process of determining the amount of money to recognize and include each element of financial reporting in the balance sheet and income statement. Process this involves selecting a particular basis of measurement. PT Cement Puger Jaya Raya Sentosa in measuring the costs of environmental management using the acquisition price with monetary units based on the costs incurred from the realization of the previous period's budget. This is used by the company as a basis or reference in determining environmental costs incurred in a certain period. The following are the costs incurred by PT. Cement Puger Jaya Raya Sentosa in environmental management, based on an interview with

Mrs. Ila as the Accounting department who said: *“The costs incurred by the company for waste management are combined with production costs, so these costs appear in the cost of production report. For the costs included in the management of this waste, among others, the cost of maintaining a dust collector machine at a cost of Rp. 10,000,000 per year, Laboratory Testing Costs for emission gases of Rp. 6,900,000, issued every 3 months, Employee Salary Costs Laboratory with 3 special employees in the waste laboratory, each worker is Rp.4.750.000,- Coal Insurance Cost is Rp.12.380.000,- in a year, Employee training costs is Rp. 1.250.000 ,- every time an employee training is held , there is also the cost of the back house machine which is replaced every 1 year at a cost of Rp. 5.250.000.00 . For employee training costs are included in the Income Statement. So the costs that I mentioned earlier are in the Cost of Production Report and the Income Statement.”*

Table 1. Environmental costs in PT.Cement Puger Jaya Raya Sentosa

No.	Information	Amount (per year)
1.	<i>Dust collector</i> machine maintenance costs	Rp. 10,000,000,-
2.	Laboratory Test Fee (gas emission test)	Rp. 27,600,000,-
3.	Laboratory Employee Salaries	Rp. 99,000,000,-
4.	Coal Insurance Fee	Rp. 12,380,000,-
5.	Employee Training Fee	Rp. 2.500.000,-
6.	<i>Back house</i> Machine Cost	Rp. 5.250. 000 ,-

Source: PT. Cement Puger Jaya Raya Sentosa, processed by researchers , 2018.

Environmental Fee Presentation

Presentation relates to the way financial information is presented in financial statements. Financial Accounting Standards No. 33 The 2011 Revision on General Mining Accounting in paragraph 13 regarding presentation reveals that: *"The estimated provision for environmental management is presented in the statement of financial position at the amount of the deferred liability, after deducting the amount of expenditure actually incurred"*.

In addition, Financial Accounting Standard No. 1 of 2009 on the Financial Statements revealed in paragraph 09. Mengenai additional information which stated that: *"Companies can also provide additional reports such as reports on the environment and value added reports, especially for industrial companies where environmental factors play an important role and for industries that consider employees as a group of users of financial statements who play an important role."*

Base on explanation above, it can be said that the Financial Accounting Standards (GAAP) requires companies engaged in industrial or mining which could potentially result in waste production as a result of production activities to present and disclose the activities of environmental management as an additional report to

supplement the financial statements that have been required.

PT. Cement Puger Jaya Raya Sentosa does not present environmental/waste management costs in the statement of financial position as in PSAK No. 33, but presents it in the general financial statements and is included in the sub Factory Overhead Costs, Direct Labor Costs in the Cost of Production Report, and includes Other Costs in the form of employee training costs in the Profit/Loss Statement. So the company can determine the costs incurred for environmental management by tracking report cost of production and income / loss.

Environmental Cost Disclosure

Disclosure is an important activity in providing financial information or accounting policies of a company. Based on interviews and observations made during the study, the company presents report environmental costs are included in the calculation of production cost and profit / loss. In addition, the company carries out RKL and RPL reporting activities every 6 months to the Jember Regency Environmental Service, explaining the conditional obligations related to environmental management issues in the Addendum to AMDAL, RKL and RPL for PT. Cement Puger Jaya Raya Sentosa, accounting policies related to

environmental costs have not been described specifically. Dith so information about the environment created by the company still lacks information so that the necessary specialized environmental management report or qualitative statements as Notes to the Financial Statements.

The revelation Standart of financial accounting No. 33 revision of 2011 concerning General Mining Accounting regulates matters that must be disclosed by entities and are presented in the Notes to Financial Statements, but are not limited to:

- a) Accounting policy.
- b) Movements in the estimated liability for environmental management costs during the current year.
- c) Environmental management activities that have been implemented and are currently running;
- d) Conditional obligations related to environmental management and other conditional obligations .

PT. Cement Puger Jaya Raya Sentosa in disclosing environmental accounting financing is not in accordance with PSAK 33 because it does not have notes on financial statements that discuss accounting policies, especially those related to environmental cost accounting or special reports on environmental cost accounting and for conditional obligations the company has explained in the Addendum to

AMDAL, RKL and RPL. Which on information that may be required for the company as one of the bases in the decision making to the maximum, but it is also in order to attract investors to invest in PT.Cement Puger Jaya Sentosa. But company has carried out the recognition, measurement and presentation in accordance with the IAS and the existing theory.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the discussion and the results that have been carried out, conclusions can be drawn:

(1) Definition, the company defines environmental costs as costs arising from efforts to reduce and control the negative impacts of mining activities, and other routine costs. as an effort to reduce and control the negative impact of mining business activities, it is necessary to carry out environmental management. Definition is in line with the definition that describes Arfan Ikhsan environmental costs as the cost incurred by the company related to the environmental damage caused and protection do. (2) PT. Cement Puger Jaya Raya Sentosa has incurred environmental management costs in its company accounting records, but did not specifically identify environmental management costs in accordance with existing standards

because the environmental management costs incurred are recognized as part of production costs. Environmental management costs are budgeted at the beginning of the period and recognized when these costs have been used and provide value for benefits, this is in accordance with the opinion of Anne and her article. (3) PT Cement Puger Jaya Raya Sentosa in measuring the costs of environmental management using the acquisition price with monetary units based on the costs incurred from the realization of the previous period's budget. (4) PT. Cement Puger Jaya Raya Sentosa has presented and carried out financing for environmental management, but has not made a specific cost report. The company presents environmental/waste management costs in the general financial statements and is included in the sub Factory Overhead Costs, Direct Labor Costs in the Cost of Production Report, and includes Other Costs in the form of employee training costs in the Profit/Loss Report. Thus, PT. Cement P u ger Jaya R a yes Sentosa yet to report and present the cost of environmental management in a special report. (5) PT. Cement Puger Jaya Raya Sentosa in disclosing environmental accounting financing is not in accordance with PSAK 33, because the company does not disclose information related to accounting policies in environmental management, only reports

environmental management costs in the Profit/Loss Report and Cost of Production. However, the company explained the conditional obligations related to environmental management issues in the Addendum to AMDAL, RKL and RPL for the Development of the Cement Plant of PT. Cement Puger Jaya Raya Sentosa, accounting policies related to environmental costs have not been described specifically.

Suggestion

Based on the description and discussion described above, the researcher presents a suggestion for the company and further researchers, namely as follows:

1. For Companies.

Company should be able to report the cost of environmental management in particular, but it is also expected that the company reveal the financial information to make Anua report or notes to financial statements which contains information about either company profile company, employment, accounting policies, CSR, and others.

2. For Further Researchers.

It is hoped that the discussion will add to the discussion not only on the financial accounting side, but also on the management accounting side, so that the results obtained are more comprehensive and more accurate and informative and find

and use standards with environmental costs so that they can be compared with the actual condition of the company.

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