Analysis of Environmental Accounting as a Form of Corporate Social Responsibility in Environmental Management Effort to Reduce Externalities Impact

(Case Study In Rumah Sakit Islam Malang-UNISMA)

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ABSTRACT

The company is never separated from the environment. Their interaction often leads to serious problems. Negative impacts are called externalities. The magnitudes of the impact of externalities encourage the desire to exercise control over the activities undertaken by the company. Environmental accounting is defined as the prevention, reduction, or avoidance and impact on the environment. This research is a descriptive qualitative study using case studies method on Rumah Sakit Islam Malang-UNISMA. This study aims to determine how to conduct environmental management, the application of the concept of environmental accounting, and the form of the financial statements of the environment in the annual reports of Rumah Sakit Islam Malang-UNISMA. Problem analysis is done through the following steps: (1) observe and analyze a variety of environmental management activities (2) collect, identify, and analyze the environmental costs arising from the activities of environmental management (3) collect and analyze information regarding the reporting of environmental costs in the report annual financial. The survey results revealed that Rumah Sakit Islam Malang has not been seriously implemented the concept of environmental accounting. This can be seen in the identification of costs, there is no aspect of measurement and classification clear how a costs is categorized as environmental costs or not. This led that some environmental costs are not budgeted for in the annual budget of the hospital. The results also showed that the Rumah Sakit Islam Malang had not made the environmental financial report.

Keywords: Environmental Accounting, The Effort of Environmental Management
I. Introduction

The interaction between the company and the environment causes various effects, either positive or negative. The negative impacts that often occur are about environmental issues (air pollution, waste production, gaps, etc.). These negative impacts are referred to as externalities by Harahap (1999).

A great externality effect that occurs in the environment as a result of the company's operations gave rise to a desire to control the activities undertaken by the company. Accounting as a science discipline respond the concept of Corporate Social Responsibility as a form of social control over the magnitude of externalities, by generating an additional accounting disciplines which is ‘Environmental Accounting’. United State Environment Protection Agency (U.S EPA) states that environmental accounting describe the environmental costs to be considered by the stakeholders of the company which later will be able to push in identifying ways of reducing or avoiding costs while simultaneously improving environment’s quality.

One form of a company or organization that is potentially causing environmental pollution and produce large amounts of waste are hospitals. Hospital waste is all waste produced by hospitals in the form of solids, liquids, and gases. All of this waste containing pathogenic microorganisms, chemicals toxic, heavy high metals, infectious and radioactive. National production of hospital solid waste is estimated up to 376.089 tons per day and the production of liquid waste is up to 48.985,70 tons per day. This number continues to increase year by year in line with the increasing number of hospitals. Indonesia’s Health Ministry data showed the increasing number of hospitals from 1.090 in 1997 to 2.176 in 2013. From these picture we can imagine how big the potential for environmental contamination and for disease dissemination that can be caused by the hospital.

As a consideration form of the environment contamination possibility, hospitals need to make social and environmental responsibility. This responsibility form can be done by implementing the Environmental Accounting concept in their management seriously. The waste production should be managed as good as possible in accordance with the legislation in force, such as the Indonesia Health Minister regulations No.1204/MENKES/SK/2004 about the health requirements of the hospital environment. Moreover both waste treatment costs and environmental management activity costs also should be allocated systematically in terms of identification, classification, measurement, assessment, and reporting. It is important to meet the accountability aspect because hospital is one of the companies that issues annual financial statements.

Based on what has been described above, the writer is interested to do a research titled “ANALYSIS OF ENVIRONMENTAL ACCOUNTING AS A FORM OF CORPORATE SOCIAL RESPONSIBILITY IN ENVIRONMENTAL MANAGEMENT EFFORT TO REDUCE EKSTERNALITY IMPACT” (Case Study in Rumah Sakit Islam Malang-UNISMA).
Based on the background that has been described by the author above, the research question are as follow:

1. How does Rumah Sakit Islam Malang perform the environmental management activities to reduce the impact of externalities, particularly in densely populated areas?
2. How is the application concept of Environmental Accounting in Rumah Sakit Islam Malang?
3. How is the Environmental Accounting report form on the financial statement made by Rumah Sakit Islam Malang?

Therefore, from the problem formulation mentioned above, the purpose of this study are as follows are; to analyze all the activities carried by Rumah Sakit Islam Malang in environmental management efforts to reduce the externalities impact; to analyze the application of Environmental Accounting concept that is implemented by Rumah Sakit Islam Malang; and to analyze the report form of Environmental Accounting on the financial statements made by Rumah Sakit Islam Malang.

II. Literatury Review

2.1 The Concept of Corporate Social Responsibility

The concept of CSR is not at all a new thing, and the definition is not static. The CSR term firstly appeared in the official academic discourse since Howard R. Bowen published his book “Social Responsibility of Businessman” in 1953. The basic idea of CSR proposed by Bowen referred to the obligation for businesses to conduct its business in line with the values and goals to be achieved by the society in which it operates. He used the term “in line” in that context to strengthen how a vision that goes beyond the company’s financial performance is very prominent in businesses (Susilo, 2008).

In early development, the most common form of CSR is in the form of assistance to local organizations and impoverished communities in developing countries. The approach of CSR based on charity and humanitarian motivation is generally done in partial and not in institutionalization. CSR in this level only “do good to look good”. Companies that do this are included in the impressive company's category where the company is only concerned with "stocking charm" (promotion) rather than "spreading the works” or empowerment (Suharto, 2008).

Nowadays more companies do not employ that kind of approach because it is unable to increase capacity and empowerment of local communities. Community development approach is increasingly applied due to the fact that it is closer to the concept of empowerment and sustainable development. The principles of good corporate government, such as fairness, transparency, accountability, and responsibility then become the foundation for measuring the success of CSR (Suharto, 2008).
2.2 The Environmental Costs

Balley (1991) in (Indah, 2011) explained that the meant of the environmental cost is one of the types of business expenses that occur in providing goods or services to consumers. Meanwhile, according to Djogo (2002) the Environmental Accounting or the EA is a term that relates to the inclusion of environmental costs into the company's accounting practices or government agencies. Environmental costs are the impact of both monetary and non-monetary to be borne as a result of activities that affect environmental quality. Ikhsan (2009: 82) defines the environmental costs as the impact of either monetary or non-monetary proceeds arising from corporate activities that affect environmental quality.

Meanwhile, according to Hansen and Mowen (2009: 413) environmental costs can also be called environmental quality costs. Similarly, with the environment quality cost, environmental costs are those costs incurred as a result of poor environmental quality. Thus, the environmental costs associated with the creation, detection, repair, and prevention of environmental degradation. By this definition, environmental costs are classified into four, namely:

1. Prevention costs
   Prevention costs are the costs of activities undertaken to prevent the waste produced and / or debris that can damage the environment.

2. Costs detection
   Detection costs are the costs of activities undertaken to determine that products, processes and other activities of the firms have to meet the cost of the applicable environmental standards or not.

3. Internal failure costs
   Internal failure costs are the costs of activities undertaken since producing waste and trash, but not discharging to the outside environment. Thus, the cost of internal failure occurs to eliminate and to treat waste, when waste is produced.

4. External failure costs
   External failure costs are the costs of activities undertaken after removing sewage or waste into the environment. External cost is the cost experienced realized and paid by the company.
2.3 Environmental Accounting

United States Environmental Protection Agency (U.S. EPA, 1995) defines environmental accounting as follows:

“Environmental accounting in the context of national income accounting refers to natural resource accounting, which can entail statistics about a nation’s or regions’ consumption, extent, quality, and value of natural resources, both renewable and non-renewable. Environmental accounting in the context of financial accounting usually refers to preparation of financial reports for external audience using Generally Accepted Accounting Principles. Environmental accounting as an aspect of management accounting serves business managers in making capital investment decisions, costing determinations, process/product design decisions, performance evaluations, and a host of other forward-looking business decisions.

Ikhsan (2009: 21) says there are several objectives of the environmental accounting development, as follows:

1. Environmental accounting is an environmental management tool.
2. Environmental accounting is a means of communication with the public.

As a tool of environmental management, environmental accounting is used to assess the effectiveness of conservation activities based on the summary and classification of environmental conservation costs. Accounting data is also used to determine the cost of the environmental management facility, the overall cost of conservation and investment necessary for environmental management activities. Besides, environmental accounting is also used to assess the level of output and performance every year to ensure the improvement of environmental performance should take place continuously.

As a means of communication with the public, environmental accounting is used to convey the negative environmental impacts, environmental conservation, and the results to the public. The response from the customers and communities is used as a feedback tool to transform the company's approach to sustainability or environmental management.

Reporting of environmental accounting can be defined as a form of reporting that describes the whole range of measures by the company in their environmental activities. While the environment report is merely a form of environmental reporting as a possible publicity conducted voluntarily by company in their environmental activities. In general, as expressed by Carolina (2010) that the reporting methods of environmental accounting can be divided into two, which are reported in the annual report or not. According Siswanto (1996) in Vivanti (2010), media reporting is done through: The annual report; Separating environmental performance reports for example in the form of green report;
Environmental report within a site or location; Other media, such as websites, CD Room, Video, Newspaper.

III. Research Methodology

This study uses qualitative research methods by using a descriptive approach. Qualitative research is a process of research based on the methodology to investigate a social phenomenon and the human problems (Creswell, 1998). The using of qualitative methods in this study is intended to describe how the application of Environmental Accounting on Rumah Sakit Islam Malang. Based on the research purpose, the qualitative research used by author is case study.

This study uses multiple methods of data collection are as follows (Yulianto, 2008):

1. Observation
   Observation is a data collection carried out directly into the field to observe the object to be investigated.

2. Interview
   Interview is the process of obtaining the data by face-to-face questions and answers between researchers and sources.

3. Use of Documents
   Documentation is data collection techniques to collect and analyze written or unwritten documents, pictures or movies both personal and formal.

   Processing the data in this study includes several stages, are as follows:

   1. Data reduction
      This process includes the perfection of data not only reduce the unnecessary and irrelevant data, but also additional data are still required.

   2. Presentation of Data
      Presentation of data is a set of structured information that provides the possibility of drawing conclusions and taking action (Huberman, 2009: 17).

   3. Interpretation of data
      Interpretation of data is the process of understanding the meaning of a data set that has been presented, which not only look at what is written, but also to understand or interpret about what is implied in the data that has been presented.

   4. Conclusion / verification
      This conclusion is expressed in short sentences and easily to be understood, and is done by repeatedly to review the validity of this inference, particularly related with the relevance and consistency of the title, problems formulation, and the goals.

IV. Findings and Discussions

4.1 Environmental Management Activities

In general, Decree of the Minister of Health No.1204 of 2004 as mentioned above serve as the main guideline in managing environment in the Rumah Sakit Islam Malang. The activities of environmental managements, as stated in it, have been executed by Rumah Sakit Islam Malang through several
separated units. Restructuring activity for building and courtyard space; insects control; management of linen washing facilities; clean water sanitation; and waste management activities are conducted by the Households Units and Unit of Maintenance Facilities. Surveillance activity through disinfection and sterilization decontamination is done by the Division of Special Care. Sanitation hygiene of food and beverages monitoring activities is conducted by the Nutrition Installation. While the radiation protection activities; and promotion activities of the environment are respectively performed by Radiology and Public Relations Unit.

The details of environmental management activities undertaken by the Rumah Sakit Islam Malang are as follows:

1. Hospitals’ Building and Courtyard Sanitation Activity
To conduct the building sanitation activity, Rumah Sakit Islam Malang cooperates with CV. Vasela Sinar Jaya. All of the routine sanitation activities are performed by the cleaning service team. These activities include the cleanings for rooms; bathrooms; toilettes; ceramic walls; and stainless wall, floor mopping, and also controlling the rainwater drain. Performance assessment of the cleaning service is done once a month by the hospitals’ Household Unit

2. Hygiene, Food and Beverages Sanitation
These activities are carried out by the installation of Nutrition. Generally, the routine activities in Rumah Sakit Islam Malang related to the hygiene and foods and beverages sanitation are preserving kitchens’ cleanliness; cutleries; preserving the dishes qualities; performing training for food cooks; etc. The Nutrition Unit is guided by the Minister of Health Regulation No. 715 of 2003.

3. Water Sanitation
Water recovery efforts are undertaken by section of Households Unit through sub unit IPAL (Liquid Waste Management). Restructuring activities carried out with the water qualities’ daily physical checks, using chemicals to ensure water quality is maintained.

4. Management of waste (solid, liquid, and gas)
Waste management activities are a series of activities to minimize the possibility of environmental pollution caused by waste from the production of either solid, liquid, and gas. Hospital wastes are classified into three types: solids, liquids, and gases. Solid waste management is carried out through two ways, for medical solid waste, it can be burnt using incinerator tools; while the non-medical solid waste is going to dumped into Supit Urang landfills. For liquid waste, the management is started by collecting the liquid waste from various rooms in the hospital through the drain pipe, and then stored in a controlling container, carrying out a neutralization process by adding chemicals, and laboratory tests before being discharged into rivers
5. **Linen washing facilities management**

Management of linen sink or laundry is an activity commonly called a cleansing of soiled linen resulting from the use by each patient treatment rooms. Linen washing facilities management activities are carried out by sub-unit laundry working under the supervision of Household Unit.

6. **Controlling insects, rodents and other nuisance animals**

All activities of insect controls and other nuisance animals are done by general helpers section.

7. **Decontamination through disinfection and sterilization**

Decontamination is an important first step in dealing with equipment, supplies, and other objects that are used to treat patients where the equipment has been contaminated. Disinfection is an attempt to eliminate the amount of pathogenic microorganisms that cause disease; while sterilization is an effort to eliminate all microorganisms both physically and chemically. This activity is carried out by specialized nursing division.

8. **Safety for Effects of Radiation**

Safety for radiation effects is a safeguard effort for society from the impact of radiation, through the promotion and prevention of risk of radiation hazards by conducting monitoring activities, investigations on the source; i.e; the environment and human media or devices which contain radiation.

9. **Health Promotion Efforts of the Environmental Health**

Promotional efforts in this activity are the delivery of messages about hygiene and sanitation hospital to patients, families of patients, visitors, and employees. The promotional activities are carried out by public relations and marketing unit.

Based on the detailed description above, the Ministry of Health Regulation No. 1204 year of 2004 on Hospital Environmental Health Requirements is used as the main guideline in managing environment in Rumah Sakit Islam Malang, in general the activities that have been carried out in the hospital have been proper with the regulations referred.

### 4.2 Hospital Waste Management

Procedures for hospital waste management are set out in Regulation of Minister of Health of Indonesia No.1204/MENKES/SK/X/2004. Waste is classified into two types: non-medical and medical wastes. Medical waste is related to the patient (syringes, infusion former, infectious waste, waste noninfectious, tissues etc.), while non-medical waste is not related to the patient such as food waste, kitchen waste and other rotten rubbishes. Rumah Sakit Islam Malang classifies the wastes into three types, namely:

1. **Solid Waste**

These solid wastes generated by the hospital are classified further into two types:

   a. **Medical Solid Waste**

   Types of medical solid waste are still divided into two types, namely infectious waste and non-infectious waste. Infectious waste is directly related to the patients; and the possibilities of disease transmission from the waste are very
large, for example the waste of infusion syringe and needle. Whereas non-
infectious waste is not related directly to the patient, for example, infusion bottles
etc.

In management, solid waste is distinguished by infectious non-infectious
solid waste, by differentiating the wrap used. Infectious waste is wrapped with a
yellow colored crackle and for non-infectious waste is wrapped with a red colored
crackle. After all solid waste are being collected by the medical officer of
Facilities Maintenance Unit in each room, then the medical solid waste are burnt
using the incinerator tool at about 1200 degrees Celsius. Rumah Sakit Islam
Malang has only one unit of fuel combustion engine with a capacity of between
40 kg - 60 kg with 4-5 hours. Rumah Sakit Islam Malang has been using the
incinerator machine since 2009. Before that period, the medical wastes were
burned by using the services of medical waste incineration in Rumah Sakit Umum
Daerah dr. Saiful Anwar Malang.

b. Non-medical Solid Wastes

Non-medical solid wastes or generally called with general wastes are those
which are generated by hospitals’ activities that have no correlation with medical
services. To distinguish the general waste (non-medical solid waste) with other
types of waste, the non-medical solid wastes are wrapped in black colored crackle.
Management for this type of waste is done by officers of the Household Unit by
collecting waste bins within a maximum of one day, then collecting them in
garbage bins, and then transporting them by truck to city office to be disposed in
the temporary landfills, and next they will be transported to the final disposal site.

2. Liquid Waste

Liquid waste is all waste liquid, which is derived from the rooms or units
at the Islamic Hospital of Malang except from radiology and laboratory spaces
that likely contain micro-organisms, harmful chemicals, are radioactive and toxic.
Before discharged in the river, Islamic Hospital of Malang seeks to manage the
liquid waste and ensure the safe waste when released into the environment. To
imply that activity, once in every three months laboratory tests are conducted by
two different agencies: Perum Jasa Tirta and laboratory of City Health Office of
Malang.

Liquid Waste management process begins by channeling the waste stream
from each room by using the exhaust pipe. After flowing through the drain pipe,
liquid waste is directly delivered into the inlet vessel and undergoing a process of
filtration and sedimentation. The liquid waste as the result of the filtration is going
to enter the Abotsi vessel 1 and 2 respectively. To kill bacteria and neutralize the
harmful substances, chlorine is mixed with the waste as a neutralizing agent in
Abotsi Vessel 2. Then the mixture is flowed into the out let tub 1, if the liquid
waste is still muddy, then some alums will be added into the mixture. Furthermore
the liquid waste is flowed into the out let tub 2, where the sample is taken for
further laboratory testing to ensure water levels are completely safe when released
into the river. For liquid waste which comes from a radiology and laboratory
rooms, the management is done by passing the waste through the drain pipe and
then it will be channeled to the septic tank. When septic tank is full, suction
process will be performed using the services from other parties to vacate the tank therefore it can be reused again.

3. Gaseous Waste

Gaseous waste produced by the Rumah Sakit Islam Malang is derived from combustion gases through the incinerator, kitchen smoke, engine generators, etc. Gases from incinerator must meet the standards of medical waste management that is not harmful to the environment, while the amount of gaseous waste from the kitchen cannot be minimized because it depends on the number of patients and the intensity of hospital operations.

Based on the research that has been described above, both the classification and waste management activities of Rumah Sakit Islam Malang have been running in accordance with the Regulation of Minister of Health No.1204/MENKES/SK/X/2004 about hospital environmental health requirements.

4.3 Environmental Accounting in Rumah Sakit Islam Malang

Environmental accountings are process of identification; measurement; allocation of environmental costs; and integrating these costs into business decisions and communicate the results to stakeholder (Ikhsan, 2005). The application of environmental accounting in Rumah Sakit Islam Malang so far begins with the establishment of two special units; Households Units and Units of Maintenance Facility. They are two special units that are in charge of waste management either solids; liquids; or gases. The conservation of the environment (environmental health) through sustainable waste management will not work properly if it is not supported by facilities and infrastructure to support the activities.

The entire infrastructures need to support environmental sanitation activities (such as waste management) require the acquisition and operation costs. Transactions refer to these costs are accounted for using the cash basis for transaction revenue, expenditure, and financing. As for the assets, liabilities, and equity are recorded on an accrual basis.

The overall expenses incurred in performing the management activities on the environment are identified by Rumah Sakit Islam Malang as environmental costs because its existence is useful to support the sustainability of environmental sanitation activities, particularly waste management to reduce the possibility of contamination to the environment. To demonstrate consistency in keeping the hospital environment, these costs are budgeted each year. As a form of control over the budgeted funds, each of the first six months of the budget evaluation process will be carried out to ascertain whether it is necessary to amend the budget or not in the next six months.

Based on the procedures that have been mentioned, it can be concluded that the decision of Rumah Sakit Islam Malang for environmental costs will be adjusted to the needs of each installation involved in environmental sanitation activities. These needs can be seen from the list of installation requirements which are submitted in the form of Goods Demand Plan per Unit.
From above discussion we can see that the implementation of environmental accounting by Rumah Sakit Islam Malang so far has not been run in accordance with the concept presented by Arfan Ikhsan which covers the process of identification, budgeting or allocation, the integration of environmental costs in decision-making, and communicate the result to the stakeholder. More detail the application of accounting concepts of the environment by Rumah Sakit Islam Malang has not been optimum yet. This example can be seen from the process of identification, budgeting, and communication of results is not optimal.

In the process of identifying the cost, there is no clear method for measurement and classification of how a cost is categorized as environmental cost or not; thus certain expenses which actually should be categorized as environmental costs are turning out to be not included in the classification of environmental costs. This weak process of identifying environmental costs occurs because there are no specific guidelines which are being used as a means of identification and low intention to increase the accountability of the hospital environment. This will lead to a direct impact on the budgeting process in the hospital's annual budget. A clear example is the facility of medical checkup for the medical waste collector personnel, and also for liquid waste operators. The cost of such examination should be categorized as environmental costs. According to the environmental cost categories on the EPA (Environmental Protection Agency), (1995) in Ikhsan (2009; 104), the costs of medical checkup for those labor whose potentially contaminated by waste, the environmental cost spectrum measurement is categorized as the cost of treatment or checkup, type of regulation cost, therefore it will be categorized as an available to be measured – cost. Considering how much important these costs to warrant the waste management unit personnel’s life, therefore the checkup costs for them should be included into hospitals’ annual budget. Yet in fact, Rumah Sakit Islam Malang has not applied the cost into their annual budget.

Meanwhile, the shortcomings for communicating the result of waste management activities; related costs; and environmental decision makings can be seen by looking that there is no environmental accounting report which can be communicated to the stakeholders, in this case they are Universitas Islam Malang foundation. Moreover, Rumah Sakit Islam Malang indeed has not made any particular report which discusses about environmental management activities; how many environmental costs are required; number of environmental revenues; etc. The existing report is only a general report about Household Unit and Facilities Maintenance Unit’s budget realization. These reports contain whole activities and costs incurred by those two units in performing their all routine activities, and give no special information about which activities or costs are related to environmental accounting matters.

Form of communication on environmental management activities can be realized in the environmental accounting disclosure format. It is an accounting disclosure from the standpoint of internal parties in environmental accounting function itself; who provide the form of environmental accounting report (Ikhsan, 2008: 140). The absence of environmental accounting report for environmental management activities (waste management) is resulting in failure to achieve the
aims and objectives of the implementation of environmental accounting as already mentioned above. Regards to some of these infirmities, Rumah Sakit Islam Malang should continue to make corrective actions and improvements to demonstrate their seriousness in implementing the concept of environmental accounting, as a form of corporate social responsibilities.

4.4 Reporting for Environmental Accounting

Environmental Accounting Report is the report form contains the revenues account and costs account from the environment conservation activities. This concept divides environment accounting report into two parts, environmental benefits and environmental costs. The benefits section is further divided into three types, income; current saving; and costs avoidance. In other hands, environmental cost is divided into four parts: environmental prevention costs, the cost of environmental detection, internal failure costs, and environmental external failure costs (Hansen & Mowen, 2009).

Financial statements created by Rumah Sakit Islam Malang consist of: Statement of Financial Position (Balance Sheet), Activity Statement (Income Statement), Statement of cash flows, Notes of Financial Statements. Furthermore, in its practice, Rumah Sakit Islam Malang does not perform a separate financial reporting to demonstrate environmental sanitation activities. Financial statements as mentioned earlier, the balance sheet, income statement, cash flow statement, and notes to the financial statements are only limited to general statements.

Table 4.1

<table>
<thead>
<tr>
<th>Explanations</th>
<th>Amount</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Goods &amp; Services Expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning service costs</td>
<td>104,000,000</td>
<td>2012</td>
</tr>
<tr>
<td>Incinerator fuel costs</td>
<td>-</td>
<td>2012</td>
</tr>
<tr>
<td>Building Maintenance costs</td>
<td>13,850,900</td>
<td>2012</td>
</tr>
<tr>
<td>Licence costs</td>
<td>-</td>
<td>2012</td>
</tr>
<tr>
<td>External training costs</td>
<td>65,036,544</td>
<td>2012</td>
</tr>
<tr>
<td>Maintenance costs of Non medical tools</td>
<td>31,917,106</td>
<td>2012</td>
</tr>
<tr>
<td>Radiation safety costs</td>
<td>20,050,000</td>
<td>2012</td>
</tr>
<tr>
<td>b. Capital Expenditure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs of Waste Destroyer Machine</td>
<td>5,500,000</td>
<td>2012</td>
</tr>
</tbody>
</table>

Source: from income statement of finance division of RSI Malang (2012)

The limitation of environmental costs disclosure on Table 4.1 which has been done by Rumah Sakit Islam Malang is: lack of detailed disclosure regarding the allocation of costs to each activity targets about environmental sanitation (waste management). The income statement does not elaborate the costs associated with environmental conservation activities, particularly regarding waste management expenses. This can be seen from the accounts contained in the
income statement. In accordance with the results obtained, most of the accounts that exist in the income statement only show the operational and administrative costs in general.

Another limitation can also be seen on the Balance Sheet. Balance sheet does not include the cost of acquisition of fixed assets combustion engine waste (incinerator) and depreciation of the asset. Acquisition of fixed assets in the form of incinerator machine account may be included in the non-medical equipment. If hospitals wants to increase accountability for environmental management activities that they have done, classification of assets related to environmental management activities are essential. This needs to be done, in order to know what assets of the company are supporting the activities of environmental health. In addition, it is useful to know how much the economic life of the asset, so that when the useful life runs out, the hospital could can improve the budget planning or even buy new assets. The decision to repair or buy new assets are important, so that the environmental management activities can still run well, thus minimizing the risk of environmental pollution.

Hansen & Mowen (2009: 418-419) suggests that in addition to report environmental costs, it is also necessary to report the environmental benefits. Environmental benefits consist of income or revenue, current saving, and cost avoidance. Table 4.2 shows the environmental benefit of Rumah Sakit Islam Malang. Environmental benefit acknowledged as an Income from incinerator.

**Table 4.2**

Income from External Medical Waste Combustion (IDR)

<table>
<thead>
<tr>
<th>Months</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>1,534,000</td>
</tr>
<tr>
<td>February</td>
<td>4,576,000</td>
</tr>
<tr>
<td>March</td>
<td>728,000</td>
</tr>
<tr>
<td>April</td>
<td>936,000</td>
</tr>
<tr>
<td>May</td>
<td>2,327,000</td>
</tr>
<tr>
<td>June</td>
<td>1,241,500</td>
</tr>
<tr>
<td>July</td>
<td>1,813,500</td>
</tr>
<tr>
<td>August</td>
<td>279,500</td>
</tr>
<tr>
<td>September</td>
<td>1,872,000</td>
</tr>
<tr>
<td>October</td>
<td>3,828,500</td>
</tr>
<tr>
<td>November</td>
<td>2,125,500</td>
</tr>
<tr>
<td>December</td>
<td>3,737,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24,999,000</strong></td>
</tr>
</tbody>
</table>

Sources: from unit of maintenance facilities of RSI 2012
### RUMAH SAKIT ISLAM MALANG
#### ENVIRONMENTAL FINANCIAL STATEMENT
#### FOR THE YEAR ENDED DECEMBER 31, 2012

<table>
<thead>
<tr>
<th>Explanations</th>
<th>Budget (IDR)</th>
<th>Realisation (IDR)</th>
<th>Variances (IDR)</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Incenerator income from external</td>
<td>6,270,030</td>
<td>24,999,000</td>
<td>18,728,970</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Total of Environmental benefit</strong></td>
<td>6,270,030</td>
<td>24,999,000</td>
<td>18,728,970</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Environmental costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prevention costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- External training costs</td>
<td>91,681,034</td>
<td>65,036,544</td>
<td>26,644,490</td>
<td>Favorable</td>
</tr>
<tr>
<td>- Cleaning service costs</td>
<td>108,000,000</td>
<td>104,000,000</td>
<td>4,000,000</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>199,681,034</td>
<td>169,036,544</td>
<td>30,644,490</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Detection costs</strong></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internal failure costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Building maintenance costs</td>
<td>25,000,000</td>
<td>13,850,900</td>
<td>11,149,100</td>
<td>Favorable</td>
</tr>
<tr>
<td>- Incenerator fuel costs</td>
<td>2,574,180</td>
<td>-</td>
<td>2,574,180</td>
<td>Favorable</td>
</tr>
<tr>
<td>- Licence costs</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Maintenance costs of Non Medical tools</td>
<td>47,371,448</td>
<td>31,917,106</td>
<td>15,454,342</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>74,945,628</td>
<td>45,768,006</td>
<td>29,177,622</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>External failure costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Safety radiation costs</td>
<td>49,200,000</td>
<td>20,500,000</td>
<td>28,700,000</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>49,200,000</td>
<td>20,500,000</td>
<td>28,700,000</td>
<td>Favorable</td>
</tr>
<tr>
<td><strong>Total of Environmental costs</strong></td>
<td>323,826,662</td>
<td>235,304,550</td>
<td>88,522,112</td>
<td>Favorable</td>
</tr>
</tbody>
</table>

Source: modified from Table 4.1 & Table 4.2

Given that the Rumah Sakit Islam Malang has not made environmental financial statements, and also notices the importance of the report for improving hospital accountability over the activities associated with environmental health, the author provides recommendations for the form of environmental financial statements. Recommended reporting format is based on the concept of environmental reporting presented by Hansen & Mowen (2009). Environmental costs can be classified into four categories: prevention costs, detection costs, internal failure costs, and external failure costs. In addition to reporting environmental costs, also report the environmental benefit. Environmental benefit consists of: income, current savings, and costs avoidance. The result of the research shows that from three kind of environmental benefits, Rumah Sakit Islam Malang produces only one type, it is income. This account recognized as income from incinerator in the income statement.
The form of financial statement which is suggested above also featuring an analysis of variance. Analysis of variance describes the comparison between the budgeted costs with actual costs, as well as revenue. This analysis showed that in 2012, income from incinerator which realized an increase of Rp 18,728,970 from the budget. This increase is favorable for the hospital because it adds to the amount of income.

In addition, the financial statement also showed that the environmental costs are realized tends to be lower when compared to budgeted costs. Almost all realization of environmental costs, both costs prevention, detection costs, internal failure costs, and external failure costs lower than budgeted costs. Total of the environmental costs that were realized in 2012 lower than the budgeted amount of Rp 88,522,112. This is favorable for hospitals and indicates the efficiency of environmental costs in 2012. This is favorable for hospitals and indicates the efficiency of environmental costs in 2012. The author expects with the establishment of the environmental financial statement, as has been shown above, will be able to increase the accountability of hospitals in applying the concept of environmental accounting or green accounting as a form of social and environmental responsibility.

V. Conclusion

Based on the analysis of data and discussion, it can be concluded as follows:

1. Rumah Sakit Islam Malang has seriously demonstrated social responsibility to the environment shape. Health Ministry Regulations No.1204 of 2004 about hospital environmental health requirement used as the main guideline in implementing the environmental management activities of the hospital. Various provisions and environmental management procedures have been carried out by Rumah Sakit Islam Malang through separate installations/units (household unit and facilities maintenance unit, division of special care, food and beverage nutrition installation, radiology unit and public relation division).

2. Application of environmental accounting concept done by Rumah Sakit Islam Malang still has some shortcomings, namely the process of identifying costs and communicating the results. The shortcomings of identification process are caused by no certain guidelines as the identification tool. This causes some of the costs which should be categorized as environmental costs that are not included in the cost, so these costs are not included in the annual budget of the hospital. While the weakness of communicating the results of the environmental management activities (waste management) can be seen from the absence of environmental accounting reports as a communication to the stakeholders of the company.
3. Rumah Sakit Islam Malang has not made a separate financial reporting to demonstrate environmental sanitation activities. Hospital financial statements, balance sheet, income statement, cash flow statement, and notes to the financial statements only to the extent of financial statements in general. Therefore, the researcher gave the recommendation of environmental financial statements form. The report classifies the environmental costs into four categories: prevention costs, the cost of detection, internal failure costs, and external failure costs the environment. In addition, the report also presents the environmental benefits derived from environment management activities.
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