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ANALYSIS OF ENVIRONMENTAL AUDIT IMPLEMENTATION ON RUBBER WASTE MANAGEMENT PTPN IV REGIONAL 1 KEBUN GUNUNG PARA

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ABSTRACT

This research aims to determine the implementation of an environmental audit of waste management at the PTPN 1V Regional 1 Kebun Gunung Para rubber factory. The object of this research is the Processing Factory PT. Perkebunan Nusantara 1V Regional 1, Kebun Gunung Para.The data collection techniques used in this research are interview techniques and documentation techniques, where interviews are carried out by asking several questions with direct communication between the researcher and the resource person to obtain information related to the problems in this research. Meanwhile, documentation techniques are data obtained directly from the company related to research data which includes: environmental audit SOPs, waste management SOPs and the company's annual costs regarding waste processing costs. The data analysis technique used by researchers is a qualitative descriptive analysis technique, describing the findings later and comparing them with the SOP created by the company. The results of this research reveal that PTPN 1V Regional 1 Kebun Gunung Para is good and in accordance with the SOP in carrying out an Environmental Audit of waste management at the Kebun Gunung Para Rubber Factory, This can be seen from the SOP that has been set by the company and the results of field observations and direct interviews with Gunung Para Garden employees

Keywords: Environmental Audit, Waste Management, Environmental Costs

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pelaksanaan audit lingkungan pengelolaan limbah pada pabrik karet PTPN 1V Regional 1 Kebun Gunung Para. Objek penelitian ini adalah Pabrik Pengolahan PT. Perkebunan Nusantara IV Regional 1, Kebun Gunung Para. Teknik pengumpulan data yang digunakan dalam penelitian ini adalah teknik wawancara dan teknik dokumentasi, dimana wawancara dilakukan dengan mengajukan beberapa pertanyaan dengan komunikasi langsung antara peneliti dan narasumber untuk mendapatkan informasi terkait permasalahan dalam penelitian ini. Sedangkan teknik dokumentasi adalah data yang diperoleh langsung dari perusahaan terkait data penelitian yang meliputi: SOP audit lingkungan, SOP pengelolaan sampah dan biaya tahunan perusahaan terkait biaya pengolahan sampah. Teknik analisis data yang digunakan oleh peneliti adalah teknik analisis deskriptif kualitatif, mendeskripsikan temuan nanti dan membandingkannya dengan SOP yang dibuat oleh perusahaan. Hasil penelitian ini mengungkapkan bahwa PTPN 1V Regional 1 Kebun Gunung Para baik dan sesuai dengan SOP dalam melakukan Audit Lingkungan Pengelolaan Limbah di Pabrik Karet Kebun Gunung Para ini dapat dilihat dari SOP yang telah ditetapkan oleh perusahaan dan hasil observasi lapangan dan wawancara langsung dengan karyawan Kebun Gunung Para.

Kata Kunci: Audit Lingkungan, Pengelolaan Limbah, Biaya Lingkungan

I. INTRODUCTION

The state of the environment has become one of the components of human life, and at this time the state of the environment is a world problem that must be overcome immediately because it has an

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impact on every human being. In recent years, environmental issues have been limited to local issues, air pollution in local communities, industrial issues, and other issues. In recent years, environmental problems have been categorized as global issues, such as climate change, ocean acidification, global warming, and acid rain. In the late eighties, there was a realization that the problems faced by the global environment could hinder economic development. As public awareness increases every year, an objective analysis tool is needed to determine how well an organization is carrying out its operational duties in relation to the environment.

Environmental audit is a tool to objectively verify environmental management efforts in increasing the productivity of environmental workers based on predetermined criteria. Environmental audits are proactive actions taken by companies to protect the environment, which helps them improve their environmental operational efficiency and, in the long run, increase the positive social impact of their companies. This then becomes one of the main reasons why environmental audits are used as the basis for evaluation (Hermiyetti, 2010)

Environmental audit as one of the tools to manage environmental problems in Indonesia began to be integrated into the national environmental policy around the end of 1994 through the Decree of the Minister of Environment No. KEP-42/MENLH/11/1994 concerning the General Guidelines for its Implementation. Although at that time it was still voluntary in addition to the *command and control* approach to the national environmental policy, its integrity as an initial development was extraordinary.

The company has managed its production waste. Production waste is treated as something very useful for the company. In the management of production waste, of course, companies need costs related to the management of the waste.

Environmental audits are very important to be carried out, such as at the PTPN 1V Regional 1 rubber factory in Gunung Para Plantation. Where as a control tool in evaluating the company's performance in the environmental sector, therefore the rubber factory must carry out waste management properly and correctly in accordance with the SOPs that have been set, because if it is not carried out properly and correctly, it will cause an unwanted impact on the company and also on the community Surrounding.

The formulation of the problem in this study is: How is the implementation of the Environmental Audit on waste management at the PTPN IV Regional 1 Kebun Gunung Para rubber factory?, Has the waste produced been processed in accordance with the SOP (Standard Operating Procedure) that has been set by the company?

The purpose of this research is: To find out how the implementation of the Environmental Audit on waste management at the PTPN IV Regional 1 Kebun Gunung Para rubber factory, To find out whether the waste produced has been processed in accordance with the SOP (Standard Operating Procedure) that has been set by the company

II. LITERATURE REVIEW

Audit

According to Agoes (2017) in (Artameviah, 2022) what is meant by the definition of audit is an assessment carried out fundamentally and methodically by an independent party on the administration of a company that contains financial statements and bookkeeping records as well as other supporting evidence, to frame an assessment of the adequacy of the company's budget summary review. The definition of Auditing according to (Tarigan et al., 2023) is an examination and evaluation that is carried out to obtain evidence of information to be able to provide a fair opinion on financial statements.

Types of Audits

According to (Thian, 2021) Audits are generally grouped into 5 types, namely:

1. Audit of Financial Statements
   Financial Statement Audits are carried out to determine whether the client's financial statements as a whole are in accordance with applicable accounting standards.
2. Internal Control Audit
   Internal Control Audits are carried out to provide input on the effectiveness of internal controls

implemented by clients.

3. Compliance Audit
   Compliance audits are conducted to determine how well the audited company complies with government policies and regulations, laws and agreements, and regulations.
4. Operational Audit
   Operational Audits are conducted to review (systematically) some or all of the organization's activities in order to assess whether the available resources have been used effectively and efficiently.
5. Forensic Audit
   Forensic audits are carried out to detect or prevent fraudulent activities.

Audit Elements

There are three elements of audit according to (Junaidi et al., 2016), including:

1. In conducting evaluations, examiners must be free and objective.
2. The auditor must have sufficient evidence to support his or her position regarding the accuracy of the client's financial statements. The evidence provided is to make an objective recognition, assessment, treatment and confirmation.
3. Used to communicate audit results to parties who will use the data. The auditor must present the side effects of his or her work as an audit of the financial summary report.

Milieu

According to (Wihardjo & Rahmayanti, 2021) The environment is a unity of space with all objects, forces, states and living things including humans and their behaviors yang mempengaruhi alam, continuity of life. Based on the world of education, The environment refers to the physical condition where all natural resources such as soil, water, energy and all plants and animals are located and utilize their physical environment.

1. Caring for the Environment
   Environmental concern is the attitude/inner ability to take action on everything around us and choose decisively between several choices. Taking decisively among several possibilities. Taking an attitude, staying in a certain attitude or changing attitudes, all play an important role in human life and are a source of mental energy.
2. **Forms of Environmental Damage**
   According to (Tampubolon & Purba, 2022) it is stated that environmental damage or environmental degradation is a sign that the carrying capacity of the environment has been exceeded. Forms of environmental damage include:
   1. Mount Erupted.
   2. Earthquake.
   3. Cyclones. A cyclone is an area of low pressure such as a typhoon or hurricane.
   4. Forest Destruction.
   5. Environmental pollution or landslide pollution.

Environmental Audit

There are several definitions of environmental auditing, at first glance – these definitions contain the same meaning. According to ISO (International Standards Organization) 14001 is: "A systematic and documented verification process in obtaining and evaluating audit evidence objectively to determine whether activities, events, conditions, management systems or information about this are in accordance with the audit criteria and communicate to clients".

Environmental Audit Function

According to the Decree of the Minister of Environment No. 42 of 1994, the functions of environmental audits are as follows:

1. Efforts to increase the compliance of a business or activity with environmental laws and regulations, such as: air emission standards, liquid waste, waste handling, and other operating standards.
2. Documents of a business or activity regarding the implementation of operating standards, environmental management and monitoring procedures including emergency response plans, monitoring and reporting as well as plans for changes in procedures and regulations;
3. Guarantee to avoid destruction or tendency to damage the environment;

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4. Evidence of the validity of the impact prediction and the implementation of the recommendations contained in the improvement of the EIA (Environmental Impact Analysis) process
5. Improving efforts that have been made by a business or activity to meet environmental interests, such as sustainable development, recycling processes and efficient use of resources.
6. An environmental audit is a document that can realize the implementation of:
   a. SOP (*Standard Operating Procedure*) or standard operating procedures for the installation and operation of equipment or environmental management activities.
   b. Environmental management and utilization of the recycling process from the waste that occurs.
   c. Emergency response or *early warming system* to environmental damage or pollution.

Benefits of Environmental Audit

According to (Fandeli et al., 2017) Environmental audit documents are useful in:

1. Identifying environmental risks
2. It is the basis for the implementation of environmental policies.
3. Avoid financial losses caused by business closures or temporary suspension of production processes, business restrictions, publication of defamation as a result of public protests or legal proceedings related to the environment.
4. Prevent the pressure of legal sanctions related to negligence for environmental management.
5. Environmental audit documents can be used to prove the implementation of environmental management.

Objectives of Environmental Audits

The purpose of environmental audits according to W.Lee Kuhre in the book "ISO 14001 Environmental Auditing" (1996) which is translated by the author as follows:

1. Increase compliance with established regulations
   Another major purpose of environmental audits is to assist an organization in complying with the established regulations (related to the environment).
2. Determining potential errors
   Environmental audits are very useful for identifying potential problems before they become major problems.
3. Improving human perception
   Audit and correction of weaknesses – weaknesses about the environment can help reduce the negative impression of the company. If the negative influence on the environment can be suppressed, then the positive impression on the organization can be increased.
4. Continuously improve the environment
5. Continuous improvement is important in maintaining the sustainability of the organization. Audits can help organizations continuously improve their environment.

Forms of Environmental Audit

The forms of environmental audits according to Thomson (1993) in (Poetri, Hermiyetti, 2010) are as follows:

1. *Compliance Audit*
   The purpose of the audit is to assess whether the company's activities are within the limits allowed by law or not.
2. Environmental Management System Audit
   This audit focuses on the company's entire environmental system. These audits provide information and assurance to management about the effectiveness of the control system and procedures for establishing environmental policies.
3. *Transactional Audit*
   It is a management tool to assess environmental risks for banks, creditors, investors and other organizations. The inspection determines whether the soil contains toxic substances or waste, the outside party must understand the environmental risks faced by the company.
4. *Pollution Prevention Audit*
   Assessment activities that identify all possible precautions to minimize product disposal and

eliminate pollution caused by industrial activities.

5. *Product Audit*
   Inspection of the production process to ensure that the products produced do not deviate from the predetermined chemical limits and that the products produced during the production process are recycled after the products are no longer used.

Implementation of Environmental Audits

According to (Poetri, Hermiyetti, 2010) the implementation of environmental audits depends on the type of audit carried out, the type of business or activity and the implementation by the auditor team. There are three stages in the environmental audit process, which are as follows:

1. Pre-audit Activities
   This activity is the most important part of the environmental audit procedure, this activity is in the form of selecting audit governance, defining the scope of the audit, selecting priority topics to include, and the company's production activities.
2. Audit activities at the actual site (actual on side audit / current audit) There are five stages in this activity, namely:
   a. Preliminary meeting
      At this stage, the audit team and the company's leadership held a meeting to review the audit objectives, governance, and schedule of audit activities.
   b. Field inspection
      Field inspections are carried out so that the audit team can get an overview of the activities of a business that requires special attention that has not been identified at the planning stage.
   c. Data collection
      The purpose of data collection is to serve as a foundation for the environmental audit process. The information and data obtained at this stage include audit procedures, documentation provided by the company or activities, and records of the results of the auditor team's evaluation.
   d. Testing
      All documents obtained by the auditor at the data collection stage must support all statements, or have been tested through direct observation by the auditor team. The auditor team must also ensure that the documents produced are original and valid.
   e. Evaluation of findings
      Each audit finding is examined in accordance with the approved audit and governance objectives to ensure that all issues/problems have been studied. Supporting documentation must be carefully reviewed, so that all findings have been supported by data and tested appropriately. There are two characteristics of audit findings, namely positive findings and negative findings.
      1) Positive findings are findings that the implementation of a system has been carried out according to the set process standards or even better.
      2) Negative findings are findings that the implementation of a system requires improvement and this must be explained to the audit clearly so that appropriate corrections and improvements can be made in accordance with the problems faced.
3. Post-Audit
   At this stage, the auditor team prepares a complete written report as a result of the implementation of the environmental audit. The report also includes a presentation on the follow-up plan to the identified problems.

Waste Management

According to (Arief, 2016) waste is waste produced from a production process, both industrial and domestic (household). Waste is known as garbage, which is often undesirable and disturbs the environment, because waste is considered to have no economic value. Meanwhile, according to the Law of the Republic of Indonesia No. 32 of 2009 concerning Environmental Protection and Treatment (PPLH), waste is the residue of a business and/or activity.

1. Based on its origin, waste can be divided into 2 parts, namely:
   a. Organic waste

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Organic waste is divided into organic materials including household activities and industrial activities.

b. Inorganic Waste
This waste consists of industrial waste and mining waste.

2. According to (Arief, 2016) Based on its characteristics, industrial waste is divided into parts, namely:
   a. Solid waste
   According to Solid waste or garbage is unwanted residual material after the end of a process.
   b. Liquid waste
   Liquid waste is liquid waste. Liquid waste is dissolved in water, always moving, and never stationary.
   c. Waste gas
   Gas waste is waste substances (waste substances) that take the form of gases. Waste gas can be seen in the form of smoke.
   d. B3 Waste (Hazardous and Toxic Materials). It is the remainder of an activity or activity that contains harmful and toxic substances which, due to their nature, and concentration and amount, can directly pollute, and damage, and can harm the environment, health, survival of humans, and other living things.

Environmental Waste Impact

Waste can cause various health problems. Waste heaps or also called garbage can function as a breeding ground for flies that can encourage the transmission of infections, in addition to causing diseases related to rats, diarrhea, cholera, typhus, and dengue fever in areas where waste management is inadequate. Waste discharged into surface water can result in waterborne disease seeds. There may also be bacteria and viruses that can cause health problems for living things that consume them.

Thinking Framework

Based on the explanation above about how to implement an environmental audit on the waste management of the PTPN IV Regional 1 rubber factory in Gunung Para Plantation, the following framework of thinking is prepared:

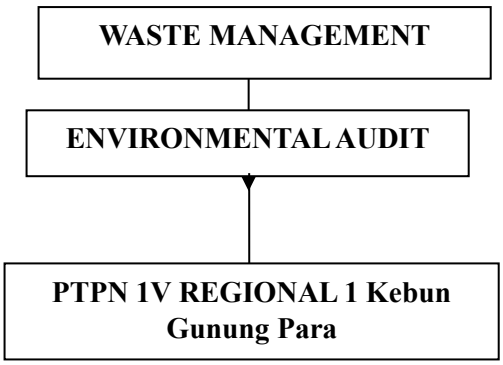

Figure 1. Thinking Framework

III. RESEARCH METHODS

The type of data used in this study is data data, namely primary data and subordinate data. Primary data is a source of data that we obtain from the first source or information obtained directly at the research site or research object/subject. The primary data referred to in this case is like the results of direct interviews. Secondary data is a source of data that we obtain or obtain from a second source or a source that does not directly provide data to the researcher, such as files or supporting documents, confessions or the results of interviews with a second party such as local residents.

IV. RESEARCH RESULTS AND DISCUSSION

Research Results

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In the operational activities of the PTPN 1V Regional 1 Rubber factory, the Gunung Para plantation has a Standard Operational Procedure (SOP) regarding Environmental Audit regarding waste management. Where the waste management will be carried out by the internal auditor team which is carried out every 6 months. Internal Audit implementation activities based on PTPN SOP! V Regional Gunung Para Gardens include:

1. Pre-audit activities
   Establish the objectives and scope of environmental audits
2. Actual on-site audit activities (*actual on side audit/current audit*)
   a. The Audit Leader or both teams held an opening meeting and the meeting participants filled out FM-BPEN-41\03 "Internal Audit Attendance List".
   b. Carry out audits by interview, document review and field observation methods.
   c. Audit results are recorded in FE-BPEN-41/04 "Internal Audit Record"
   d. The findings of audit non-conformities are recorded in accordance with SOP – BPEN-43 concerning corrective actions on the FM-BPEN/01 form "Non - conformity report (LK)" and establishes the category of findings (major/critical/minor/improvement Needed/Noncritical/41/05 "List of Environmental Observation Findings".
   e. The audit must immediately make corrections, investigate the causes and corrective actions in accordance with SOP-BPEN-43 "Corrective Actions".
3. Post-Audit Activities (Post-Audit)
   a. The head of the audit team held a closing meeting and the meeting participants filled out FM-BPEN-41/03 "Internal Audit Attendance List".
   b. Verification of corrective actions is carried out after a predetermined deadline (maximum one month) or as needed after the implementation of the audit.
   c. The auditor verifies and records the results in FM-BPEN-41/08 "Verification of Internal Audit Findings". The verification method can be seen in SOP-BPEN-43 "Corrective Actions".

Field Observation Results

The results of observation activities in the field based on SOP (Standard Operating Procedure) and conducting interviews with researchers found:

1. Pre-audit activities (Pre-Audit
   The Pre-Audit activities of PTPN 1V Regional 1 Gunung Para Plantation can be described as follows:
   a. The purpose of PTPN 1V is to carry out an environmental audit so that the management of Waste in the Gunung Para Plantation is in accordance with applicable standards.
   b. The waste produced by the Rubber Processing Plant (PPK) of the Gunung Para plantation is solid waste, liquid waste, air waste and B3 waste.
2. Field Activities (Actual On Side Auditt)

The audit preparation procedure begins with an opening meeting led by the auditor leader which aims to explain the audit plan and audit participants fill out the "Internal Audit Attendance List". After the audit plan is known and understood by all parties, the auditor conducts an audit process in the field and records the findings during the audit. The audit findings are confirmed by the auditor to the auditee or division head. The auditor chief makes an audit report or called an internal audit field review report.

In terms of environmental audits, the audit method carried out by the auditor is by conducting interviews with the Labor assistant and some of its employees, field observation (*site observation*), and checking the necessary documents. After that, in collecting audit evidence, PTPN auditors! V Regional 1 conducts direct observations or inspections to the production waste treatment section accompanied by an analyst who is an expert in the field of environment and chemicals. After that, the auditor tests the audit evidence obtained in the field during the field review. The results of this test are in the form of audit findings that demand corrective action. Any audit findings found by the auditor are included in the document FM – BPEN – 41/04." Internal Audit Record".

The following are the steps of the researcher in making observations. According to Mr. Surya Darma, Waste is a waste material in the form of liquid or solid produced from production

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process activities that can interfere with comfort, both in the work environment and the community environment. For this reason, it is necessary to conduct an environmental audit in a company engaged in the industrial sector, including PTPN 1V Regional 1 Kebun Gunung Para. The Rubber Processing Plant of Kebun Gunung Para has waste, including:

a) Solid waste
   Solid waste owned by the PPK (Rubber Processing Plant) of Gunung Para from production does not exist. However, operational activities include used archives, used tires, used spare parts, and product wast sap that have been managed so that they do not cause environmental problems, namely by collecting solid waste regularly such as collecting in TPS (temporary collection points). And cooperate with third parties who have special permits to transport the solid waste. Meanwhile, solid waste based on its type comes from plantation operational activities to be reused *(reuse*). Examples of solid waste such as firewood, replanting residues for fuel. Based on an interview with Mr. Muhammad Ma'ruf and field observations, the researcher saw that the management of solid waste at the rubber processing plant in the Gunung Para plantation is still in accordance with the regulations applicable in the company.
b) Liquid Waste
   The liquid waste produced by the Rubber Processing Plant (PPK) is the result of the rest of the process of making rubber products in the form of sheets called RSS 1 and SIR 10. The liquid waste produced must follow the standards that have been set and cannot be disposed of/applied directly because it will have an impact on environmental pollution. The liquid waste produced must be managed properly so as not to cause environmental pollution. To overcome this, measures were taken to control liquid waste through a pond system which would then be flowed into the river and the river was lost. The stages of liquid waste management carried out by the company are by placing it in a waste pond consisting of:
   1) Anaerobic Ponds 1 and 2: Liquid waste produced from rubber factories is flowed into Anaerobic ponds. In the Anaerobic pool, active Anaerobic bacteria will form organic acids and CO2 gas. Next, Methogonic bacteria will convert organic acids into CH4 and CO2 gases. The pool has a measurement of 47.5 m × 30 m, a depth of 5 meters.
   2) Aerobic Pond: In Aerobic ponds, the process of treating wastewater by Aerobic bacteria occurs. In this pond, algae and Heterotroph microbes grow forming Flogs. This is the process of providing oxygen needed by microbes in the pond by natural methods or by using an Aerator. The pool has a size of 60 m × 35 m, a depth of 5 meters.
   3) Facultative Pond1 and 2: The process that occurs in this pond is the process of inactivating Anaerobic bacteria, this activity can be known by indications on the surface of the pond that there is no skim and the liquid appears greenish. The pool has a size of 100 m × 30 m, a depth of 2.5 meters.

From the entire summary of the process mentioned above, the waste stay period during the process from the Anaerobic pond to the wastewater being discharged into the recipient/environmental pond requires a stay period of approximately 34 days, the waste pond was built in 2004 and has a total acquisition value of Rp. 231,090,156.

Table 1. Cost of Making a Waste Pool

It	Description	Cost (Rp)	Activities	Sum
1	Sewage Pond			
	Heavy Equipment	3.880.000	30 days @ Rp. 3,880,000	116.400.000
	Operator	450.000	30 days @ Rp 450,000	13.500.000
	Daily employee wages	100.000	30 days @ Rp 100,000 x 15 people.	45.000.000
2	Sewer			
	Ditch	215.600	125 meters @ Rp. 215.600	26.940.156
	Wages for digging	150.000	15 days @ Rp. 150,000 x 13 pax	29.250.000

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	trenches			
	TOTAL			IDR 231,090,156

Source : PTPN 1V Regional 1 Gunung Para Plantation Data

Based on the results of the interview with Mr. Surya Darma and field observations, the management of liquid waste at the Gunung Para plantation rubber processing plant is still in accordance with the SOPs that apply in the company.

c) Waste Gas

In addition to solid waste and liquid waste produced by the Rubber Processing Plant (PPK) in the production process is gas waste. This gas waste comes from the chimney and steam of the rubber processing plant which is in the form of smoke. The smoke from the production is emitted using a chimney which is then channeled into the air with a height of 18 meters above the ground, a diameter of 0.7 meters, and a side hole position of 12 meters.

The way to handle the pollution is by way the combustion processing results are discharged through a gas chimney outside the factory building, to overcome the air pollution, testing is carried out within a certain period of time. The results of this period of time on average stated that the gas waste emitted was below the hazard (safe) standard.

Based on an interview with Mr. Muhamad Ma'ruf and field observations, the researcher saw that the management of liquid waste at the Gunung Para plantation rubber factory was still in accordance with the applicable company regulations

d) B3 Waste (Hazardous and Toxic Materials)

The B3 waste produced by the rubber processing plant (PPK) of the Gunung Para plantation is used oil, used batteries, and B3 packaging (fertilizer jute/poison bottles) as well as chemical jerry cans. All B3 waste is collected at the TPS (Temporary Storage Area) before being handed over to a third party who has a permit to transport and process B3 waste. B3 waste has been managed properly and a report is made for every entry and discharge of B3 waste from TPS B3 (Hazardous and Toxic Materials).

Based on the results of interviews with Mr. Muhammad Ma'ruf and field observations, the researcher found that the management of B3 waste (Hazardous and Toxic Materials) is still in accordance with applicable company regulations. In this study, the researcher conducted an interview with a person in charge of the waste section. The officer and waste testing section at the PPK of the mountain garden is called the labor section.

If there are audit findings in field observations related to waste management, they are recorded in FE-BPEN-41/04 "Internal Audit Records" and non-conformity reports "(LK)". Each finding differs in the placement of documents as per the SOP instructions above.

3. Post-Audit Activities (Post-Audit)

In the activity after the audit, the head of the audit team held a closing meeting to ensure that the audit participants filled out FM-BPEN-41/03 "internal audit attendance list". Then the audit gives time to the plantation unit to carry out corrective and preventive *actions* from non-conformities found by the audit team no later than one month after the implementation of the audit. Follow-up verification of findings can be done by reviewing the evidence of follow-up without going to the field. And it can also be done directly in the field to prove the effectiveness of the follow-up carried out. Then the auditor verifies and records the results in FM-BPEN-41/08 "Verification of Internal Audit Findings"

Based on the results of an interview with Mr. Labor assistant named Mr. Reynaldi Nadapdap, the implementation of the Environmental Audit at the Rubber Processing Plant (PPK) of the Para Mountain Farm is carried out 2 times a year. But for groundwater or wastewater testing carried out by employees of the labor department is carried out every month, and the results are reported to the office of the board of directors. The waste of the Gunung Para plantation factory is also audited by internal and external auditors.

Table 2
Recap of Rubber and Palm Oil Administration Costs Year 2023

Description	Cost Center	Cost

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Fee	CK28AU1101	Rp. 50,064,749
Production Quality Cost (ISO 9000)	CK28AU1102	Rp. 19,719,800
Environmental Control (ISO 14000)	CK28AU1103	Rp. 29,957,092
Occupational Health and Safety Management System (SMK3)	CK28AU1104	Rp. 158,534,760
Transportation, Travel & Accommodation outside the garden	CK28AU1105	Rp. 1,665'246,109
Research, Experimentation, and Development	CK28AU1106	0
Maintenance of Small Inventory Tools	CK28AU1107	Rp. 130,415,500
Small Inventory Usage	CK28AU1108	Rp. 102,692,842
Use of Office Supplies	CK28AU1109	Rp. 203,955,138
Contributions, Contributions and CSR	CK28AU1110	Rp. 3,300,000
Education and Human Resource Development	CK28AU1111	Rp. 2.632.500
Others	CK28AU1112	Rp. 561.718.362
Sum		Rp. 2.928.236.842

Source : PTPN 1V Regional 1 Gunung Para Plantation Data

In table 2 above, it can be seen that the cost of environmental control is one of the costs budgeted to supervise the environment of the Gunung Para Rubber Plantation. Therefore, the cost of environmental control is recorded in the Rubber Administration Cost Recap section, because these costs include costs for testing wastewater and other waste. And the cost is recorded as a whole because the environmental audit party exists from internal and external parties. Meanwhile, external parties report their costs to the office, and internal parties report their costs to the board of directors' office.

Table 3

Contribution of Social and Environmental Responsibility to the Community in 2023

It	Object Name	Address	Cost
1	Rehap Nurul Amin Mosque Dusun V1 Dolok Merawan	Dolok Merawan	Rp. 8,761,770
2	Rehab Nurul Hidayah Mosque Dusun	Dolok Merawan	Rp. 19,270,500
3	Renovation of Dolok Merawan Post	Kalembak Village	Rp. 24,977,650
4	Madrasyah Bustanuurahmah	Bandarawan Village	Rp. 12,748,734
5	Rehap Mesjid Alikhlas	Paretokan Village	Rp. 19,238,750
6	Construction of PAUD Tiara Mandiri	Dolok Batu Nanggar District	Rp. 12,760,375
7	Construction of Al Ikhlas Mosque	Dolok Steel	Rp. 10,025,525
8	Pesantren Tahfizul Darul Ihsan	Limbong Village	Rp. 10,926,050
9	Procurement of used car practice tools for SMK Negeri I Dolok Merawan	Kalembak Village	Rp. 10,607,880
10	Construction of the fence of SD No. 102127 Panglong	Shelter Village	Rp. 10,126,250
11	Construction of Al Ja'raanah Mosque Facilities	Dolok Merawan	Rp. 10,028,000
12	Dolok Merawan Police Office Equipment	Dolok Merawan	Rp. 10,104,300
13	Construction of Al Ikhlas Mosque	Dolok Merawan	Rp. 10,686,100
14	Renovation of R.Dinas / Koramil Office 14 DM	Dolok Merawan	Rp. 10,799.25
15	Village Office Bathroom Renovation	Mount Para 11	Rp. 10,296,410
16	Renovation of GKPS Paretokan Church	Paretokan Village	Rp. 10,309,450
17	Sanitation Development of Elementary School 107467	Mount Para 11	Rp. 7,486,060

Source: PTPN Regional I Data for Gunung Para Gardens in 2023.

In table 4, we can see that the ideal relationship between a businessman or a business field and the surrounding community is an ideal that is coveted by all circles. The concept of Social and Environmental Responsibility (CSR) means that a company has obligations to the surrounding community. This obligation is in the form of a corporate social responsibility to the surrounding environment. The awareness that there is a mutually beneficial relationship between the community and

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the community in the surrounding environment is the main concept in the implementation of the Social and Environmental Responsibility Program (TJSL). In an effort to help empower the surrounding community, the garden has made several efforts that the company has made to the surrounding villages.

Discussion

Based on the results of the research that has been carried out, by comparing the Standard Operating Procedures (SOP) with field observations and conducting direct interviews with the head of the division in charge of the environmental section of PTPN 1V Regional 1 Kebun Gunung Para. The researcher will explain and continue the discussion about the results of field observations and interviews regarding the implementation of environmental audits on the waste management of rubber factories in the Gunung Para Plantation. Inside the Gunung Para Plantation Those who are in charge of waste monitoring are called labor employees. And the head of the labor division of the Gunung Para Plantation, Mr. Reynaldi Nadapdap and two of his employees named Mr. Muhammad Ma'ruf, and Surya Darma. He was the respondent in this study. Before discussing in detail, the researcher will first explain what an environmental audit is.

Environmental Audit is a management tool that is carried out internally and consciously by the company as the responsibility of environmental management and monitoring, to identify environmental problems that will arise, so that preventive efforts can be made. Environmental audit is also a document that can be used as an *early warning system* in environmental management (Poetri & Hermiyetti, 2010).

As discussed in the environmental audit at the Gunung Para Plantation, it aims to monitor or supervise the performance of employees in carrying out their duties in the environmental field, including waste management from the production activities of rubber processing plants. Environmental Audit in Gunung Para Plantation has several stages, including pre-audit activities (*Pre-Audit*), field activities (*Actual On Side Audit*) and post-audit activities (*Post-Audit).* The implementation of environmental audits is carried out every 6 months (per semester).

Based on the results of an interview from Mr. Reynaldi Nadapdap, who is a labor assistant at the Gunung Para Rubber Plantation, and the results of observations in the field, the researcher saw that the implementation of the environmental audit at the Gunung Para Plantation was still carried out in accordance with the SOP made by the company, because before conducting the audit, the head of the audit team had determined the purpose and scope of the internal audit first. And that is already part of conducting *pre-audit* activities first.

Then the auditor leader held an opening meeting, to explain the audit plan and audit participants filled out the "Internal Audit Attendance List". After all auditor participants understand the audit plan, the auditor goes directly to the field. The auditor checks based on interviews, review of relevant documents and field observations.

Field observation began by seeing the waste managed by the Gunung Para Plantation rubber factory, including:

1. Solid waste
   Based on the results of the interview with Mr. Ma'ruf, the solid waste generated from production activities does not exist, but from its operational activities, a universal collection point (TPS) has been provided to specifically store all used goods in solid form owned by the Rubber Processing Plant (PPK) of the Gunung Para plantation, so that it does not pollute the environment.
2. Based on the results of an interview with Mr. Surya Darma, a special officer in the liquid waste section, the liquid waste produced by the Guung Para plantation rubber factory is still in accordance with the SOP made by the company, it can be seen that the liquid waste produced by the Gunung Para plantation rubber factory before being flowed into the Bahilang River, is required to go through several processes to be flowed in the waste pond from anaerobic ponds to facultative ponds so that the chemicals dissolved in the waste are lost, After that, it was just flowed into the Bah Ha Hilang River. In the last pond, it can be declared harmless because there are already living things that survive in the last waste pond, one of which is catfish.
3. Waste Gas,
   This waste is handled by air, by making a chimney that is high enough from the ground level, so that

the gas produced from the production activities of the Rubber Processing Plant (PPK) does not interfere with the comfort of local residents and does not pollute the environment.

4. B3 waste,
   This waste also has its own place for shelter and temporary collection points (TPS) made by the company so as not to pollute the environment around the Gunung Para Plantation rubber factory.

After the interview, document review and field observations regarding the waste management of the Gunung Para plantation rubber factory, if there are findings recorded in the "internal audit record" document and non - conformity report (LK). The above activities prove that the implementation of environmental audits is in accordance with the second activity, namely actual audits (field audits).

Then the leader of the auditor team gives time to the operating unit to take corrective actions during the specified time. Then the auditor team returned to verify the audit findings, and that was what was recorded in the "Verification of Internal Audit Findings". And the above activities are post-audit activities.

Based on the results of the interview with Mr. Reynaldi Nadapdap St, in addition to the implementation of environmental audits at the Gunung Para Plantation is still running well and the waste management is still in accordance with the company's SOPs made by the company, the Gunung Para Plantation also records the cost of environmental control every year. Gunung Para Gardens also carry out Social and Environmental Responsibility (TJSL) activities every year to establish good relations with the community around the factory. The Rubber Processing Plant (PPK) of the Gunung Para Plantation conducts Environmental Audits from internal and external parties.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of the research and discussion regarding the Analysis of the Implementation of Environmental Audit on the Waste Management of the Gunung Para Plantation Factory, by conducting observations in the field and direct interviews with the head of the labor division, Mr. Reynaldi Nadapdap and then compared with the SOP, the researcher can draw the following conclusions:

1. The implementation of the environmental audit carried out by PTPN IV Regional 1 Kebun Gunung Para has been carried out well, the PTPN IV environmental audit is carried out by internal auditors. In this case, it is in accordance with the provisions set by the company, this can be seen from the implementation of the environmental audit of the audit procedures that have been set by the company and every finding obtained by the auditor can be followed up according to the time determined by the auditor team.
2. Waste management carried out by PTPN IV Regional 1 Gunung Para Plantation is still running well. Such as the creation of waste ponds for liquid waste, and Temporary Collection Points (TPS) for solid waste and B3 waste, as well as chimneys for gas waste so that all waste produced is still in accordance with the SOP set by the company.
3. The contribution of social responsibility is also made by PTPN IV Regional 1 Gunung Para Plantation to the surrounding community so that a good relationship is established between the company and the community around the Rubber Processing Plant (PPK).

Suggestion

The implementation of the environmental audit on the waste management of the rubber factory in the Gunung Para plantation has been running well. Therefore, the researcher can give suggestions to the company as follows: Hopefully the Environmental Audit and waste management process that has been running well at PTPN IV Regional 1 Kebun Gunung Para. so that the employees who work at the Rubber Processing Plant (PPK) and the people who live around it feel comfortable, and can increase the company's positive image in the eyes of the public in the future.

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