



**Evaluation of Environmental Management System Implementation ISO 14001 at Imam  
Lastori Daruba's Port Morotai Island Regency**

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**Article Info**

Article History:

Received: June 29, 2020

Revised: July 30, 2020

Published: August 2020

e-ISSN: 2623-2324

p-ISSN: 2654-2528

DOI: 10.5281/zenodo.4012790

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**Abstract:**

Imam Lastori Daruba Port is one of the piers that serves local loading and unloading routes located in Morotai Island Regency which is a type of regional port. The purpose of this writing is to know the evaluation of the implementation of iso 14001 environmental management system in imam lastori port of morotai island district, the research method used is data collection by way of interview and field observation by way of descriptive analysis. Thus the implementation of environmental management system must be in accordance with Law No. 32 of 2009 on Environmental Protection and Management.

**Keyword:** ISO 14001, Waste, Environmental Management

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## INTRODUCTION

Environmental issues are an issue that always attracts attention. This makes public awareness of environmental issues increasing. Many people, especially entrepreneurs, are beginning to realize that environmental management policies and strategies require a standard that must be one-unit in the system of managing it. ISO 14001 is an international standard for environmental management systems. An environmental management system is a set of management processes that require a company to identify, measure, and control their environmental impact. In Imam Lastory Daruba Port the environment around the port area and in the sea is very dirty and the drainage system also does not exist therefore I want to evaluate the system of implementation of Iso 14001 Environmental Management

Based on the above concept, Imam Lastori Port has quite solid activities on certain days such as loading and unloading containers and passenger ships, but each activity will certainly have an impact, both a positive impact and a negative impact on the environment. The positive impacts that arise can improve well-being for port users. While the negative impact that arises is the accumulation of waste in the port environment from activity activities.

Based on the source of iso 14001 interview and survey is an Environmental Management System that controls all aspects of environmental impact by referring to the standard quality limits

that have been set, achieved by always making continuous, monitored and measurable improvements involving all internal and external actors of the company.

## **RESEARCH METHOD**

The method in writing is the following reasons:

### **1. Data Collection**

Data collection is carried out in the form of:

- a. Interview with imam lastori daruba port manager
- b. Field Observation

### **2. Analysis**

The analysis is descriptive with observations on information obtained from secondary data and previously published reports

## **RESEARCH RESULT AND DISCUSSION**

### **A. Implementation of ISO 14001 environmental management system at Imam Lastori Daruba Port**

Port imam lastori daruba district morotai south morotai island district suda entered classification UPP CLASS III, Port imam lastori no certificate ISO 14001 but they suda have environmental permits UKL and UPL, which manage the port imam lastori daruba port organizing unit office (UPP) class III daruba, until now in the lastori imam's graduation there is no parking lot so the parking lot is now only temporary , in addition to the opsioanal car that is parked on the bridge there are also other vehicles that are parked in the port that suda allowed but when there is a ship that enters it even if the entrance must be paid, with the price of the car four thousand rupiah, and the motor three thousand rupiah.

At the port there is already a SMK3 which is available for the hunts who work to unload ships and contenter activities but not all hunts to use the security that has been provided only some who use those safeguards there are complete and some are incomplete.

### **B. Activities at Imam Lastori Daruba Port**

Based on the results of interviews between the author and the port, activities at the port include unloading goods, contenter and disembarkation of passengers, unloading activities in a month 2 times, and unloading of the cargo according to working hours. The nominal parking rental of the contenter if paid according to the tariff applicable to PP No 15 in 2016 about PNPB, the contenter that is in imam lastori daruba port is managed by PT Pelni Ternate Branch. There are three concepts applied in the environmental management of Imam Lastori Daruba Port:

#### **1. Healthy Harbor**

Healthy ports can be sold regularly directed and within the targeted time. The healthy fruiting can be done in the following stages:

- a. Cleaning is done daily (8 hours), channel cleaning.
- b. Cleaning of solids is carried out 2 times during the day (morning afternoon)
- c. Cleaning of marine debris and handling of oil and oil

## 2. Clean Port

The clean port is done to clean up solid waste and liquid waste located in the area of Imam Lastori Daruba Port, to prevent pollution. The cleaning is done by transportation process in the form of wood scraps, plastic waste, and other impurities.



*Pictures. 1. Clean Port and Healthy Port*

## 3. Green Port

The green port of Imam Lastori Daruba Port has a variety of plants including:



*Pictures 2. Green Port*

## C. Waste Management At Imam Lastori Daruba Port

### 1. Problems in Imam Lastori Daruba Port

The garbage bins that are in the garbage area only in the office but along the port are not in the garbage cans as a result of garbage in the garbage waste indiscriminately and some are discarded directly into the sea, from the results of surveys carried out the source of garbage in the port that various garbage, types of garbage umunya Plastic such as used packaging and drinks and packs of cresek bags, resulting in environmental pollution problems. Garbage in the sea is difficult to clean especially when the rainy season arrives to make the volume of garbage continue to increase every day, this condition in addition to disturbing the view of the harbor also makes the environment dirty and feel dirty.



*Pictures 3 Garbage in the Port area*

In addition, the problems caused not from the garbage of visitors, but from the boats that are parked, because there is no supervision from the port, there are some ships that dispose of garbage in the port area.



*Picture 4 Garbage in the boat parking lot*

## **2. Waste processing system at Imam Lastori Daruba Port**

The waste processing system in imam lastori port is inadequate, because there is no temporary garbage shelter (TPS) provided by the port, but there is still the use of garbage cans spread only around the office

In addition, the drainage system that exists in imam lastori port is only one main line to the port, it is also suda damaged, as a result if when the rainy season arrives there are puddles, puddles as high as the heel of adults often occur in the area of container shelters (contenter), the condition

of the port used to be unlike now, there is this puddle after the hoarding talut for the widening of the port location and they forget to make the waterway then there is a puddle if it used to be not like this , the water will recede by itself adjusting to the conditions, but if the rain does not subside, then the volume of water bias increases. Drainage line images include:



*Picture 5 Faulty drainage and good drainage*

### **3. Oil and Ship Waste Treatment System at Pelabuhan Imam Lastori Daruba**

There are several ships that are farmed in imam lastory daruba port, oil waste treatment system and garbage on this ship i.e. they hold oil waste in oil shelters and in drums that are specially used to accommodate oil waste and dry waste and their bases are accommodated in the trash, but there are some ships they provide garbage cans on this ship there is only 1 piece of garbage , based on the results of the interview obtained he said the oil waste of their ship brought free marine and disposed of the oil waste, if their garbage is laying it on the edge of the port so if the garbage is not transported by the port cleaning team then the garbage is carried by the wind and could fall into the sea and there is pollution and the sea looks dirty. The countermeasure process can be seen in the image below



*Pictures. 1.3. oil waste shelters*

## **D. Port Liquid Waste Management Techniques**

Oil and oil contamination was influenced by the number of ship arrivals at Imam Lastori Daruba Port, and the ship's arrival was influenced by the number of cargoes on board. To optimize contamination from oil and oil waste, there needs to be a determination of port points that will serve the final buildup of oil and oil waste.

In this planning should pay attention to the objective function in the optimization process namely the smallest cost unit of planning taking into account:

1. Number of cargo transported
2. Number of ship men (ABK)
3. Wari operation
4. Fuel price, lubricant price, and barge construction material price)

## **E. Port Liquid Waste Management Procedure**

Waste and waste shelter facilities from port activities should be integrated with reception facility which is a waste and garbage shelter facility from the ship. In principle this standard refers to the regulations that have been in effect related to waste management at the port, in particular Regulation of the Minister of Environment No. 05 of 2009 on Waste Management in the Port.

The type of waste referred to in this standard is liquid waste hazardous and toxic material (B3) resulting from port activities. The port waste management procedure is explained in the information below:

- a. Waste packaging/disposal
- b. Packaging Requirements
- c. Waste Packaging Principles
- d. Packaging Waste Shelter
- e. Waste Packaging Storage

## **CONCLUSION**

Imam lastori port of Samapai imam is not currently in the system of environmental management ISO 14001, and there is no ISO 14001 certificate yet but they have ukl and UPL environmental permits, from the survey results obtained as a whole has been done well, but masi there are some things that need to be improved such as TPS and drainage, garbage is not currently managed well and needs to be in the garbage can in the area around the port so that passengers ship do not dump garbage into the sea. It is hoped that the management of the environment that is implemented today is always improved towards better

## SUGGESTIONS

Based on the results obtained then suggestions that can be given include

1. Raising awareness of the workforce and community the importance of maintaining the environment
2. Impose sanctions on port workers who do not implement a program to properly management the environment and passengers of ships or communities around the port so as not to dispose of garbage in port and sea areas
3. Multiply trainings related to ISO 14001 environmental management system, so that companies are biased to obtain ISO 14001 certificate.

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