

THE INSPECTION OF TEST MAINTENANCE IN PT PJB UBJ OPERATION AND MAINTANANCE PLTU INDRAMAYU

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ABSTRAK

Inspeksi adalah salah satu alat kontrol manajemen klasik, namun masih relevan dan diterapkan secara luas dalam upaya menemukan masalah yang dihadapi di lapangan, termasuk untuk memperkirakan besarnya risiko, pengujian adalah alat ukur yang memiliki standar objektif yang dapat dilakukan. digunakan secara luas, dan bisa benar-benar digunakan dan membandingkan keadaan psikologis atau perilaku individu. Pemeliharaan adalah kombinasi dari berbagai tindakan yang dilakukan untuk menyimpan barang atau memperbaikinya sampai kondisi bias. K3 merupakan salah satu aspek perlindungan tenaga kerja dengan menerapkan teknologi pengendalian keselamatan dan kesehatan kerja, diharapkan tenaga kerja dapat mencapai ketahanan fisik, tenaga kerja, dan tingkat kesehatan yang tinggi. Dalam pelaksanaan Tugas Akhir yang dilakukan pada 1 Juni 2017 s.d 1 Juli 2017 bertujuan untuk mengetahui pemeriksaan program k3 APAR, prosedur pemeriksaan K3 APAR, pelaksanaan pemeriksaan K3 APAR. APAR adalah perangkat yang dirancang sebagai pertolongan pertama di awal kebakaran. Metode yang digunakan dalam pelaksanaan Tugas Akhir adalah metode wawancara, observasi, dan studiliteratur. Program yang dilaksanakan adalah pemeliharaan apar dalam waktu 1 tahun 2 kali, dengan area transfer tower II, CWWTMBDS, Heavy Equipment, gudang, stepup B, limbah B3, boiler 3, turbin 3, CCB 1, CCB 2, pada minggu 1 (Rabu), minggu 2 (Selasa), minggu ke 3 (Selasa). Prosedur yang digunakan adalah prosedur pemeriksaan APAR dengan dokumen IKE-8.2.3.085 dengan tanggal 10 Maret 2016 dan prosedur pengendalian APAR dengan nomor dokumen IKY8.2-03-8 dengan tanggal publikasi 15 Maret 2013. Pelaksanaan ap3 untuk pencegahan kebakaran dan pengendalian bias dengan cara membuat manajemen kebakaran di perusahaan. Kesimpulannya adalah pemeriksaan K3 APAR yang telah dilaksanakan sesuai dengan peraturan 04 tahun 1980.

Kata kunci: Inspeksi, K3, APAR, Api, PLTU

ABSTRACT

Inspection is one of the classic management control tools, but it is still relevant and widely applied in the effort to find problems faced in the field, including to estimate the magnitude of risk. , the test is a measuring device that has an objective standard so that it can be used widely, and can be really used and compare the psychological state or individual behavior. Maintenance is a combination of various actions taken to keep an item or fix it until a condition is acceptable. OHS is one aspect of labor protection by applying safety and health control technology, it is expected that the workforce will achieve physical endurance, work force, and high level of health. This final assigned was conducted on 1 June 2017 up to 1 June, 2017 and the it purpose of to know the program inspection OHS Fire extinguisher, inspection procedures OHS Fire extinguisher, implementation inspection OHS fire extinguisher. Fire extinguisher is a device designed as first aid at the beginning of a fire. The method used in the implementation of Final assignmen are interview method, observation, and literature study. The program implemented is the maintenance of the apar within 1 year 2 times, with the transfer area of tower II, CWWTMBDS, Heavy Equipment, warehouse, stepup B, B3 waste, boiler 3, turbine 3, CCB 1, CCB 2, on first week 1 (Wednesday), second week 2 (Tuesday), third week 3 (Tuesday). The procedure used is the fire extinguisher checking procedure with the IKE-8.2.3.085 document with the date of 10 March 2016 and the fire extinguisher control procedure with document number IKY8.2-03-8 with date issued March 15, 2013. Implementation of fire extinguisher inspection for fire prevention and control can be by making fire management in the company. The conclusion is the inspection of OHS fire extinguisher has been implemented in accordance with the regulation 04 of 1980.

Keywords: Inspection, OHS, Fire extinguisher, Fire, PLTU

1. Introduction

Fire is a phenomenon that occurs when a material reaches a critical temperature and reacts chemically with oxygen to produce heat, flame, smoke, carbon monoxide and other products. In the phenomenon diagram of the occurrence of fire explained that the fire that first appeared during a fire is not a fire in big size, but a small fire. In such conditions, we can prevent the increase of fire by extinguishing it. There is a way of extinguishing a small fire, that is the traditional way and the modern way. Extinguishing the fire in the traditional way can be done using traditional equipment as well, such as burlap sacks and towels that have been previously covered. This method is usually applied to households. While extinguishing the fire modern way can be done by using a tool called (Fire Extinguishers Light). Typically, Fire extinguisher is used to extinguish fires in the work environment (offices, factories, companies, institutions, etc.)

At present, the development of the industrial world is so thriving, the increase in the free market demands an increase in efficiency in producing quality products that meet standards, environmentally friendly and safe, so that these products can compete in the international market. In this case, there is so much that every company needs to pay attention to, all the attention and implementation of aspects relating to environmental and occupational safety impacts needs to be done. Because of this is what has the influence either directly or indirectly on work productivity.

2. Fundamental Theory

2.1 Definition of Safety Inspection Test Maintenance

Inspection is a program or activity undertaken to measure or assess the suitability of an object against the standards used and the implementation is usually done regularly, scheduled and periodic. Safety Inspection or Occupational Safety Inspection is an activity carried out through surveillance of condition-condition at work and or existence of deviation (both unsafe act and unsafe condition) to avoid factors that potentially cause accident. Inspection is one good system for finding a problem and estimating the amount of risk before an accident occurs and other disadvantages that can arise (Sucipto, 2014).

2.2 Fire Extinguisher Installation Standards

Based on the regulation of the minister of labor and transmigration number 4 year 1980, Fire extinguisher installation standard as follows:

- 1) Any fire extinguisher shall be placed in a position that is easily visible, easy to achieve and retrieved and equipped with marking.
- 2) The height of the mounting mark is 125 cm from the floor floor.
- 3) Installation and placement of fire extinguishers shall be appropriate to the type and classification of fires.
- 4) The placement of one fire extinguisher with the other group shall not exceed 15 m.
- 5) All mandatory APAR tubes are red.

- 6) It is prohibited to install and use fire extinguisher that are found to be perforated or defective and rust.
- 7) Each fire extinguisher shall be mounted to hang on the wall by strengthening other reinforcing constructions or placed in an unlocked box cabinet.
- 8) The size and width of a safe glass frame (safety glass) should be adjusted to the size of the existing fire extinguisher in the cabinet or box fire extinguisher so that it can be removed.
- 9) Installation of the fire extinguisher shall be such that the topmost part is located at a height of 1.2 m from the floor surface.
- 10) Fire extinguisher should not be installed in a room or place where temperatures exceed 49 ° C.
- 11) Fire extinguisher placed inside the enclosure must be protected with a safety cap.

2.3 Typeys of Fire Extinguisher

- Type of flour (Dry chemical)
- Type of Gas (Carbon Dioxide CO₂)
- Foam Type (Foam)
- Replacement Gas Type of Hallon

2.4 Fire Extinguisher Control

Fire extinguisher control is carried out in accordance with work instructions and requirements set by the government to ensure adequate, reliable and secure operation. All fire extinguisher can be used according to their function every time needed to reduce the risk of loss due to fire. The replacement or replenishment of the apar is adjusted to the expiration period of the filler (Sucipto, 2014).

2.5 Identification of Fire Extinguisher

- 1) Each fire extinguisher has identification: fire extinguisher type, capacity, placement location, fill capacity, refill date, etc.
- 2) Fire extinguisher placement: the bottom side should not be less than 15 cm and the top of the tube should not be more than 120 cm.
- 3) Fire extinguisher shall not be placed in a room with a temperature exceeding 49oC or decreased to minus 44oC.
- 4) The fire extinguisher should have instructions on how to use it and should be readable clearly.
- 5) Each fire extinguisher is equipped with a maintenance / inspection history card.

2.6 Examination of Fire Extinguisher

Based on the regulation of the minister of labor and transmigration number 4 year 1980, fire extinguisher examination in general include as follows:

- 1) Make sure that the installed fire extinguisher matches between the nozzle identification and the hanger.
- 2) If it does not match immediately return the fire extinguisher in the actual position.
- 3) Check the pressure on the pressure gauge, if the needle on the green color position is normal condition.
- 4) Clean the fire extinguisher tube of dirt / dust attached.
- 5) Clean the nozzle heads of the obstructing material.

- 6) The hanging case card of the fire extinguisher check in the provided position indicates that the fire extinguisher has been checked.
- 7) Record the examination results on checklist of fire extinguisher checks that have been provided.

2.7 Checking of Fire Extinguisher (6 month period)

Based on the regulation of the minister of labor and transmigration number 4 year 1980, the examination of fire extinguisher for 6 months period includes the following aspects:

- 1) Checking fire extinguisher monthly period.
- 2) Whether or not the tube is, whether or not the pressure inside the tube is damaged, whether or not the sealing of the cartridge or the pressurized tube and seal penetrating mechanic is sealed.
- 3) The outside of the tube shall not be defective including the handle and the label shall always be in good condition.
- 4) The transmit mouth should not be clogged and the transmit pipe should not crack or show any signs of damage.
- 5) For liquid fire extinguisher or sodas are checked by mixing a small amount of sodium bicarbonate and hard acid solution outside the tube, when the reaction is strong enough, the light extinguisher may be reassembled.

3. Data Collection Method

In conducting the is final assignment, students are expected to conduct research in the company by making observations, to then be reviewed in accordance with the area of expertise. To support the activities of the final task that will be done, it can be done several methods of implementation, among others:

3.1 Field Observation Method

The data used in the compilation of reports is obtained directly from the real activities and their implementation in the field and using secondary data already in the OHS section.

3.2 Viewing data / records in the company

This method is used to search the data by examining the data of objects that are historical, origin, reasons, or background about the existing data on the company. By using this method the presentation of data will be more clear and detailed.

3.3 Interview

In this case the autho conduct sdirect interviews with the field supervisor, the worker concerned, and other officers authorized to obtain information in support of the completion of the report. The interview was conducted by asking several questions related to the theme and the title of the final assignment performed.

3.4 Discussion

It is a stage in which the autho asks questions to the resource persons with more specific questions, conduct discussions, etc. This technique is done by making prior arrangements to the relevant resource person.

4. Results and Discussion

4.1 Fire extinguisher Inspection Program

PT PJB UBJ O & M PLTU Indramayu as a company engaged in power generation has a fire extinguisher inspection program that aims to ensure that the conditions of fire extinguisher in accordance with the standards of feasibility fire extinguisher and to know the damage to the fire extinguisher as early as possible. These programs include Maintenance of fire extinguisher and fire extinguisher inspection schedule.

4.1.1 Maintenance of Fire Extinguishers

- 1) Any fire extinguishers should be checked 2 times a year, ie checks within 6 months and examination within 12 months. Defects in lightweight fire extinguishing equipment encountered during inspection shall be promptly repaired or the apparatus immediately replaced with non-defects.
- 2) 6 Months Examination.
- 3) (twelve) month check for all fire extinguishers using gas cylinders, in addition to a 6 month check, further inspection.

4.1.2 Schedule On fire extinguisher Inspection

The implementation of inspection apar at PT PJB UBJ O & M PLTU Indramayu prepared as a reference to carry out various activities in realizing the performance of labor.

In an effort to realize training and emergency response on skilled labor for the maintenance of facilities to support the fire department.

In the inspection of OSH team checked the place in several areas with the following schedule:

Table 5.1.3 fire extinguisher Inspection Schedule

Area	Schedule
Transfer tower II	Week 1 (Wednesday)
CWWTMBDS	Week 1 (Wednesday)
Heavy Tools	Week 1 (Wednesday)
Warehouse	Week 2 (Tuesday)
Steapup B	Week 2 (Tuesday)
Toxic Hazardous Waste	Week 2 (Tuesday)
Boiler 3	Week 2 (Tuesday)
Turbin 3	Week 2 (Tuesday)
CCB 1	Week 3 (Tuesday)
CCB 2	Week 2 (Monday)

Source: at PT PJB UBJ O & M PLTU Indramayu, 2017

4.2 Fire Extinguisher Inspection Procedure

PT PJB UBJ O & M PLTU Indramayu as a company engaged in the field of power plants have fire extinguisher inspection procedures aimed at ensuring that the conditions of fire extinguisher in accordance with the standards of feasibility fire extinguisher and to know the damage to the fire extinguisher as early as possible. These procedures include fire extinguisher checking and fire extinguisher control procedures.

4.2.1 Fire Extinguisher Check Procedure

This work instruction applies to every activity of checking all kinds of Fire Extinguishers, both CO₂, Foam and Dry Powder contained in all work area of PT. PJB UBJ O & M PLTU Indramayu. Procedure of checking with document number IKE-8.2.3.085 with date of 10 March 2016. Checking is done using APAR Checklist Form No. Document: FME-8.2.3.003. The fire extinguisher check procedure includes the following aspects:

- a) Make sure the fire extinguisher is in the designated place
- b) Make sure the fire extinguisher is not blocked or hidden. If obstructed or hidden, clean objects that block fire extinguisher.
- c) Check the latest fire extinguisher charging date.
- d) Check Expired fire extinguisher contents. If you have exceeded the expiration date, record and immediately refill or can be used as an exercise tool.
- e) Check the condition of fire extinguisher signs. Make sure it is installed properly and visible.

4.3 Fire Extinguisher Inspection Implementation

- a) Make sure the fire extinguisher is in a predetermined location that is in accordance with PER / 04MEN / 1980 that is where the distance from the floor to the fire extinguisher is 120 cm, and also from the floor distance to the APAR sign is 125 cm, and also from fire extinguisher 1 distance to fire extinguisher 2 it is 15 m.
- b) Check the date of fire extinguisher final charge after performing the inspection.
- c) Check Expiration of fire extinguisher contents, if it has exceeded the expiration date, record and immediately refill or can be used as an exercise tool.
- d) Check the condition of fire extinguisher beacons, make sure they are installed properly and can be seen clearly, and also in accordance with PER.04 / MEN / 1980.
- e) Check box fire extinguisher condition, if box fire extinguisher in rusty condition better recommended to be replaced by side OHS.
- f) Check the cleanliness of fire extinguisher, if dirty clean the fire extinguisher from dust and other impurities using a hygiene kits, eg duster.
- g) Check the condition of the fire extinguisher tube, make sure the fire extinguisher tube condition is in good condition and ready for use.
- h) Check the condition of the fire extinguisher seal, make sure the fire extinguisher seal is properly installed and not damaged.

- i) Check the condition of handle fire extinguisher, make sure the condition of handle fire extinguisher in good condition, if the handle fire extinguisher damaged condition is suggested to be replaced by the OHS.
- j) Check the pressure gauge condition / fire extinguisher pressure indicator, make sure the pressure gauge condition is working properly and shows enough pressure.
- k) Checking fire extinguisher with izat tool.
- l) Especially for Dry Chemical type apps, check whether the contents of the tube fire extinguisher clump or not by shaking the fire extinguisher tube or hitting the fire extinguisher tube using a rubber hammer to prevent the clumping of the flour.
- m) When checking the fire extinguisher has been done, mark the checklist card contained on the fire extinguisher by hole.
- n) It is a tool to check the fire extinguisher.
- o) (Traditional Fire Extinguishers), this is used for backup if the fire extinguisher is not functioning properly.

5. Conclusion and Suggestion

5.1 Conclusion

Conclusion This Final assignment titled Inspection K3 fire extinguisher have conclusions which are as follows:

- 1) Inspection program of Afire extinguisher OHS at PLTU Indramayu is checked 2 times a year, ie examination within 6 months and examination within 12 month period.
- 2) The inspection procedure of OHS fire extinguisher in PLTU Indramayu has fire extinguisher checking procedure and fire extinguisher control. That the procedure of checking the fire extinguisher with the document number IKE-8.2.3.085 with the date published March 10, 2016. Checking is done using fire extinguisher Checklist Form No. Document: FME-8.2.3.003. Fire extinguisher control procedures with document number IKY8.2-03-8 with date of March 15, 2013.
- 3) Implementation of inspection of fire extinguisher OHS in PLTU Indramayu.

Checking inspection of OHS fire extinguisher for more intensively is done every day and the examination is done in different place or area according to work instructions document number: FME-8.2.3.003, after inspection in the field of inspection result data will be submitted to OHS office or manager.

5.2 Suggestion

- 1) In some box fire extinguisher rusty conditions and is not feasible to use it is recommended to implement improvements in the box fire extinguisher.
- 2) The total fire extinguisher in Indramayu power plant in the numbering section are not sequential and the numbering only uses markers, therefore it is recommended to renumber the fire extinguisher and use the label for the numbering of fire extinguisher.

- 3) In the inspection activities are often found objects that should not exist in the box fire extinguisher therefore it is recommended to make a warning ban put any item in the box fire extinguisher.

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