

IMPLEMENTATION AND SUPERVISION OF OCCUPATIONAL SAFETY AND HEALTH IN THE OCCUPATIONAL ACCIDENT PREVENTION AND HANDLING SYSTEM AT PT. INDONESIA POWER STEAM POWER PLANT (PLTU) BARRU (A STUDY OF THE LABOR LAW)

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Abstract

This study investigates the implementation and supervision of occupational safety and health (OHS) in the work accident prevention and response system at PT. Indonesia Power Pembangkit Listrik Tenaga Uap (PLTU) Barru, focusing on the study based on the Manpower Law. The background of the study underlines the importance of OHS in the power generation industry to reduce the risk of accidents and ensure a safe working environment for employees. This study uses a qualitative approach with case studies, including in-depth interviews, direct observation, and document analysis. The results of the study indicate that although there has been progress in the implementation of OHS policies, such as the use of personal protective equipment (PPE) and routine equipment inspections, there are challenges in managing complex risks, especially related to the use of heavy equipment and a dynamic working environment. The discussion of the research results highlights the practical implications for OHS management in the power generation industry, including the need to strengthen safety culture, improve supervision, and align policies with applicable regulations, namely Recommendations for development include improvements in OHS policies and practices, increasing employee awareness, and aligning with the latest regulations in Law Number 13 of 2003 concerning Manpower. The results of this study provide an important contribution to our understanding of OHS practices in the energy sector, with direct implications for improving the safety and well-being of workers in the power generation industry. The conclusions emphasize the need for strategic steps to improve the effectiveness of the OHS system and recommend further research to explore more deeply the factors that influence OHS implementation in high-risk work environments. Thus, this study contributes to a better understanding of OHS practices in the energy industry, particularly in the context of PT. Indonesia Power PLTU Barru.

Keywords: Supervision, Workforce, Electricity.

A. INTRODUCTION

The power generation industry, especially steam-powered power plants (PLTU), is a work environment that has a high potential risk of work accidents and occupational diseases. The power generation industry, especially steam-powered power plants (PLTU), does pose a significant risk of work accidents and diseases. Studies have highlighted various hazards in PLTU, such as human error in the control room (O'Reilly et al., 2022). The importance of occupational safety and health (OHS) in this sector cannot be doubted considering its operational characteristics involving the use of heavy equipment, complex production processes, and a work environment that is often potentially dangerous.





OHS in the power generation industry is not only related to the physical and mental well-being of employees, but also affects the overall productivity of the company. Good implementation of OHS policies can reduce the risk of work-related accidents and diseases, which in turn increases operational efficiency and reduces costs related to treatment and compensation due to accidents.

The implementation of Occupational Safety and Health (OHS) in the power generation industry plays an important role not only in maintaining the physical and mental well-being of employees but also significantly impacts the overall productivity of the company (Khanifatul Khusna et al., 2023).

In the context of PT. Indonesia Power PLTU Barru, as a case study in this study, a deep understanding of the importance of OHS is crucial. By paying attention to applicable OHS regulations and standards, companies can build a safe work environment, ensure employee welfare, and fulfill their legal obligations. Thus, this study aims to identify challenges, strategies, and best practices in implementing OHS in the power generation industry, especially at PT. Indonesia Power PLTU Barru.

The Concept of Occupational Safety and Health (OHS)

Occupational Safety and Health (OHS) is a very important area in human resource management in various industries, including the power generation industry. OHS refers to efforts to protect the safety, health, and well-being of employees in the work environment. The definition of K3 includes various important aspects that must be considered and managed properly by the company:

1. Definition of K3: Occupational Safety and Health is defined as a systematic effort to prevent work-related injuries and illnesses through identification, evaluation, and control of risks in the workplace. This includes various preventive, protective, and health promotion measures to ensure that every employee can work in a safe and healthy environment.

2. Important Aspects of K3:

- Use of Personal Protective Equipment (PPE): PPE such as helmets, gloves, eye protection, and safety shoes are the first step in keeping employees safe from physical hazards in the workplace.
- Accident Prevention: Through proper education, training, and supervision, companies can reduce the risk of accidents that can occur due to the use of heavy equipment and potentially hazardous work processes.
- Risk Management: Identification, evaluation, and control of risks are basic principles of K3 that help companies plan preventive actions and responses to unwanted events.
- Policies and Procedures: Effective K3 requires clear policies and procedures that are implemented consistently by all employees and company management.





(Rahayu et al., 2023a) stated that in the context of PT. Indonesia Power Plant Barru, the implementation of the K3 management system is very important for continuous evaluation and improvement of safety standards.

This concept is important in the context of PT. Indonesia Power PLTU Barru because it helps establish the basis for continuous evaluation and improvement of their K3 system. By understanding and implementing this concept comprehensively, companies can minimize the risk of work accidents, increase productivity, and create a safe and healthy work environment for all employees.

Legal Basis and Regulations related to Occupational Safety and Health (K3)

In Indonesia, protection of occupational safety and health (K3) is based on several legal bases that comprehensively regulate the rights, obligations, and responsibilities of both employers and employees. Law Number 1 of 1970 concerning Occupational Safety is the initial basis which was later revised and updated by Law Number 13 of 2003 concerning Manpower. This law requires every employer to provide a safe and healthy work environment for all employees, as well as regulates the basic rights of workers related to decent working conditions free from danger.

In addition to the Manpower Law, further regulations are regulated in the form of regulations government regulations and more specific ministerial regulations, such as the Regulation of the Minister of Manpower Number 5 of 2018 concerning Occupational Safety and Health in the Workplace. This regulation outlines the procedures for implementing OHS in accordance with various industrial sectors, including the steam power generation industry such as PT. Indonesia Power PLTU Barru.

This regulation emphasizes the importance of adopting effective OHS practices and the need for a structured and measurable OHS management system. This regulation underlines the importance of adopting effective OHS practices and the need for a structured and measurable OHS management system to ensure safety and health in the workplace. The research findings emphasize the importance of implementing OHS in high-risk environments such as construction projects and industrial settings, where accidents can have severe consequences (Pangestika, 2023).

In addition to national regulations, Indonesia also adopts international standards as recommended by the International Labour Organization (ILO) through ratified OHS conventions. This demonstrates Indonesia's commitment to ensuring OHS standards that are in accordance with international practices, as well as increasing awareness and protection of employee welfare in the workplace. With this strong legal and regulatory foundation, PT. Indonesia Power PLTU Barru is expected to carry out its operations in accordance with high OHS standards, create a safe and healthy work environment, and fulfill its legal obligations to protect employees.





Occupational Accident Prevention and Response System

In the context of the occupational accident prevention and response system at PT. Indonesia Power PLTU Barru, various methods and approaches are applied to ensure a safe work environment and reduce the risk of accidents that can occur in daily operations. Collaboration between companies, workers, and local governments is emphasized to manage accident reporting effectively and reduce incidents, as discussed in (Sultan, 2023). One of the main methods used is a systematic approach that includes the following steps:

Risk identification and evaluation is the first step in the occupational accident prevention system. This involves identifying potential hazards in the workplace, such as the use of heavy equipment, complex operational processes, and potentially hazardous work environments. This risk evaluation helps determine the priority of preventive actions that must be taken to reduce the identified risks.

The implementation of clear and structured OHS policies and procedures is key to ensuring employee safety and health. PT. Indonesia Power PLTU Barru implements strict operational standards that include the use of appropriate personal protective equipment (PPE), safety procedures in operating equipment, and regular training to improve employee awareness and skills in dealing with potential hazards in the workplace. Regular monitoring and evaluation are an integral part of the work accident prevention system.

Through strict supervision of the implementation of OHS policies and routine inspections of work equipment, companies can identify potential problems and quickly implement corrective actions to reduce the risk of accidents and improve the effectiveness of the overall OHS system. Close supervision of the implementation of OHS policies and routine inspections of work equipment play an important role in identifying potential problems and quickly implementing corrective measures to reduce the risk of accidents and improve the overall effectiveness of the OHS system. Studies have shown that the implementation of OHS in various sectors, such as construction projects and company operations, significantly impacts worker safety and project success (Khanifatul Khusna et al., 2023).

By integrating these methods and approaches into daily practice, PT. Indonesia Power PLTU Barru is committed to creating a safe working environment, ensuring employee welfare, and meeting OHS standards set by international regulations and standards.

B. RESEARCH METHOD

Research Design

This study uses a qualitative approach with a case study at PT. Indonesia Power PLTU Barru. The qualitative approach was chosen because it allows researchers to gain a deep understanding of the implementation and supervision of occupational safety and health (K3) in a complex work environment such as the steam power plant industry. The choice of a qualitative approach in research is crucial for gaining a deep understanding of implementation and supervision processes.





Qualitative methods are essential in implementation research, providing a deep understanding of complex processes (Hamilton & Finley, 2019)

Research Instruments

To collect relevant and in-depth data, this study uses several instruments:

- 1. Interviews: In-depth interviews were conducted with various related parties at PT. Indonesia Power PLTU Barru, including senior management, supervisors, and field employees. These interviews aim to obtain direct views and experiences related to the implementation of OHS, challenges faced, and strategies used in preventing and handling work accidents.
- 2. Observations: Direct observations were conducted in the field to observe daily work practices, work environment conditions, use of PPE, and compliance with established safety procedures. These observations provide a direct picture of OHS practices carried out by employees and the effectiveness of the implementation of OHS policies at PT. Indonesia Power PLTU Barru.
- 3. Document Analysis: OHS-related documents such as company policies, safety inspection reports, accident records, and risk evaluations were also analyzed. This document analysis supports further interpretation and understanding of the OHS system implemented in the company.

Data Collection Procedure

The data collection procedure includes systematic steps in collecting information from various sources, including planning interview schedules, scheduled field observations, and collecting structured documents. The collected data are carefully analyzed to gain a holistic understanding of the implementation of K3 at PT. Indonesia Power PLTU Barru.

Data Analysis

Data analysis was conducted by adopting in-depth qualitative analysis methods. Discusses the application of these methods in social research Moleong, L. J., & Edisi, P. R. R. B. (2004). Data from interviews, observations, and document analysis were analyzed thematically to identify patterns, key findings, and conclusions relevant to the research objectives. This approach allows researchers to present research results with rich and detailed context, and provide evidence-based recommendations for improving OHS practices at PT. Indonesia Power PLTU Barru.

Framework Diagram

A Framework Diagram is an important tool in research or analysis because it helps organize and systematically structure related ideas and concepts. By using this diagram, researchers can describe the relationship between variables or elements that interact with each other in a particular research context. In addition, the Framework Diagram helps in providing a clear basis for hypothesis development, problem formulation, and research design. With the





visualization provided by this diagram, researchers can clarify complex concepts and facilitate a better understanding of the topic being studied.



Figure 1: Research Flow Diagram

C. RESEARCH RESULTS AND DISCUSSION

Description of Research Location

PT Indonesia Power is a subsidiary of PT PLN Persero which was established on October 3, 1995 under the name PT PLN Pembangkitan Jawa Bali I (PT PJB I). On October 8, 2000, the company changed its name to an independent power generation company focused on pure business.

Currently, the company's main activities are providing electricity through various power plants, as well as providing operation and maintenance services for power plants spread across various locations in Indonesia. In addition to managing power generation units, Indonesia Power has five subsidiaries, two joint ventures, one associate company, and 37 affiliated companies of its subsidiaries to support its business strategies and processes.

In 2020, PT Indonesia Power began developing its subsidiary in the field of new renewable energy by establishing PT Indo Tenaga Hijau. One of the projects developed is a rooftop solar power plant built at the PT Indonesia Power power plant unit in South Sulawesi. The head office of PT Indonesia Power is located in Lampoko Village, Balusu District, Barru Regency.

Within the scope of the Director of Human Resources and Administration, there are four divisions that have important roles in supporting the company's operations.

1. The HR System and Change Management Division is responsible for ensuring that the human resource management system and policies are well managed, as well as managing the company's change program using an integrated information system in accordance with InPower IMS. The main focus of this division is to improve the company's performance based on the principles of Good Corporate Governance (GCG) and compliance with the Anti-Bribery Management System (SMAP).



- 2. The HR Development Division is tasked with ensuring that human resource capabilities are in accordance with the company's needs. They use an integrated information system to maximize the company's performance by following GCG standards and compliance with SMAP.
- 3. The Talent Management Division focuses on ensuring the availability of cadres and talents that match the company's job requirements. They also manage an integrated information system to support the company's goals in terms of GCG and compliance with SMAP.
- 4. The Industrial Relations and Remuneration Division is responsible for the company's labor administration and industrial relations activities. They utilize an integrated information system to ensure the smooth operation of the company in accordance with GCG principles and compliance with SMAP.

In addition to these main functions, each division also has main tasks that include compiling and controlling work programs and budgets to support the Company's Long-Term Plan (RJPP) and the Company's Work and Budget Plan (RKAP) of each division. They are also responsible for compiling long-term strategies, policies, business processes, and procedures that support the operational goals of each division.

A logo or symbol is an important part of a company's identity. Corporate identity refers to the way or element that distinguishes the company from others. PT Indonesia Power uses a logo as its identity with the aim of making it easier for consumers or the general public to recognize and remember the company.

The PT Indonesia Power logo consists of the words "Indonesia Power", which reflect the identity and scope of the business as a whole. The name "Indonesia Power" was chosen to illustrate that this company is the main provider of power utility services in Indonesia.



Figure 2: Shows the logo of Indonesia Power (Source: indonesiapower.co.id). Here is a description of the PT Indonesia Power logo:

A. Form

- 1. The company name is displayed using the Futura Book/Regular and Futura Bold fonts which give a strong and firm impression.
- 2. A lightning bolt is applied to the letter "O" to symbolize the electric power industry, which is the company's main focus.
- 3. The red dot or circle at the end of the lightning bolt is a symbol that has been used since the company was named PLN PJB1. This symbol is a widely known identity and represents the company.





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B. Color

- 1) The red color is used in the word "Indonesia", depicting a strong and solid identity as the owner of resources to produce electric power used in Indonesia and abroad.
- 2) The blue color is used in the word "Power", indicating the high technology used in the company's electric power production.
- 3) The yellow color depicts the smart and wise nature, which is applied to the word "Power" to show that the company's electric power products have high-tech characteristics.

By using these elements, the PT Indonesia Power logo not only reflects the company's identity visually, but also communicates the company's core values to the public effectively.

Research Location Maps

PT. Indonesia Power PLTU Barru OMU is located in Lampoko village, Balusu sub-district, Barru regency. PT. Indonesia Power PLTU Barru OMU is located in Lampoko village, Balusu sub-district, Barru regency.



Figure 3: Research Location Maps





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Figure 4: Group Photo with K3 Officers at PT. PLN Indonesia Power Barru



Figure 5: Atmosphere of PLN Indonesia Power Barru



Figure 6: Safety Center Office of PT. Indonesia Power PLTU Barru OMU





Research Results

Evaluation of Occupational Safety and Health (OHS) Implementation at PT. Indonesia Power PLTU Barru based on Law Number 13 of 2003 concerning Manpower

In the evaluation of the implementation of occupational safety and health (OHS) at PT. Indonesia Power Steam Power Plant (PLTU) Barru, this study highlights the conformity of OHS practices with the provisions of Law Number 13 of 2003 concerning Manpower. This evaluation is based on the results of an interview with Mr. Rahmat Kamaruddin, Senior Environmental OHS Supervisor at the company, who provided valuable insights related to OHS implementation efforts in the industrial environment.

According to Mr. Rahmat Kamaruddin, PT. Indonesia Power PLTU Barru integrates OHS principles as stipulated in the Manpower Law in various aspects of their operations. One of the main aspects highlighted is the company's commitment to providing a safe and healthy work environment for all employees, in accordance with the provisions stipulated in the law. This implementation includes the implementation of strict safety procedures, the use of personal protective equipment (PPE), as well as training and development of OHS skills for employees.

In the context of legal regulations, PT. Indonesia Power PLTU Barru is also active in complying with certain requirements stipulated in the Manpower Law, such as the preparation of an OHS program, internal audits, and reporting of OHS incident delays to relevant parties. This reflects the company's commitment to not only meet legal standards, but also to continuously improve OHS practices to improve employee safety and welfare.

Based on the results of this interview, it can be concluded that PT. Indonesia Power PLTU Barru has taken significant steps in implementing OHS in accordance with Law Number 13 of 2003 concerning Manpower. However, certain challenges and areas for improvement still exist, including increasing OHS awareness at all levels of the organization and implementing more sophisticated technology for monitoring and mitigating work risks. This evaluation provides a strong foundation for the development of a more effective OHS strategy in the future, taking into account the conditions and specifications of the steam power plant industry.

Evaluation of Occupational Health and Safety (OHS) Implementation at PT. Indonesia Power PLTU Barru

This study evaluates the implementation of occupational health and safety (OHS) at PT. Indonesia Power PLTU Barru using a qualitative approach and case study. This evaluation reveals several significant findings related to OHS practices in the company's work environment.

First, the implementation of OHS policies at PT. Indonesia Power PLTU Barru shows several identifiable successes. The company's management has made significant investments in safety infrastructure, including the provision of adequate PPE and regular training for employees. These steps help raise awareness of the importance of OHS among employees and support efforts to prevent work accidents. The company's management has demonstrated a commitment to safety by investing in safety infrastructure, such as providing comprehensive Personal





Protective Equipment (PPE) and conducting regular training sessions for employees (Fardinal et al., 2022).

However, the study also identified several challenges in OHS implementation. One of the main challenges is the gap between existing policies and their implementation in the field. Although a comprehensive OHS policy has been implemented, there are still obstacles in changing the safety culture at all levels of the organization. Factors such as inconsistent understanding of the importance of OHS, as well as limited resources to support policy implementation, are obstacles that need to be addressed. In addition, the evaluation also highlighted the need for increased supervision and monitoring of OHS practices. Although there have been efforts to carry out routine inspections and internal audits, there is still a need for increased direct supervision of the implementation of OHS policies in the field. This is important to ensure that all employees comply with established safety procedures and identify potential problems before they become accidents. Ensuring that all employees comply with established safety compliance in reducing workplace accidents. Because non-compliance can lead to serious consequences such as large fines, reputational damage, and operational shutdowns (Barbosa, 2023).

Evaluation Results of Occupational Safety and Health Implementation at PT. Indonesia Power PLTU Barru based on Law Number 13 of 2003 concerning Manpower

In this study, an evaluation was conducted on the implementation of occupational safety and health (OHS) at PT. Indonesia Power PLTU Barru based on the provisions of Law Number 13 of 2003 concerning Manpower. Data and information were obtained through interviews with Mr. Rahmat Kamaruddin, Senior Environmental OHS Supervisor at the company, as well as opinions from a number of other sources who were directly involved in the implementation of OHS policies in the company.

According to Mr. Rahmat Kamaruddin, PT. Indonesia Power PLTU Barru implements strict OHS Standard Operating Procedures (SOPs). Every worker is required to understand and comply with the company's OHS SOP as part of an effort to maintain occupational safety and health not only for the company but also for the personal interests of each worker (Rahmat Kamaruddin, July 22, 2023).

This opinion is supported by Asbiandi, a local operator at the company, who said that violations of the K3 SOP, such as non-compliance in using Personal Protective Equipment (PPE), will be subject to sanctions in the form of verbal warnings, warning letters, and can even result in termination of employment (Asbiandi, July 24, 2024). Asbiandi also added that the company's policy in ensuring occupational safety applies not only to employees but also to visitors or guests, and involves active efforts in controlling the risk of hazards in the workplace. (Barbosa, 2023).

Eka Pratiwi Nuriadin also emphasized that PT. Indonesia Power PLTU Barru provides health facilities and benefits, including BPJS Employment and health, to ensure the welfare and health security of workers (Eka Pratiwi Nuriadin, July 24, 2024).





Based on the results of this interview, it can be concluded that the understanding and compliance with the K3 SOP at PT. Indonesia Power PLTU Barru is quite good. The workers showed a good understanding of the established safety procedures, as directly observed by researchers in the field where all workers used PPE in accordance with the applicable SOP. This shows that the implementation of K3 in the company is in line with the provisions of Law Number 13 of 2003 concerning Manpower, with active efforts to ensure high compliance and work safety for all parties involved in the work environment of PT. Indonesia Power PLTU Barru.

One aspect that forms compliance is the knowledge of workers about an object/material. Knowledge in this case regarding the K3 SOP implemented by the company. Based on the results of the interviews above, the researchers concluded that the understanding of the workforce on the K3 SOP was very good. While some companies have shown good implementation of the K3 promotion and management system, there are still areas that need improvement, such as updating policies and conducting regular training sessions to increase safety awareness among workers (Rahayu et al., 2023b). This statement is supported by the results of direct observations made directly by researchers that all workers use PPE when going into the field.

Thus, the evaluation of the implementation of K3 at PT. Indonesia Power PLTU Barru provides a holistic picture of the achievements and challenges in creating a safe and healthy work environment. Recommendations based on the findings of this study can help companies improve their OHS systems, enhance employee safety, and reduce the risk of future accidents.

Research Results on the Implementation of Occupational Safety and Health (OHS) and Law Number 13 of 2003 concerning Manpower: Case Study of PT. Indonesia Power PLTU Barru

In this study, the main focus is to investigate the implementation of occupational safety and health (OHS) at PT. Indonesia Power Pembangkit Listrik Tenaga Uap (PLTU) Barru, by considering the perspective of the relevant Manpower Law. The results of this study are based on the results of interviews with Mr. Rahmat Kamaruddin, Senior Environmental OHS Supervisor at the company, who provided valuable insights related to OHS practices in the industrial environment.

According to Mr. Rahmat Kamaruddin, the implementation of OHS at PT. Indonesia Power PLTU Barru is greatly influenced by the provisions of Law Number 13 of 2003 concerning Manpower. This law stipulates that every company, including the power generation industry, is required to provide a safe and healthy working environment for all employees. This implementation not only includes compliance with legal regulations, but also the formation of a strong safety culture at all levels of the organization.

The interview results also revealed that PT. Indonesia Power PLTU Barru has adopted various strategies in order to comply with the Manpower Law and improve OHS practices. One of the main strategies is the use of a systematic approach in OHS management, which includes risk identification, control evaluation, and periodic implementation of corrective actions. This is in





accordance with the approach recommended in the related literature, which emphasizes the importance of proactive risk management to reduce accident incidents. Proactive risk management is very important in reducing accident incidents, as highlighted in the literature. This approach emphasizes the need for continuous monitoring, regular reviews, and identification of potential problem areas to ensure safety improvements and prevent catastrophic events (Ispas et al., 2023).

In addition, Mr. Rahmat Kamaruddin also highlighted the importance of employee training and awareness of OHS as a key factor in successful implementation. Structured and ongoing training programs help improve understanding of work risks and empower employees to identify and address potential hazards in the workplace.

Overall, the results of this study provide a clear picture of how PT. Indonesia Power PLTU Barru implements OHS in relation to the Manpower Law. These findings not only confirm the importance of compliance with legal regulations, but also demonstrate how the implementation of effective OHS practices can improve occupational safety and health conditions in the power generation industry.

Success in Implementing Occupational Safety and Health (OHS) at PT. Indonesia Power PLTU Barru: Case Study based on Law Number 13 of 2003 concerning Manpower

This study investigates the success in implementing occupational safety and health (OHS) at PT. Indonesia Power Steam Power Plant (PLTU) Barru, with a focus on compliance with Law Number 13 of 2003 concerning Manpower. The results of this study are based on the results of interviews with Mr. Rahmat Kamaruddin, Senior Environmental OHS Supervisor, and Asbiandi, a local Operator at the company.

According to Mr. Rahmat Kamaruddin, the success in implementing OHS at PT. Indonesia Power PLTU Barru can be seen from the company's commitment to implementing strict OHS Standard Operating Procedures (SOPs). Every worker is required to understand and comply with the OHS SOP as an effort to maintain occupational safety and health, in accordance with the provisions of the Manpower Law (Rahmat Kamaruddin, July 22, 2023). This implementation includes regular training, use of Personal Protective Equipment (PPE), and internal audits to ensure compliance with applicable OHS standards.

Asbiandi, who is a local Operator at the Barru PLTU, added that the success of OHS implementation is also reflected in the sanctions imposed on violations of the OHS SOP, such as verbal warnings, warning letters, and termination of employment for those concerned (Asbiandi, July 24, 2024). This shows that the company not only implements OHS policies formally, but also enforces strict enforcement mechanisms to increase awareness and compliance with the OHS SOP.

Based on the results of this interview, it can be concluded that PT. Indonesia Power PLTU Barru has achieved a good level of success in implementing OHS based on Law Number 13 of 2003 concerning Manpower. Active involvement of management in implementing OHS SOPs, full support for the implementation of training and supervision, and the application of sanctions





for violations, are key factors supporting this success. The implications of these findings can provide guidance for other companies in the industrial sector to improve OHS practices and ensure a safe and healthy working environment for all employees.

The implementation of occupational safety and health (OHS) at PT. Indonesia Power PLTU Barru has shown several successes that reflect the company's commitment to creating a safe and healthy working environment for employees. The following are some key points that mark the success of OHS implementation:

PT. Indonesia Power PLTU Barru has succeeded in providing sufficient infrastructure and resources to support OHS practices. This includes the provision of adequate personal protective equipment (PPE), such as helmets, gloves, eye protection, and safety shoes. The availability of appropriate PPE helps reduce the risk of physical injury to employees when carrying out their duties in a potentially hazardous work environment.

The company's success is reflected in the implementation of clear and structured safety procedures. PT. Indonesia Power PLTU Barru has a comprehensive OHS policy that includes guidelines and standard operating procedures that must be followed by all employees. This step not only raises awareness of the importance of OHS among employees, but also ensures that all operational activities are carried out in accordance with established safety standards.

The company management is actively involved in promoting a safety culture in the workplace. Through regular training, seminars, and safety campaigns, the company strives to improve employee understanding of accident risks and preventive measures. This not only creates greater awareness of OHS, but also builds a collective commitment to creating a safe and healthy work environment. Thus, the success of OHS implementation at PT. Indonesia Power PLTU Barru is not only reflected in the physical infrastructure and policies in place, but also in the safety culture built throughout the organization. These measures are the basis for increasing productivity, reducing absenteeism due to work injuries, and maintaining employee well-being in the long term.

Although PT. Indonesia Power PLTU Barru has achieved some success in implementing occupational safety and health (OHS), there are still a number of challenges faced in efforts to improve OHS practices in the workplace. Some of the main challenges include:

First, inconsistent awareness and commitment to OHS at all levels of the organization. Although OHS policies and procedures have been established, not all employees have a deep understanding of the importance and benefits of complying with these safety standards. This lack of awareness can hinder effective implementation and lead to inconsistent compliance with safety procedures.

Second, financial challenges and limited resources are often barriers to improving OHS infrastructure. Investment in more sophisticated safety equipment and routine maintenance of OHS infrastructure can require significant costs. Limited budgets for training and additional equipment can also affect a company's ability to improve workplace safety.





In addition, operational complexity and changing work environments are challenges in implementing effective OHS practices. PT. Indonesia Power PLTU Barru, as a steam-powered power plant, has a complex production process and involves the use of heavy equipment that is potentially dangerous. Adapting occupational health and safety (K3) policies to these operational dynamics requires a flexible approach and continuous adjustment to emerging risks. Research highlights the importance of flexible and sustainable adaptation of occupational health and safety (K3) policies to address emerging risks in various industries. (Setiawan, 2019)

By effectively identifying and addressing these challenges, PT. Indonesia Power PLTU Barru can strengthen their K3 system and improve protection of employee health and safety. Efforts to create a strong safety culture and address these barriers will contribute to achieving the company's long-term goal of maintaining a safe and productive work environment. Implementation of occupational safety and health (K3) at PT Indonesia Power PLTU Barru and strategies to promote safety culture in the workplace. (Muhammad & Marsuki, 2024) found that PLTU Barru has implemented a K3 management system that is integrated with company management, emphasizing communication as a key factor. They note good practice in accident prevention and management (Muhammad & Marsuki, 2024).

Discussion

Interpretation of Occupational Health and Safety (OHS) Implementation Supervision Findings at PT. Indonesia Power PLTU Barru

In this discussion, an interpretation will be made of the findings of occupational health and safety (OHS) implementation supervision at PT. Indonesia Power PLTU Barru based on the provisions of Law Number 13 of 2003 concerning Manpower. Data obtained from interviews with Mr. Rahmat Kamaruddin, Senior Environmental OHS Supervisor, and Asbiandi, a local Operator at the company, will be analyzed to understand the extent to which the company complies with applicable OHS regulations.

Based on the interview with Mr. Rahmat Kamaruddin, the implementation of OHS SOPs at PT. Indonesia Power PLTU Barru has shown positive results. The company has a comprehensive approach in implementing OHS SOPs, including regular training to increase employee awareness and knowledge of workplace hazards. This is in line with the requirements of Law Number 13 of 2003 concerning Manpower which emphasizes the importance of safety training and education for all workers. In addition, Asbiandi said that the company imposes strict sanctions against violations of the K3 SOP, such as verbal warnings, warning letters, and even termination of employment for persistent violators (Asbiandi, July 24, 2024). This reflects the company's commitment to maintaining compliance with the K3 regulations stipulated by the Manpower Law, as well as active efforts to ensure occupational safety and health for all its personnel. From the interpretation of these findings, it can be concluded that PT. Indonesia Power PLTU Barru has succeeded in implementing K3 well, in accordance with the provisions of Law Number 13 of 2003 concerning Manpower. The combination of a proactive approach in training and supervision, as well as consistent enforcement of sanctions against violations, is the key to the success of K3 implementation in this company. The implication of these results





is the importance of implementing a comprehensive and consistent strategy in increasing awareness and compliance with OHS in the work environment, which can be a reference for other companies in the same industry to improve and strengthen their OHS systems.

In interpreting the findings of the study on the implementation and supervision of occupational safety and health (OHS) at PT. Indonesia Power PLTU Barru, several important interpretations can be outlined. These findings not only provide an overview of the actual conditions of OHS implementation in the company, but also provide insight into practical implications that can be applied to improve the OHS system.

First, the results of the study indicate that the success of OHS implementation is highly dependent on management commitment in creating a strong safety culture. Management that is actively involved in supporting and enforcing OHS policies, as well as providing sufficient resources for their implementation, tends to create a safer work environment and reduce the risk of accidents. This indicates that the role of leadership in promoting a safety culture has a significant impact on employee behavior and attitudes towards OHS.

Furthermore, the interpretation of these findings also highlights the importance of a systematic approach in managing OHS. The implementation of structured procedures, including risk identification, implementation of preventive actions, and periodic evaluations, helps in ensuring that safety standards at PT. Indonesia Power PLTU Barru is implemented consistently and effectively. The use of this approach not only supports compliance with existing OHS regulations, but also improves response to changes in the work environment and ever-evolving technology.

In addition, the interpretation of the findings also underlines the importance of employee training and skills development in the context of OHS. Targeted and continuous training not only increases awareness of work risks, but also helps improve skills in identifying, evaluating, and addressing potential hazards in the workplace. Thus, investment in OHS-related human resource development is a crucial step in creating a safe and productive work environment.

Overall, the interpretation of the findings from this study provides a comprehensive view of the factors influencing OHS implementation at PT. Indonesia Power PLTU Barru. By considering these findings carefully, companies can identify areas for improvement, optimize accident prevention strategies, and integrate sustainable OHS practices into their organizational culture.

Implications of Research Results for Occupational Health and Safety (OHS) Practices in the Power Generation Industry

The results of this study have several important implications for occupational health and safety (OHS) practices in the power generation industry, especially at PT. Indonesia Power PLTU Barru. These implications cover various aspects that can affect the improvement of the OHS system and improve safety conditions in the workplace.

First, the study shows that management needs to strengthen its commitment and active role in supporting OHS implementation. Management that is directly involved in overseeing the





implementation of OHS policies, providing sufficient resources, and ensuring regular inspections and audits will help create a strong safety culture throughout the company. This implication underscores the importance of leadership in creating a safe and supportive work environment.

Furthermore, the results of this study highlight the need for increased use of technology and innovation in the OHS system. The use of technology such as safety sensors, early warning systems, and real-time monitoring can help identify potential risks faster and provide a more effective response to emergency situations. This not only improves employee safety but also optimizes operational efficiency and risk management in the workplace.

In addition, another implication of this study is the need for increased investment in employee training and education related to OHS. Structured and ongoing training will help improve employee awareness, knowledge, and skills in managing occupational risks. By strengthening employee capacity in facing various OHS challenges, companies can reduce the number of accidents and work injuries that can disrupt employee productivity and well-being.

Overall, the implications of this study reinforce the need for a holistic approach to managing OHS in the power generation industry. By considering these recommendations, companies can design sustainable strategies to improve their OHS systems, minimize risks, and create a safer and healthier work environment for all employees. This study makes a significant contribution to the development of theory and practice in the field of occupational safety and health (OHS), especially in the context of the power generation industry. Here are some of the main contributions of this study:

This study strengthens the understanding of key factors that influence the effective implementation of OHS at PT. Indonesia Power PLTU Barru. By identifying successes and challenges in OHS practices, this study provides an in-depth look at how factors such as organizational culture, management commitment, and use of technology affect occupational safety and contributes new insights into OHS practices through a specific case study in the steam power generation industry. The empirical findings of this study provide concrete examples of how companies can implement effective OHS strategies in complex and high-risk work environments such as power plants. This has the potential to be an important reference for similar companies in improving their OHS systems.

The contribution of this study is seen in justifying the use of a systematic approach in OHS management. By emphasizing the importance of risk identification, control evaluation, and regular monitoring, this study strengthens the theoretical argument that this approach can reduce workplace accidents and improve overall employee safety and also contributes to advocating the importance of OHS-related training and education. Through the finding that investment in employee skill development can increase risk awareness and strengthen safety culture, this study provides a strong empirical basis for recommending a continuous and focused training strategy in accident prevention efforts.

This study not only provides a deeper understanding of OHS implementation in the power plant industry, but also generates valuable insights for the development of OHS theory and practice





more broadly. The implications of these findings can help companies improve the occupational safety and health of their employees and improve overall operational efficiency.

The findings of this study have significant relevance to related literature and other OHS practices in various aspects. Here are some of the relevance of the findings to related literature and other OHS practices:

This study supports related literature that emphasizes the importance of safety culture in creating a safe work environment. The finding that management commitment and the establishment of a strong safety culture contribution to reducing work accidents is in line with theories that identify cultural factors as key to the success of K3 implementation. Emphasizing the role of cultural factors in the implementation of safety management systems, proposing a worker-based and local socialization model (Andi et al., 2010). And broadening the understanding of the importance of a systematic approach to K3 risk management. By integrating the process of risk identification, control evaluation, and continuous monitoring, companies can adopt best practices that have been supported by K3 literature to improve the effectiveness of safety systems. Integration of risk identification, control evaluation, and continuous monitoring is essential for an effective occupational health and safety (K3) system in an organization (Handayani & Purwanto, 2014). Occupational safety and health are important aspects in controlling all risks in the company's operations so that the implementation of (K3) in the workplace can minimize the risk of work accidents in every production process activity (Handayani & Purwanto, 2014).

Furthermore, the finding that the use of technology in OHS can improve emergency response and operational efficiency is also consistent with trends in related literature. Previous studies have shown that technology such as safety sensors and early warning systems can significantly reduce the risk of workplace accidents. Every job in this world certainly has its own level of risk of danger. Occupational Safety and Health (OHS) is an effort to create a safe, comfortable working atmosphere, and the ultimate goal is to achieve the highest possible productivity (Meylinta, 2020). This study provides additional evidence of the effectiveness of employee training and education in increasing awareness of occupational risks. The literature has highlighted that investment in employee skill development in OHS not only increases compliance with safety procedures but also influences better safety behavior in the workplace. Occupational Safety and Health (OHS) is one aspect of workforce protection that plays a major role in efforts to increase company productivity (Aldyirwansyah et al., 2023).

Overall, the relevance of the findings of this study to related literature and other OHS practices not only strengthens the understanding of factors affecting occupational safety, but also provides a basis for the development of more effective OHS strategies and policies in the power generation industry and other industries. The implications of these findings can help in improving occupational safety and health conditions in general, as well as improving employee productivity and quality of life. Dengan mengimplementasikan saran-saran ini, diharapkan PT. Indonesia Power PLTU Barru dapat memperkuat budaya K3 yang aman dan sehat bagi seluruh personelnya.





D. CONCLUSION AND SUGGESTIONS

Conclusion

This study reveals that the implementation of occupational safety and health (OHS) at PT. Indonesia Power PLTU Barru, based on Law Number 13 of 2003 concerning Manpower, has been carried out well and meets most of the legal requirements set. By considering the results of interviews with Mr. Rahmat Kamaruddin, Senior Environmental OHS Supervisor, and Asbiandi, a local Operator at the company, it can be concluded that the company has established strict OHS SOPs and implemented them consistently.

The implementation of OHS SOPs at PT. Indonesia Power PLTU Barru includes regular training for employees, the use of Personal Protective Equipment (PPE), and enforcement of sanctions for violations of OHS SOPs. This shows a strong commitment from the company in maintaining the occupational safety and health of its employees, in accordance with applicable regulations.

However, there are several challenges that need to be overcome, such as increasing OHS awareness at all levels of the organization and the application of more sophisticated technology for monitoring and mitigating work risks. In this context, the recommendation for the company is to continue to improve the OHS training program, strengthen the supervision system, and actively involve employees in efforts to improve OHS.

Overall, the success of OHS implementation at PT. Indonesia Power PLTU Barru shows the importance of seriousness and commitment in implementing OHS practices that comply with the law and pay attention to employee welfare. The implications of this study can provide a positive contribution to OHS practices in the steam power generation industry and other industries, as a guide to improve and enhance occupational safety and health in the future.

Suggestions

To strengthen the implementation of occupational safety and health at PT. Indonesia Power PLTU Barru, it is recommended to:

- 1. Expand the OHS training program periodically and comprehensively to increase employee awareness and understanding.
- 2. Improve internal supervision and audit of the implementation of OHS SOPs to ensure consistent compliance.
- 3. Integrate advanced technology into the OHS system to improve efficiency in controlling risks and work accidents.

By implementing these suggestions, it is hoped that PT. Indonesia Power PLTU Barru can strengthen a safe and healthy OHS culture for all its personnel.





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