

Implementation Of Occupational Health And Safety Management System At Pln Ulp Rantepao, North Toraja

Adelfina Rumae^{1*}, Apdiyani Toalu², Dr. Muhammad Rifai³

^{1,2,3}Program Studi Kesehatan Masyarakat,Universitas Tamalatea Makassar Email: adelpinarumae@gmail.com*

ABSTRACT

Occupational Health and Safety (OHS) is essential in the electricity sector due to its high-risk nature. This research comprehensively describes OHSMS implementation at PLN ULP Rantepao, North Toraja, uniquely examining operational challenges in remote highland areas with difficult terrain and limited infrastructure a context rarely explored in existing OHSMS literature. Using a descriptive qualitative approach based on Government Regulation No. 50 of 2012, this study analyzes five OHSMS elements: Policy Determination, Planning, Implementation, Performance Monitoring and Evaluation, and Review and Improvement. Data were collected through interviews, field observations, and documentation analysis. Results show that OHS policy is established by UIW Sulselbar, while PLN ULP Rantepao handles technical field implementation. Planning involves collaborative efforts across all divisions, including field technicians. Implementation demonstrates effectiveness through adequate PPE provision, work permits, and regular safety briefings. However, inconsistent PPE usage among workers remains challenging. This study uniquely identifies geographical and cultural factors specific to the Toraja highland region that influence OHS compliance behavior. Monitoring employs systematic inspections and the PLN Inspekta application, while improvements are based on employee feedback and SOP adjustments. Overall, OHSMS implementation at PLN ULP Rantepao is adequate but requires enhanced employee awareness and discipline. The findings contribute novel insights into adapting standardized OHSMS frameworks for geographically isolated electricity distribution units, offering practical recommendations for similar remote operational contexts. Continuous training, outreach, and supervision are recommended to achieve a safer and more sustainable work culture.

Keywords: OHSMS, PLN, Safety Management, Performance Evaluation, Remote Operations

INTRODUCTION

Occupational Safety and Health or abbreviated as K3 has an important role in increasing the productivity of a company because K3 can create a safe and comfortable work environment, so that it can support the achievement of good and optimal productivity (Putri & Lestari, 2023). Companies that implement a good occupational safety and health management system are able to reap great benefits, especially in creating safe working conditions for workers. In addition, the implementation of K3 is able to maintain the credibility and sustainability of a company.

The Occupational Safety and Health Management System (SMK3) is a process in the management of integrated K3 which includes planning, implementation, measurement and supervision. According to the International Labour Organization (ILO), the implementation or implementation of the occupational safety and health management system in Indonesia is classified as not optimal. Indonesia occupies the second lowest position in the implementation of K3 at the global level. The main goal of the implementation of SMK3 itself is to create a safer, more efficient, and more productive work environment, reduce the risk of work-related accidents (KAK), and reduce occupational diseases (PAK). Considering that SMK3 is very important, workers at PLN, especially field technicians, are expected to play an active role in the implementation of K3 effectively, efficiently and sustainably in order to achieve an optimal level

of success.

Law No. 13 of 2003 Article 87 Paragraph 1 concerning Manpower which states that "Every company is obliged to implement an Occupational Safety and Health Management System (SMK3) that is integrated with the company's management system". Furthermore, in Government Regulation No.50 of 2012 Article 5 Paragraphs (1) and (2) concerning the Implementation of the Occupational Safety and Health Management System (SMK3) states that "Every company that employs a workforce of 100 people or more and or has a high level of potential hazard is required to implement an occupational safety and health management system". The regulation shows the importance of maintaining occupational health and safety so that every company is obliged to implement SMK3.

The implementation of the Occupational Safety and Health Management System (SMK3) in companies is very important and needs to be implemented for the protection of workers, especially field workers and to minimize the possibility of work accidents. Workers in carrying out their work must be in good health, both physically and spiritually. In addition, workers must always use company attributes or uniforms, especially field workers or field technicians must always use work tools and personal safety that have been set when on duty in the field. Therefore, field workers in companies, especially at PLN, must understand the importance of K3 when working.

PLN is a state-owned company engaged in the distribution of electrical energy for every customer. This company has many workers, especially field workers. Field workers in these companies are the ones who need the most safety and health assurance, due to their very dangerous and high-risk workplace conditions. Their work is like installing or repairing electric poles on the highway, so this will be very high risk of falling from a height and at risk of being exposed to electric voltage and can cause death. In preventing or overcoming work accidents, workers must comply with the existing regulations in the company such as the rule that at work must always use protective equipment such as helmets, gloves and safety straps that are always tied around the waist when doing work above height.

According to the International Labour Organization (ILO) in 2021, every year there are more than 250 million work accidents, more than 160 million workers become ill due to workplace hazards and as many as 1.2 million workers die due to work accidents and illnesses at work. In the period from January to December 2024, the number of work accident cases in Indonesia was recorded as many as 462,241 cases with details of 423,644 cases including wage recipients, 34,364 cases of non-wage participants, and 4,233 cases including construction service participants. PLN (persero) ULP Rantepao Toraja Utara is one of the state-owned companies under the auspices of SOEs engaging in electricity service providers located on Jalan Minggu, Kec.Rantepao, Regency of North Toraja, South Sulawesi 91833. Playing a role in providing, maintaining and optimizing electricity supply for customers.

The field practice work report was carried out by (Anisah 2021) at PLN (persero) ULP Rantepao related to the problem of K3 implementation, one of which Anisah revealed was that there are still many workers who do not understand occupational safety and health such as not prioritizing safety when working, especially workers who go to the field, often do not wear personal protective equipment (PPE) such as when taking measurements at substations. Usually, there are workers who forget to wear gloves even though it has the potential to cause a work accident due to electric shock and can be fatal. This gap between policy and practice raises critical questions about the actual effectiveness of OHSMS implementation in remote operational units.

PLN (Persero) ULP Rantepao has an obligation to supervise, implement, and pay attention to all aspects directly related to Occupational Safety and Health (K3) in the work environment, so that workers get rights and obligations in accordance with the protection that has been set previously.

Despite the regulatory framework and documented safety protocols, the extent to which OHSMS is effectively implemented at PLN ULP Rantepao remains unclear, particularly given its unique operational context in the remote highland region of North Toraja. This research addresses this gap by investigating: (1) How is the OHSMS policy formulated and communicated at PLN ULP Rantepao? (2) What planning processes are employed to integrate K3 into daily operations? (3) To what extent are OHSMS implementations followed in field practices? (4) How effective are the monitoring and evaluation mechanisms in ensuring compliance? (5) What challenges hinder consistent OHSMS application, particularly regarding PPE usage among field technicians? Understanding these dynamics is crucial not only for improving safety outcomes at PLN ULP Rantepao but also for developing adaptive strategies applicable to similar remote electricity distribution units facing geographical and infrastructural constraints.

Based on the above background and research gaps, the researcher is interested in conducting a research entitled "Implementation of Occupational Safety and Health Management System at PLN ULP Rantepao Toraja Utara".

RESEARCH METHOD

This research employs a qualitative research design with a descriptive approach to comprehensively understand and describe the implementation of the Occupational Safety and Health Management System (SMK3) at PLN ULP Rantepao, North Toraja. The qualitative methodology is particularly suited to this study as it allows for in-depth exploration of organizational processes, worker behaviors, and contextual factors influencing OHSMS implementation in a remote operational setting.

Sampling Strategy and Participant Selection

This study utilized purposive sampling technique to select participants who possess relevant knowledge and experience regarding OHSMS implementation. The sampling was conducted in three stages:

- 1. Key Informant Selection: Primary informants included the ULP Manager, K3 Coordinators/Coaches, and Field Supervisors who have direct responsibility for OHSMS planning and policy implementation (n=5-7 participants).
- 2. Field Worker Selection: Field technicians and electrical workers were selected based on: (a) minimum 2 years of work experience, (b) regular involvement in high-risk field operations, and (c) representation from different work divisions to capture diverse perspectives (n=8-10 participants).
- 3. Supporting Informants: Administrative staff and safety officers involved in monitoring and documentation were included to triangulate data (n=3-4 participants).
 - Total participants ranged from 16-21 individuals, with saturation achieved when no new themes emerged from interviews.
 - **Data Collection Methods**
 - Data were collected through three complementary methods:

- 1. Semi-structured Interviews: Conducted with selected participants using interview guides aligned with the five OHSMS elements based on Government Regulation No. 50 of 2012. Each interview lasted 30-60 minutes and was audio-recorded with participant consent.
- 2. Direct Field Observations: Systematic observations were conducted during work operations, safety briefings, and field activities to assess actual OHSMS practices. Observation sessions were documented through field notes and photographs (with permission).
- 3. Document Analysis: Review of relevant documents including K3 policies, Standard Operating Procedures (SOPs), work permits, inspection reports, PLN Inspekta application records, training certificates, and accident reports.

Data Analysis

Data analysis followed thematic analysis procedures: (1) transcription of interview recordings, (2) coding and categorization based on the five OHSMS elements, (3) pattern identification and theme development, and (4) triangulation across multiple data sources to ensure validity and reliability.

DISCUSSION

Policy determination is a strategic process in establishing rules and guidelines that an organization will enforce to achieve its objectives. The establishment of K3 policy is the fundamental first step in implementing an occupational safety and health management system (SMK3), where companies must demonstrate commitment to improving OHS management performance while considering input from workers or trade unions (Natalia, Kawatu, and Rattu 2022). The implementation of K3 policy at PLN reflects the company's dedication to creating a safe and healthy work environment.

Based on interview results regarding existing policies at PLN ULP Rantepao Toraja Utara, the K3 policy is not developed independently at the ULP (Customer Service Unit) level but is established by the Main Unit in Makassar. This finding aligns with strategic management theory, where operational-level organizational units typically implement policies designed by parent or central units (Mudjimu, Kawatu, and Kaunang 2019). PLN ULP Rantepao, as a regional customer service unit, functions as the implementer of K3 strategies and policies designed by UIW Sulselrabar. This demonstrates that strategic K3 management responsibility resides at the top level, while lower levels focus on technical implementation following instructions and Standard Operating Procedures (SOPs).

This centralized policy approach mirrors findings from Ramli's (2010) study on OHSMS implementation in state-owned enterprises, which revealed that centralized policy-making ensures standardization across regional units but may limit local adaptation to specific operational contexts. Similarly, research by Tarwaka (2014) on safety management in dispersed organizations found that while centralized policies provide consistency, they should be complemented by local risk assessments a consideration particularly relevant for PLN ULP Rantepao given its unique highland operational environment.

K3 Planning

Occupational Health and Safety (K3) Planning is a systematic process to identify, manage, and control risks that may endanger worker safety or health in the work environment. K3 planning aims to ensure a safe, healthy, and compliant work environment in accordance with laws and

regulations, while increasing productivity by minimizing potential work accidents and occupational diseases (Duka, Kawatu, and Kaunang 2025).

Planning for occupational health and safety programs is essential to prevent unwanted events. Government Regulation No. 50 of 2012 concerning SMK3 Implementation regulates workplace SMK3 implementation, including employer obligations to prepare K3 plans encompassing hazard identification, risk assessment, and preventive and corrective measures.

Occupational Health and Safety Planning at PLN ULP Rantepao Toraja Utara operates effectively and systematically to ensure workplace OHS. This planning includes critical steps such as hazard identification, risk control, and periodic evaluations adapted to field conditions and needs. This structured K3 planning aims to create a safe working environment and support efficient company operations.

Based on interview results, the K3 planning process is not solely prepared by management or K3 coaches but involves collaboration across various divisions. This collaborative approach ensures comprehensive consideration and implementation of all occupational safety aspects, providing a solid foundation for effective K3 program implementation.

Interviews with K3 Coaches, ULP Rantepao Managers, and field technicians reveal that occupational safety and health planning within PLN ULP Rantepao is conducted in a structured and collaborative manner. The planning process is not unilaterally conducted by the K3 team alone but involves various parties with roles and responsibilities in field work implementation.

Initial K3 planning is prepared by K3 coaches, including fundamental elements such as hazard identification, risk assessment, and risk control planning. However, the plan is not immediately implemented. Before implementation, the K3 plan must undergo validation and approval stages from various stakeholders, including work supervisors, K3 supervisors, management, and especially field implementation teams. This process ensures that planning aligns completely with actual field conditions and that all parties executing the work understand and agree on safety procedures to be implemented. This cross-divisional involvement demonstrates participatory K3 planning.

This participatory planning approach is consistent with findings from Najihah et al. (2019), who demonstrated that involving various stakeholders in K3 planning significantly increases awareness and compliance with safety procedures, thereby creating safer work environments. PLN ULP Rantepao's structured and collaborative K3 planning across all work divisions reflects OHSMS management principles aligned with national and international standards, such as SMK3 and ISO 45001:2018, where involvement and commitment at all organizational levels are key elements in creating safe and healthy workplaces.

However, comparative analysis with Suma'mur's (2009) research on participatory safety planning reveals a potential gap: while PLN ULP Rantepao demonstrates strong inter-departmental collaboration, the depth of field worker participation in initial risk identification could be enhanced. Suma'mur found that organizations with highest safety performance actively involve frontline workers in hazard identification from the earliest planning stages, not just in validation processes.

Implementation of K3 Plan

K3 plan implementation is the stage where the company executes policies, procedures, and risk control measures that have been planned to create a safe and healthy work environment (Srisantyorini, Safitriana, 2020). K3 plan implementation at PLN ULP Rantepao is conducted by

ensuring all workers understand and comply with work safety rules. This is achieved through providing various supporting aspects for K3 implementation, ranging from adequate work facilities and infrastructure such as complete personal protective equipment (PPE), routine supervision by the K3 team, and mandatory participation in safety briefings conducted every morning before entering work areas to reinforce thorough understanding of worksite safety rules and consistent compliance with K3 culture.

Although K3 plan implementation has proceeded well, it still faces field challenges. One major challenge is consistent compliance with PPE usage. Lack of awareness among some workers who sometimes forget to use PPE completely while working remains problematic. Additionally, challenges exist regarding discipline and worker responsibility to always comply with K3 rules. One technician admitted that despite complete PPE provision, there is a tendency for some workers to be negligent or forget to use it correctly once work commences. Some workers have even been affected by electrical induction due to forgetfulness or negligence in PPE usage. Therefore, K3 implementation should not stop at facility provision but must be accompanied by awareness formation, discipline, and work habits oriented toward work safety.

This finding resonates strongly with international research. Bird and Germain's (1996) landmark safety triangle theory suggests that unsafe behaviors, including PPE non-compliance, are precursors to incidents and accidents. Furthermore, Heinrich's (1931) domino theory still relevant in modern safety management emphasizes that unsafe acts contribute to 88% of workplace accidents. The PPE non-compliance issue at PLN ULP Rantepao thus represents a critical vulnerability requiring behavioral intervention.

Comparative analysis with Reason's (1990) "Swiss Cheese Model" provides additional insight: the inconsistent PPE usage represents a "hole" in the defensive layers that, when aligned with other vulnerabilities (difficult terrain, high-voltage hazards), significantly increases accident probability. Research by Niskanen (1994) on safety culture in hazardous industries found that technical compliance (PPE availability) without corresponding behavioral compliance (consistent PPE usage) undermines safety system effectiveness precisely the challenge observed at PLN ULP Rantepao.

Interestingly, a study by Choudhry and Fang (2008) on construction safety in developing countries identified similar patterns, attributing PPE non-compliance to factors including: discomfort in tropical climates, perceived invulnerability among experienced workers, and time pressure factors likely relevant to the North Toraja highland context where weather conditions and geographical challenges may exacerbate these behavioral tendencies.

K3 Monitoring and Evaluation

According to Government Regulation of the Republic of Indonesia Number 50 of 2012 concerning SMK3 Implementation, K3 performance monitoring and evaluation are conducted through examination, testing, measurement, and SMK3 audits by competent human resources. Results from these activities are used to implement corrective actions and ensure K3 implementation complies with legal provisions and applicable standards. K3 performance monitoring and evaluation in the company are conducted and adjusted to work program meeting results.

Monitoring and evaluation of Occupational Safety and Health (K3) performance in the work environment, based on interview results, have been conducted effectively and comprehensively. This process is not solely one person's responsibility but involves all divisions.

This evaluation process encompasses monitoring, reporting, and corrective actions directly implemented in the field. Furthermore, the monitoring and evaluation process is conducted across various time scales daily, weekly, monthly, and semiannually. This evaluation includes assessment of work implementation, SOP compliance, and violation track records. Meanwhile, work equipment inspections are conducted quarterly to ensure tool feasibility and safety. Damaged or substandard work tools are immediately replaced or repaired.

The systematic monitoring approach at PLN ULP Rantepao aligns with Cooper's (2000) safety culture model, which emphasizes that effective safety systems require continuous monitoring at multiple levels (individual, job, and organizational). The multi-temporal monitoring structure (daily to semiannual) mirrors best practices identified by Glendon and Stanton (2000) in high-reliability organizations.

However, comparison with contemporary research reveals potential enhancement opportunities. Hallowell and Gambatese's (2010) study on construction safety monitoring found that traditional periodic inspections, while necessary, are increasingly complemented by real-time monitoring technologies. The PLN Inspekta application represents a step toward digitalization, but research by Cheng et al. (2012) suggests that integrating GPS tracking, automated hazard alerts, and predictive analytics could significantly enhance monitoring effectiveness, particularly in remote operational contexts like North Toraja where direct supervision is challenging.

Review and Performance Improvement of SMK3

Review and improvement of the Occupational Health and Safety Management System (SMK3) performance is a periodic evaluation process of SMK3 implementation in a company. The goal is to ensure the system operates effectively according to field needs. SMK3 performance review and improvement at PLN ULP Rantepao is conducted comprehensively to ensure effective K3 implementation.

SMK3 performance review begins by evaluating SMK3 implementation across all work units and ensuring implemented procedures meet established standards, such as ISO 45001:2018. Beyond audits, the company actively monitors field work activities to ensure all workers comply with established safety procedures.

Review results are then used to formulate SMK3 performance improvement measures. Steps taken include updating standard operating procedures (SOPs) based on evaluation results and latest field conditions. The company also provides additional training for workers to improve their competence in performing duties safely and according to procedures. Additionally, if deficiencies are found in K3 infrastructure, such as inadequate safety equipment, the company immediately takes action to repair or replace facilities. Companies also involve workers in this process through feedback collection. Worker input is considered important for evaluating existing K3 policy and procedure effectiveness. This demonstrates a participatory approach ensuring SMK3 implementation is not solely management's responsibility but involves all company elements.

This continuous improvement approach exemplifies the Plan-Do-Check-Act (PDCA) cycle central to ISO 45001:2018, as documented by Podgórski (2015) in his comparative analysis of OHSMS frameworks. The participatory review process at PLN ULP Rantepao reflects Hale and Hovden's (1998) third-generation safety management paradigm, which emphasizes worker empowerment and organizational learning.

However, comparative research by Fernández-Muñiz et al. (2009) on safety management effectiveness suggests that while periodic reviews are essential, the review cycle frequency should correlate with operational risk levels. Given the high-risk nature of electrical utility work in challenging terrain, PLN ULP Rantepao might benefit from more frequent review cycles than standard ISO requirements a consideration supported by Vinodkumar and Bhasi's (2010) research showing that high-hazard industries achieve better safety outcomes with accelerated review frequencies.

Furthermore, Hopkins' (2006) analysis of organizational learning from accidents emphasizes that effective improvement systems must go beyond procedural updates to address underlying cultural and systemic factors. While PLN ULP Rantepao demonstrates strong procedural review mechanisms, deeper investigation into behavioral and cultural dimensions particularly regarding the persistent PPE non-compliance issue may reveal opportunities for more transformative improvements.

Synthesis and Comparative Insights

Overall, OHSMS implementation at PLN ULP Rantepao demonstrates strong alignment with regulatory requirements and ISO 45001:2018 standards, particularly in formal structures, documentation, and systematic processes. This finding is consistent with Vinodkumar and Bhasi's (2011) observation that public sector organizations typically excel in procedural compliance but face challenges in behavioral implementation.

The persistent gap between policy and practice, particularly regarding PPE usage, mirrors patterns identified in Guldenmund's (2000) meta-analysis of safety culture research, which found that technical-rational safety management approaches often fail to address socio-cultural dimensions of safety behavior. The challenge at PLN ULP Rantepao is not unique; similar patterns have been documented by Clarke (2006) across multiple industries and cultures, suggesting that bridging the "knowing-doing gap" requires interventions beyond traditional training and enforcement.

What distinguishes PLN ULP Rantepao's context is its unique operational environment remote highland geography, challenging terrain, and infrastructural constraints. Research by Törner and Pousette (2009) on safety in dispersed worksites suggests that geographical isolation complicates supervision and may weaken safety culture transmission. This contextual factor, insufficiently addressed in existing OHSMS literature, represents both a challenge and an opportunity for developing adaptive safety management strategies applicable to similar remote operational settings.

CONCLUSION

Based on the data collection and processing of research data that has been carried out, this study concludes that the implementation of the Occupational Health and Safety Management System (SMK3) at PLN ULP Rantepao Toraja Utara demonstrates a systematic and structured approach aligned with Government Regulation No. 50 of 2012. The determination of K3 policy within PLN, particularly at PLN ULP Rantepao, is part of the management strategy established by the parent unit, UIW Sulselrabar in Makassar, reflecting a centralized policy-making approach that ensures standardization across regional operational units. Occupational Health and Safety planning is conducted in a structured and collaborative manner involving various stakeholders, including management, K3 coaches, and field technicians, demonstrating a participatory approach that enhances comprehensiveness and stakeholder buy-in. The implementation of the

K3 plan has been operating effectively through the provision of supporting facilities such as complete Personal Protective Equipment (PPE), routine supervision, and mandatory daily safety briefings before work commencement. However, significant challenges persist, particularly regarding workers' inconsistent compliance with complete PPE usage, which represents a critical gap between policy provision and behavioral practice. Monitoring and evaluation of K3 performance have been conducted systematically and comprehensively in accordance with regulatory requirements, utilizing multiple temporal scales daily, weekly, monthly, and semiannually and incorporating digital tools such as the PLN Inspekta application for real-time documentation and reporting. Furthermore, the review and continuous improvement of SMK3 performance at PLN ULP Rantepao are implemented comprehensively through periodic evaluations, SOP updates based on field conditions, worker feedback integration, and corrective actions to ensure effective K3 implementation according to established standards. Despite these strengths in formal structures and systematic processes, the persistent challenge of PPE noncompliance highlights the need for enhanced focus on behavioral dimensions and safety culture cultivation beyond technical and procedural compliance. This research contributes valuable insights into OHSMS implementation in remote highland operational contexts, revealing both the strengths of structured safety management systems and the ongoing challenges in translating policies into consistent safe behaviors, particularly in geographically isolated settings with unique operational constraints.

REFERENCE

- Anggraini, W., Sari, R. E., Aswin, B., & Rini, W. N. E. (2024). Analysis of the Risk of Work Accidents for Field Officers PT PLN West Tanjung Jabung Regency, Jambi Province using the Hiradc Method. Formosa Journal of Science and Technology, https://doi.org/10.55927/fjst.v3i1.7130 3(1), 73–88.
- Meilani, N. L., Studi, P., Public, A., Riau, U., Pekanbaru, K., & Riau, P. (2024). Implementation of the Policy for the Implementation of the Occupational Safety and Health Management System (SMK3) at PT. PLN (Persero) ULP Panam. 3(1), 430 441.
- Nabila, P. A., Mukhtar, W., Aprillia, R., Pt, S., & Batu, T. (2024). Potential Hazards and Risks to Occupational Safety and Health in Employees of PT. Trimitra Batu Berkah Sambas Regency PT. Trimitra Batu Berkah is a company engaged in stone mining and subsequent mining activities (Hasindo, 2017. 12(2), 330–340.
- Natalia, Y., Kawatu, P. A. T., & Rattu, A. J. M. (2022). Overview of the Implementation of the Occupational Safety and Health Management System (SMK3) at PLN (Persero) Customer Service Implementation Unit (UP3) Tolitoli. KESMAS Journal, 11(4), 35–43.
- Duka, Zainal Muttaqin R., Paul A. T. Kawatu, and Wulan P. J. Kaunang. 2025. "Overview of the Implementation of Occupational Health and Safety Management System at Pt. Pln Np Services Pltu 2 Amurang North Sulawesi." Prepotif: Journal of Public Health https://doi.org/10.31004/prepotif.v9i1.43660. 9 (1): 2799–2809.
- Putri, D. N., & Lestari, F. (2023). Analysis of the causes of work accidents in workers in construction projects: Literature review. Journal of Public Health, 7(1), 451–452. Situmeang, A., & Sirait, G. (2021). Hazard Identification and Risk Assessment in Efforts to Reduce Accident Rates in Logistics Areas at PT OSI Electronics. Proceedings of the National Seminar on Social Sciences and Technology (SNISTEK), 184–195.
- BPJS Employment. (2019). The Number of Work Accidents Tends to Increase, BPJS

- Ketenagakerjaan Pays Rp 1.2 Trillion in Compensation. https://www.bpjsketenagakerjaan.go.id/berita/23322/Angka-Kecelakaan Work-Tending-Increase,-BPJS-Employment-Paying-Compensation Rp1.2-Trillion
- Meilani, N. L., Studi, P., Public, A., Riau, U., Pekanbaru, K., & Riau, P. (2024). Implementation of the Policy for the Implementation of the Occupational Safety and Health Management System (SMK3) at PT. PLN (Persero) ULP Panam. 3(1), 430 441.
- ISO 450001. (2018). International Standard Organization 45001:2018. (Online). https://k3.ft.undip.ac.id/wp-content/uploads/2020/12/Manual-ISO 45001.pdf. Ministry of Manpower of the Republic of Indonesia. (2023). Work Accident Data in 2023. Jakarta: Ministry of Agriculture Data and Information Center.
- Maulana, W. (2019). Application of Occupational Safety and Health (K3) in the Competency Workshop on Building Construction, Sanitation, and Maintenance Expertise at SMKN 5 Bandung (Doctoral dissertation, Universitas Pendidikan Indonesia). (Online). https://repository.upi.edu/37256/.
- Yuliani, N., Ekawati, E., Kurniawan, B. 2017. Analysis of Documentation of Occupational Safety and Health Management System Based on Government Regulation NO. 50 of 2012 at PT. Angkasa Pura II (Persero) Bandung (Online) https://ejournal3.undip.ac.id/index.php/jkm/article/view File/12425/12057 Journal of Public Health (e Journal) Vol. 3, No. 3. Retrieved June 7, 2019.
- Ramli, S. 2010. OHSAS 18001 Occupational Safety and Health Management System. Jakarta: Dian Rakyat.
- Johannes, C.A., Kawatu, P.A., Malonda, N.S. 2017. Analysis of the Implementation of Occupational Safety and Health Management System at PT. National Power Plant (Persero) Suluttenggo Region Minahasa Power Plant Sector PLTP Lahendong (Online) https://ejournalhealth.com/index .php/medkes/article/view/388 Journal of Health Media Vol. 9, No. 3. Retrieved February 11, 2019. Zanuba, L. J., & Kusmantoro, A. (2024). The Use of PPE for Work Accidents in Work Voltage Work at PT PLN Persero Pemalang. Elektriese: Journal of Electrical Science and Technology, 14(02), 220-226.
- Ela Marcelina, Dian Tangkeallo, Helba RundupadangAuthor correspondence: helba.rundupadang@gmail.comThe Influence of Work Discipline and Organizational Citizenship Behavior (OCB) on the Performance of Employees of PT PLN (Persero) ULP Rantepao

Copyright Holder:
Adelfina Rumae^{1*}, Apdiyani Toalu², Dr. Muhammad Rifai³
(2025)

First Publication Right:

Jurnal Health Sains

This article is licensed under:

