



## Factors Associated with the Implementation of the Occupational Safety and Health Management System in the Production Section at PT Abaisiat Raya in 2023

Ade Setia Aji<sup>1</sup>, Meyi Yanti<sup>2</sup>, Alkafi<sup>3</sup>

Alifah Health Science Collage, Indonesia<sup>1-3</sup>

[Adesetiaaji@gmail.com](mailto:Adesetiaaji@gmail.com) , [meviyanti5@gmail.com](mailto:meviyanti5@gmail.com) , [Alkafi\\_pu@gmail.com](mailto:Alkafi_pu@gmail.com)

### Abstract

Companies that implement OHSMS have decreased by 14% where in 2022 there were 2,004 companies that implemented OHSMS, down to 1749 companies in 2023. The purpose of this study was to determine the factors associated with the implementation of OHSMS in the production department of PT Abaisiat Raya workers in 2023. This type of research is quantitative with cross sectional study method. This research was conducted in March - August 2023 with a population of 119 workers in the production division of PT Abaisiat Raya. The sample in this study was 92 workers who were taken with a sampling method using simple random sampling technique. The research instrument used was an interview using a questionnaire. Data were analyzed univariately and bivariately using the Chi-Square test. The results showed that 48.9% of workers assessed the application of OHSMS which was not good, 51.1% of workers had a low level of knowledge, 54.3% of workers assessed that there was no commitment, 52.2% of workers assessed that the work environment did not meet the requirements. There is a relationship between knowledge level ( $p=0.021$ ), OHS commitment ( $p=0.035$ ), and work environment ( $p=0.036$ ) with OHSMS implementation. There is a relationship between the level of knowledge, OHS commitment, and the work environment with the implementation of OHSMS in the production section at PT Abaisiat Raya workers. It is expected that the company can increase the provision of information about OHS, increase OHS commitment by providing training related to occupational safety principles, and complete OHS signs in the work environment.

**Keywords :** Knowledge, OHS Commitment, , OHSMS, Work Environment

### \*Corresponding author:

Address : STIKes Alifah Padang

E-mail : [Adesetiaaji@gmail.com](mailto:Adesetiaaji@gmail.com)

### INTRODUCTION

Human resources are an important key to the success of a company, because humans are assets that must be considered specifically in a company. Therefore, the importance of a management system that is able to manage human resources efficiently, planned and systematically. With this management system, it is expected that employees in a company can work productively and optimally as planned. Apart from employee

work productivity, there is one important aspect that must be a concern, namely occupational safety and health. Occupational safety and health is included in the maintenance program in a company (Saliano et al., 2022).

Government Regulation of the Republic of Indonesia Number 50 of 2012, every company that employs at least 100 (one hundred) workers or has a high level of potential danger is required to implement an Occupational Safety and Health

Management System (SMK3) that integrates with company management. The ideal K3 Management System is one that is no longer a compulsion, but is embedded as a culture within the company. The work safety culture that runs in a company is certainly something that can be measured, one of which is through the assessment of the Safety Culture Maturity Level or the Level of Maturity or Maturity of the Work Safety Culture.

Government Regulation of the Republic of Indonesia Number 50 of 2012 concerning the implementation of the K3 management system, the goals and objectives of SMK3 are to create an occupational safety and health system by involving elements of management, labor, conditions, and an integrated work environment in order to prevent and reduce accidents and occupational diseases and create a safe, efficient and productive workplace. This regulation is shown so that all parties have high concern and commitment to the implementation of occupational safety and health so as to create an attitude that cares about safety (Ridasta, 2020).

The management system in managing occupational health and safety risks includes the organizational structure, planning activities, implementation procedures, processes and resources for the development and implementation and review of safety policies. The purpose of SMK3 is to prevent work accidents in order to achieve zero accidents or zero accidents. Therefore, the effectiveness of occupational safety and health is structured, planned and integrated, and it is necessary to create a safe, comfortable and efficient work environment to increase work productivity. The ultimate goal of health and safety management requires the involvement of all employees involved in the prevention of work accidents and the creation of a safe and comfortable work environment (Nanda & Hardianti, 2022).

Referring to the International Labor Organization (ILO) in its latest estimate issued in 2019, at the world level 2.78 million workers lose their lives each year due to accidents at work and

occupational diseases. At least 2.4 million (86.3%) of these fatalities are caused by occupational diseases. More than 380,000 (13.7%) are caused by work accidents. In Indonesia, based on data from BPJS Employment, there were 210,789 cases of work accidents in 2019, there was an increase in 2020 with many 221,740 cases in 2020, while in 2021 there were 234,370 cases (BPJS employment, 2022).

The World Health Organization (WHO) states that in 2018 Indonesia was ranked second lowest in the world in the implementation of OSH, which ranked 152 out of 153 countries. It was explained that out of 15,043 large-scale companies, only about 317 companies (2.1%) implemented SMK3 and occupational safety standards in Indonesia were the worst when compared to other countries in the Southeast Asian region. This can be attributed to the high number of work accidents in Indonesia (Lucky et al., 2021).

According to data from the Indonesian Ministry of Manpower, companies that obtained zero work accidents increased by 3.8%. Where in 2022 there were 1,742 companies that won the zero accident award, and in 2023 there were 1,812 companies. Meanwhile, companies that implement SMK3 experienced a 14% decrease where in 2022 there were 2,004 companies that implemented SMK3, dropping to 1749 companies in 2023 (Indonesian Ministry of Manpower, 2023)

Based on data from PT Sucofindo that in 2017 in Indonesia there were more than 1,850 companies with various types of industrial sectors, government agencies, the mining sector and a number of other industries. In 2017, 455 companies received awards for their commitment to the implementation of Occupational Safety and Health (K3), the number of recipients of this certificate increased compared to 2016, namely 347 companies, but this number is still very low, namely 24% of the number of companies in Indonesia. Companies that get this award are companies that carry out SMK3 audits with auditors from PT Sucofindo. (Lucky et al., 2021).

According to data from the Employment Social Security Organizing Agency (BPJS), the number of work accidents in Indonesia was 265,334 cases from January-November 2022. This number increased by 13.26% compared to the whole of 2021 which amounted to 234,270 cases.

According to BPJS Ketenagakerjaan data for the Riau-West Sumatra region (2021), there were 31,801 cases of work accidents and of these cases, 166 workers died. BPJS Ketenagakerjaan Padang Branch stated that during 2021 there were 1,597 cases of work accidents. Padang City has quite a lot of workers and companies compared to other regencies / cities in West Sumatra. The entire scale of the existing company. Padang City has a total of 1,460 companies (BPJS Ketenagakerjaan, 2021).

Based on the results of research conducted by Lucky et al. (2021), the factors that influence employee behavior towards the implementation of SMK3 at PT Angkasa Pura I (Persero) found that out of 60 workers who had a lack of knowledge and did not apply SMK3 as many as 2 people (3.3%), workers who had a lack of knowledge but applied SMK3 well were 2 people (3.3%) and workers who had a sufficient level of knowledge and applied SMK3 well were 56 people (93.3%). Based on the regression test, the sig value = 0.024 ( $\alpha = 0.05$ ) so that  $H_0$  is accepted, meaning that there is an influence between knowledge and the application of SMK3. If workers' knowledge is low, then the application of SMK3 has not been implemented properly. On the other hand, if workers' knowledge is good, then the implementation of SMK3 can be implemented properly. This means that there is an influence of knowledge on the implementation of SMK3 at PT Angkasa Pura I (Persero) Sultan Hasanuddin International Airport Makassar (Lucky et al., 2021).

Based on the results of research conducted by Sidauruk, (2020) management commitment, K-3 knowledge & K-3 attitudes with the application of SMK-3 to workers, the results show

that there are significant results and influence between management commitment in terms of implementing the K3 management system. The results show that management commitment affects the implementation of the OHS management system, which has a contribution of 22.13%,

Based on the results of research conducted by Arifin & Harianto, (2020) the effect of the application of occupational safety and health (OHS) and the work environment on work productivity in Surabaya, the results of the work environment variable have a significant effect on the work productivity variable. The higher the level of work environment on the project, the higher the level of work productivity produced (Arifin & Harianto, 2020).

PT Abasiat Raya is a company engaged in the crumb rubber processing industry. The company is located on Jl. Raya Padang, Lubuk Begaluang District, Padang City. PT Abasiat Raya is part of a company from Singapore, which has a target of achieving zero accident, with a total of 215 employees, consisting of 192 men and 23 women. Where male and female employees in the production section are 119 people. In carrying out its business processes, every day the production department cannot be separated from equipment and machinery that have a high risk of work accidents. In 2021 the number of accident cases at PT Abasiat Raya was 9 accident cases. In 2022 there were 5 cases of work accidents.

Based on an initial survey conducted on May 24-25, 2023 by researchers at PT Abasiat Raya Padang. Researchers used a questionnaire and interviewed 10 production workers, it was found that 4 workers (40%) had a good level of OHS knowledge and 6 workers (60%) had a poor level of OHS knowledge, based on OHS commitment in workers, 4 workers (40%) had commitment, while 6 workers (60%) had no commitment. In addition, as many as 6 workers (60%) found the work environment qualified and 4 workers (40%) found the work environment unqualified, the results of the assessment of the

application of SMK3 showed 6 workers (60%) were less than satisfactory in the application of SMK3, 1 worker (10%) was good in the application of SMK3 and 3 workers (30%) were satisfactory in the application of SMK3.

Based on the above phenomenon, the researcher is interested in conducting research on "factors related to the application of the Occupational Safety and Health Management System (SMK3) in the production section at PT Abaisiat Raya Workers in 2023".

## METHODS

This type of research is quantitative research with a cross sectional study approach, where data collection for independent variables (level of knowledge, OHS commitment and work environment) with the dependent variable (application of SMK3) is carried out together at the same time. This research has been conducted at PT Abaisiat Raya Nan XX Village Lubuk

Begalung Padang City. The research time was conducted in March-August 2023. Data were collected from August 14-31, 2023. The population in this study were all production workers at PT Abaisiat Raya as many as 119 people. The sample in this study were production workers at PT Abaisiat Raya. Sampling in this study using the Slovin formula.

## RESULTS AND DISCUSSION

Based on table 1, out of 92 respondents, it is known that most of them are 26-30 years old, namely 48 workers (52.2%). The gender of the respondents was mostly male, namely 87 workers (94.6%). According to the level of education, most respondents have a high school education level as many as 56 workers (60.9%) in the production division of PT Abaisiat Raya workers in 2023.

**Table 1. Frequency Distribution of Respondent Characteristics**

No.	Characteristics	f	%
1.	<b>Age</b>		
	20-25	32	34,8
	26-30	48	52,2
	31-35	8	8,7
	36-40	1	1,1
	42-45	1	1,1
	46-50	2	2,2
	<b>Total</b>	92	100,0
2.	<b>Gender</b>		
	Male	87	94,6
	Female	5	5,4
	<b>Total</b>	92	100,0
3.	<b>Education</b>		
	Elementary	11	12,0
	Junior high school	20	21,7
	High school		
	S1	56	60,9
		5	5,4
	<b>Total</b>	92	100,0

**Table 2. Frequency Distribution of Hypertension Incidence, Diet, Physical Activity, Smoking Habit**

<b>implementation of SMK3</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Good	45	48,9
less	47	51,1
Total	92	100,0
<b>Knowledge Level</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Low	47	51,1
High	45	48,9
Total	92	100,0
<b>Commitment to safety</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
No commitment	50	52,2
There is commitment	45	47,8
Total	92	100,0
<b>Working environment</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Not qualified	48	52,2
Qualified	44	47,8
Total	92	100,0

**Implementation of the Occupational Safety and Health Management System (SMK3) in the Production Section at PT Abaisiat Raya Workers in 2023.**

Based on the results of the study, it was found that out of 92 respondents, 45 people (48.9%) rated poorly in the Application of SMK3 at PT Abaisiat Raya in 2023. This is in line with research conducted by Barokah and Harokan (2021) on Analysis of Factors Associated with the Implementation of Occupational Safety and Health Management Systems (SMK3) in Oil Palm Harvesting Workers at PT Gading Cempaka Graha Oki showing as many as 35.5% have poor implementation of occupational safety and health management systems, while Hamiru (2023) on the Relationship between Knowledge and Worker Commitment with the Implementation of the SMK3 Program at the Kendari Port Health Office shows 38.7% of respondents have poor implementation of occupational safety and health management systems.

Every company that employs a workforce of one hundred people or more and has a high

potential for danger, namely potential hazards that can cause accidents that harm human life, disruption of the production process and pollution of the work environment. Potential hazards that can cause occupational accidents such as explosions, fires, pollution, and occupational diseases must implement SMK3. This Occupational Safety and Health Management System must be implemented by administrators, employers, and all workers as a unit (Sastrohadiwiryo & Syuhada, 2019).

Occupational Safety and Health is a thought and effort to ensure the integrity and perfection of both physical and spiritual labor in particular, and humans in general, work and culture towards a just and prosperous society (Sucipto, 2014).

The aims and objectives of SMK3 are to increase the effectiveness of occupational safety and health protection that is planned, measured, structured, and integrated. In addition, SMK3 also aims to prevent and reduce work accidents and occupational diseases by involving elements of management, workers/laborers. And / or trade

unions / labor unions and create a safe, comfortable and efficient workplace to encourage productivity (Sastrohadiwiryono & Syuhada, 2019).

Based on the characteristics of respondents in the last education, respondents who considered the implementation of the occupational safety and health management system to be unfavorable were found to be more in high school education as many as 28 people (50.0%). This is in line with the theory that says that the education of a worker affects the way he thinks in dealing with his work, including how to prevent accidents and avoid work accidents while doing his job. This happens because of the reality in the field where workers in the production section have different levels of final education and have different skills in the work process (Ramadhany & Pristya, 2019).

According to the researchers' assumptions, the implementation of a good occupational health and safety management system will reduce the risk of occupational accidents and occupational diseases in the workplace. Then the application of SMK3 in the company will protect all forms of work process errors that can result in both physical and material losses. Poor implementation of SMK3 will increase the risk of work accidents and companies that do not fulfill their K3 obligations will receive criminal sanctions and violations of the law will be fined and pay compensation with a nominal amount according to the impact caused.

According to the researcher's assumption, the implementation of the Occupational Health and Safety Management System (SMK3) at PT Abaisiat Raya is quite good, but from the results of the questionnaire analysis, 34 workers (36.9%) considered that occupational safety facilities and infrastructure were not available at PT Abaisiat Raya. Lack of K3 facilities and infrastructure will result in unsafe working conditions so that it can result in an unsafe work environment that can increase the risk of work accidents becoming higher, which can cause injury and even death for workers. Therefore, it is hoped that the Health Safety (HS) function will provide facilities and

infrastructure that support Occupational Safety properly in order to create a safe, comfortable and efficient workplace for workers in the production section of PT Abaisiat Raya.

### **Level of Knowledge in the Production Section of PT Abaisiat Raya Workers in 2023**

Based on the results of the study, it is known that out of 92 workers as many as 47 people (51.1%) have a low level of knowledge at PT Abaisiat Raya Year 2023. This is in line with research conducted by Ramadhany and Pristya (2019) on Factors Related to the Implementation of SMK3 in the Production Section of PT Lestari Banten Energi as many as (47.3%) workers have low knowledge. Meanwhile, Azzari's research (2018) on Factors related to the Implementation of the Occupational Safety and Health Management System for workers in the production section at PT. Hervebia Kampar Lestari shows that (43.5%) workers have a low level of knowledge.

Knowledge is the result of human sensing, or the result of someone knowing the object through his senses (eyes, nose, ears, and so on). By itself at the time of sensing so as to produce knowledge is greatly influenced by the intensity of attention and perception of the object (Mindhayani & Asih, 2022). The knowledge possessed by individuals is influenced by many factors. In general, factors that affect knowledge can be classified into two, namely internal factors (originating from within the individual) and external factors (originating from outside the individual) (Senjani, 2021).

Knowledge is a fundamental factor in motivating behavior and providing personal references in a person's learning experience. So that a person's level of education is related to the high level of knowledge and how a person behaves (Supriadi et al., 2022).

According to the researcher's assumption, a higher level of education can provide better experience and understanding of occupational safety and health concepts. Workers with better

knowledge may be able to identify and avoid potential risks in the workplace. They will also be more aware of existing hazards and know how to deal with them.

### **K3 Commitment in the Production Division at PT Abaisiat Raya Workers in 2023**

Based on the results of the study, it is known that out of 92 workers, 50 workers (54.3%) considered that there was no commitment at PT Abaisiat Raya Year 2023. This is in line with research conducted by Ajib (2016) on Factors Associated with the Implementation of the Occupational Safety and Health Management System (SMK3) PT. Kubota Indonesia shows that as many as (48.7%) workers assess the company as having no K3 commitment. The research of Firdaus and Hasin (2022) on Factors Affecting the Implementation of Occupational Safety and Health (K3) at CV Agis Truss showed that 41.3% of workers assessed the company as having no K3 commitment.

Commitment from the company is very important in terms of implementing SMK3, as explained in PP No. 50 of 2012 that one of the basic elements in implementing SMK3 is the commitment of the company. In a company, if the leader is committed to implementing SMK3, it will be directly proportional to the results of implementing SMK3 in the company (Firdaus and Hasin, 2022).

According to the researcher's assumption, if the company does not have an OHS commitment, it will have an impact on the safety of its workers, such as the absence of transparency from the company regarding data and information related to work accidents or occupational disease incidents and the absence of facilities to report incidents or safety hazards in the workplace, it will have an impact on the health and safety of workers. OHS commitment is a form of willingness and seriousness from top management towards efforts to eliminate deviation or control losses, especially to humans and the environment. Companies that have a high commitment to OHS

will realize the serious impact of accidents and injuries at work. Commitment to OHS can also be influenced by the level of evaluation and supervision carried out by the management. When organizations actively monitor and enforce OHS rules, commitment to OHS is likely to be stronger and it will reduce the risk of occupational accidents or occupational diseases.

### **Work Environment in the Production Section at PT Abaisiat Raya Workers in 2023**

Based on the results of the study, it was found that out of 92 workers, 48 people (52.2%) considered the work environment did not meet the requirements at PT Abaisiat Raya 2023. This is in line with research conducted by Barokah and Harokan (2021) on Analysis of Factors Related to the Implementation of SMK3 in Oil Palm Harvesting Workers at PT Gading Cempaka Graha Oki, which showed that 61.3% rated the work environment as poor, while Senjani, (2021) on Factors Affecting Employee Behavior towards the Implementation of SMK3 at PT Angkasa Pura I (Persero) showed that 35 respondents 55% rated the work environment as less qualified.

The work environment is a place where workers are carrying out work activities. A good work environment will have a positive impact on workers. A poor workplace health environment can reduce the degree of health and performance of workers. Therefore, control efforts are held with the aim of being able to prevent and reduce and be able to suppress so that this does not happen. In occupational health there is physical and spiritual fitness. The higher the work environment, the more performance on construction projects. The point is that a safe and healthy work environment will improve the quality of work of workers so that the productivity of workers will increase (Arifin & Harianto, 2020).

According to the researcher's assumption, a safe, clean, organized, and ergonomic work environment is considered better for worker productivity and welfare. A work environment

that does not ensure a safe and comfortable state will affect the productivity of workers. A work environment that exceeds the threshold value (NAB) can also affect workers' health and comfort and will also increase the risk of developing occupational diseases. A work environment that provides social support, such as good relationships between workers, support from coworkers, and management that cares about

worker safety, will support worker well-being and safety.

**Relationship between Knowledge Level and Implementation of Occupational Safety and Health Management System (SMK3) in the Production Section at PT Abaisiat Raya Workers in 2023.**

**Table 3. Relationship between Knowledge Level and Implementation of Occupational Safety and Health Management System (SMK3) in the Production Section at PT Abaisiat Raya Workers in 2023.**

Knowledge Level	implementation of SMK3				Total	p-value	
	Less		Good				
	f	%	f	%			
Low	29	61,7	18	38,3	47	100	0,021
high	16	35,6	29	64,4	45	100	
Total	45		47		92	100	

Based on the results of the study seen from the proportion of the application of the occupational health and safety management system (SMK3) more in low knowledge respondents as much as 61.7% compared to those with high knowledge as much as 35.6%. Based on the results of the study, the p-value = 0.021 was obtained, which means that there is a significant relationship between the relationship between the level of knowledge and the implementation of the Occupational Safety and Health Management System (SMK3) in the production section at PT Abaisiat Raya workers in 2023. The results of this study are in line with the research of Setyowati (2018) where the results of the study obtained a p value = 0.029, which means that there is a significant relationship between the level of knowledge and the implementation of the Occupational Safety and Health Management System (SMK3). In addition, research conducted by Ramadhany & Pristya (2019) also obtained a p value = 0.00, which means that there is a significant relationship between the level of

knowledge and the Application of SMK3 in the Production Section of PT Lestari Banten Energi.

Individuals have a high level of knowledge when they are able to answer correctly on average above 75%. The results of this study indicate that respondents generally have low knowledge about Occupational Safety and Health. According to Bloom's Theory in Notoatmodjo which states that the knowledge domain starts from knowing to the application domain. The domain of knowing only knows about the principles of SMK3 but has not been able to apply it in behavior when practicing. Respondents also need occupational safety training to reduce work accidents in the workplace. Respondents who have low knowledge about occupational safety are more at risk of occupational accidents (Rachman, 2020).

According to the researcher's assumption, the level of labor knowledge related to the Occupational Safety and Health Management System (SMK3) still has a low level. This is based on workers who do not understand the concept and implementation of SMK3 in the work

environment. the level of knowledge will have a positive impact on the application of SMK3, in other words, the higher the level of knowledge of workers about SMK3, the more likely they are to apply the principles of SMK3 in carrying out their daily tasks and activities.

**The Relationship between OHS Commitment and the Implementation of the Occupational Safety and Health Management System (SMK3) in the Production Division at PT Abaisiat Raya Workers in 2023.**

Based on the results of the study seen from the proportion of the application of the occupational health and safety management system (SMK3), more respondents were found to have no commitment as much as 60.0% compared to those with commitment as much as 35.7%. Based on the results of the study, the p-value = 0.035 was obtained, which means that there is a

significant relationship between the relationship between commitment and the Implementation of the Occupational Safety and Health Management System (SMK3) in the Production Division at PT Abaisiat Raya Workers in 2023. The results of this study are in line with the research of Barokah and Harokan (2021) where the results of the study obtained a p value = 0.010, which means that there is a significant relationship between commitment and the implementation of the Occupational Safety and Health Management System (SMK3). In addition, research conducted by Salmawati (2018). also obtained a p value = 0.008 which means that there is a significant relationship between the K3 Commitment Relationship and the Work Environment with the Implementation of the Occupational Safety and Health Management System (SMK3) at PT. Ispat Indo 2018.

**Table 4. The Relationship between OHS Commitment and the Implementation of the Occupational Safety and Health Management System (SMK3) in the Production Division at PT Abaisiat Raya Workers in 2023.**

Commitment to safety	implementation of SMK3				Total	p-value
	Less		Good			
	F	%	F	%	F	%
None	30	60,0	20	40,0	50	100
available	15	35,7	27	64,3	42	100
Total	45		47		92	100

Commitment from the company is very important in terms of implementing SMK3, as explained in PP No. 50 of 2012 that one of the basic elements in implementing SMK3 is the commitment of the company. In a company, if the leader is committed to implementing SMK3, it will be directly proportional to the results of implementing SMK3 in the company (Salmawati et al., 2018).

The efforts to minimize work accidents at PT Abaisiat Raya are carried out in the form of cooperation coordinated directly by the HR

Manager of the company where in this case the company shows leadership and commitment to K3, the company shows its commitment by placing the K3 organization in a position that can determine company decisions. The results of preliminary studies at PT Abaisiat Raya show that the company has shown efforts regarding OHS in the company including the procurement of PPE (personal protective equipment), procurement of OHS banners.

According to the researcher's assumption, if the company is committed to implementing

SMK3 to workers, it will reduce the risk of a work accident. In other words, when companies and workers see the benefits and positive results of implementing SMK3, the company will become more committed to complying with existing OHS policies and procedures. With a high commitment, it is expected that workers and companies can work together to create a safe work culture and maintain a healthy work environment, so as to reduce the risk of work accidents and occupational diseases.

**The relationship between the work environment and the implementation of the Occupational Safety and Health Management System (SMK3) in the production section at PT Abaisiat Raya workers in 2023.**

Based on the results of the study seen from the proportion on the Application of Occupational Health and Safety Management System (SMK3) more in the respondents who assess the work environment does not meet the low requirements

as much as 60.4% compared to those who have a qualified work environment as much as 36.4%. Based on the results of the study, the p-value = 0.036 was obtained, which means that there is a significant relationship between the relationship between the work environment and the Implementation of the Occupational Safety and Health Management System (SMK3) in the Production Division at PT Abaisiat Raya Workers in 2023. The results of this study are in line with Arianto's research (2019) where the results of the study obtained a p value = 0.030, which means that there is a significant relationship between the relationship between the work environment and the application of SMK3 to tofu home industry workers in Dukuh Janten. In addition, research conducted by Auliasari (2022) obtained a p value = 0.000 which means that there is a significant relationship between the Work Environment and the Implementation of the Occupational Safety and Health Management System (SMK3) at PT. Indonesian Ship Industry (Persero) Makassar.

**Tabel 5. The relationship between the work environment and the implementation of the Occupational Safety and Health Management System (SMK3) in the production section at PT Abaisiat Raya workers in 2023.**

Working environment	implementation of SMK3				Total	p-value
	Less		Good			
	f	%	f	%	f	%
Not qualified	29	60,4	19	39,6	48	100
Qualified	16	36,4	28	63,6	44	100
Total	45		47		92	100

The work environment is a place where workers are doing work activities. A good work environment will have a positive impact on its workers. A poor workplace health environment can reduce the degree of health and performance of workers. Therefore, control efforts are held with the aim of being able to prevent and reduce and be able to suppress so that this does not happen. In occupational health there is physical and spiritual fitness. The higher the work environment, the more performance on

construction projects. The point is that a safe and healthy work environment will improve the quality of work of workers so that the productivity of workers will increase (Arifin & Harianto, 2020).

A poor working environment can increase the risk of accidents and occupational diseases. For example, noise, air pollution, exposure to hazardous chemicals, and inappropriate physical conditions of the workplace can cause injuries or health problems. Therefore, the implementation of

SMK3 must take these environmental factors into account to identify and mitigate existing risks. Companies that successfully integrate environmental factors into their SMK3 can create a safer and healthier work environment, and contribute to overall environmental protection (Arifin & Harianto, 2020).

According to the researchers' assumptions, a safer and more conducive work environment tends to encourage workers to be more aware of the importance of occupational safety and health. Therefore, companies with better working environments will have higher levels of safety awareness and be more successful in implementing SMK3.

## CONCLUSION

Based on the results obtained about the factors associated with the application of the Occupational Safety and Health Management System (SMK3) in the production section at PT Abaisiat Raya Workers in 2023. A total of 48.9% of workers who assess the application of the Occupational Safety and Health Management System (SMK3) is not good in the production section of PT. Abaisiat Raya Year 2023. A total of 51.1% of workers in the production section have a low level of knowledge at PT. Abaisiat Raya Year 2023. A total of 54.3% of production workers who assessed that there was no OHS commitment at PT Abaisiat Raya in 2023. A total of 52.2% of production workers who assess the work environment are not eligible at PT Abaisiat Raya in 2023. There is a relationship between the level of knowledge and the implementation of the Occupational Safety and Health Management System (SMK3) in the production section of workers at PT Abaisiat Raya in 2023 (p-value = 0.021). There is a relationship between OHS Commitment and the Implementation of the Occupational Safety and Health Management System (SMK3) in the Production Section for Workers at PT Abaisiat Raya in 2023 (p-value = 0.035). There is a relationship between the work environment and the implementation of the

Occupational Safety and Health Management System (SMK3) in the production section of workers at PT Abaisiat Raya in 2023 (p-value = 0.036).

## REFERENCES

- Adzim, H. I. (2021). Investigation (Causes) of Work Accidents The Domino Effect of Work Accidents (H.W. Heinrich).
- Ajib, A. L. (2016). Factors Associated with the Implementation of Occupational Safety and Health Management System (SMK3) of PT Kubota Indonesia. Thesis, 1-102.
- Anissa, R. (2017). Safety, Occupational Health, and Environmental Engineering in Industry. Media Nusa Creative.
- Arianto, M. E., & Dewi, D. (2019). The Relationship Between Work Environment and Implementation of SMK3 in Tofu Home Industry Workers in Dukuh Janten. *Scientific Journal of Public Health: Public Health Community Communication Media*, 11(4), 318-324. <https://jikm.upnvj.ac.id/index.php/home/article/view/39>
- Arifin, A. Z., & Harianto, F. (2020). Effect of Occupational Safety and Health (OHS) Implementation and Work Environment on Work Productivity in Surabaya. *Engineering: Journal of Civil Engineering*, 5(1), 19. <https://doi.org/10.53712/rjrs.v5i1.856>
- Assidiqi, A. F., & Prasetya, N. (2020). Safety Management. AFA Group.
- Auliasari P, Haeruddin, & Masriadi. (2022). The Relationship between the Work Environment and the Implementation of the Occupational Safety and Health Management System (SMK3) at PT. Indonesian Ship Industry (Persero) Makassar. *Public Health Journal*, 3(3), 2339-2350.
- Azzari, M., Indriani, L., & Riri. (2018). Factors associated with the Implementation of the Occupational Safety and Health

- Management System for production workers at PT Hervebia Kampar Lestari. *Angewandte Chemie International Edition*, 6(11), 951-952., 3, 10-27.
- Barokah, F., & Harokan, A. (2021). ANALYSIS OF FACTORS RELATED TO THE APPLICATION OF SMK3 TO OIL PALM HARVESTER WORKERS AT PT. GADING CEMPAKA GRAHA OKI IN 2019. 13(2), 2019-2022.
- BPJS Employment. 2021. Number of Work Accidents Riau-West Sumatra Quarter 1. (n.d.).
- Fajri, R. (2022). Overview of knowledge and attitudes in the waste management section regarding the implementation of SMK3 (2022). Muhammadiyah University of West Sumatra Bukittinggi.
- Firdaus, M. A., & Hasin, A. (2022). Factors Affecting the Implementation of Occupational Safety and Health (K3) at CV Agis Truss. *Selekta Manajemen: Journal of Business & Management Students*, 01(04), 192-208. <https://journal.uui.ac.id/selma/index>
- Hamiru, L. O. (2023). The Relationship between Knowledge and Worker Commitment with the Implementation of the SMK3 Program at the Kendari Port Health Office in 2023. 1(2), 70-76.
- Indonesian Ministry of Manpower. (2023). Ministry of Manpower Holds K3 Award in 2023.
- Kuswana, W. S. (2014). *Ergonomics and OSH* (P. Latifah (Ed.); Pe mold). PT. Remaja Rosdakarya.
- Lucky Afri Senjani, K., Andayanie, E., Occupational Health and Safety, P., Public Health, F., Muslim Indonesia, U., Environmental Health, P., & Health Policy Administration, P. (2021). Factors Affecting Employee Behavior towards the Implementation of Smk3 at Pt. Angkasa Pura I (Persero). *Window of Public Health Journal*, 01(06), 702-714.
- Mahawati, E., Yuniwati, I., Ferinia, R., & Fani, P. P. R. T. F. (2021). *Workload Analysis and Work Productivity* (1st ed.). Yayasan Kita Tulis.
- Mindhayani, I., & Asih, P. (2022). The Effect of Occupational Safety and Health Education on the Knowledge Level of Building Labor Workers. *Jieom*, 05(02), 148-156. <https://doi.org/http://dx.doi.org/10.31602/jieom.v5i2.7713>
- Nanda, M. P., & Hardianti, R. (2022). ANALYSIS OF THE IMPLEMENTATION OF HEALTH MANAGEMENT SYSTEM AND. *Journal of Infrastructure Engineering*, 8(no 2), 29-34.
- Notoatmodjo, S. (2014). *Science of Health Behavior*. Rineka Cipta.
- Regulation of the Minister of Manpower of the Republic of Indonesia Number: 03 /MEN/1998 concerning Procedures for Reporting and Examining Accidents. (1998). Regulation of the Minister of Manpower of the Republic of Indonesia Number: PER.03/MEN/1998.
- Government Regulation Number 50 of 2012 concerning the Implementation of the Occupational Safety and Health Management System (pp. 1-94). (2012).
- President of the Republic of Indonesia. (1992). Law No.23 of 1992 concerning Health (Issue 23).
- Rachman, L. A. (2020). Relationship between Knowledge and Attitude towards the Implementation of OHS at PT Sarandi Karya Nugraha Sukabumi. *Journal of Health & Science Integration*, 2(2), 155-160. <https://doi.org/10.29313/jiks.v2i2.4341>
- Ramadhany, F. A., & Pristya, T. Y. R. (2019). Factors Associated with the Implementation of SMK3 in the Production Section of PT Lestari Banten Energi. *Scientific Journal of Public Health*, 11(2), 199-205.
- Ridasta, B. A. (2020). Assessment of Occupational Safety and Health Management System in Chemical

- 88 *Factors Associated with the Implementation of the Occupational Safety and Health Management System in the Production Section at PT Abaisiat Raya in 2023 - Ade Setia Aji, Meyi Yanti, Alkafi*

Laboratory. *Higeia Journal of Public Health Research and Development*, 4(1), 1-12.  
<http://journal.unnes.ac.id/sju/index.php/higeia>

- Salami, I. R. S. (2016). *Occupational Environmental Health and Safety* (Preprint). Gadjah Mada University Press.
- Salianto, S., Akhyar, M., & Subhan, M. (2022). Evaluation of the implementation of occupational safety and health (OHS) based on occupational safety and health management system (SMK3): literature study. *Nautical: Multidisciplinary Scientific Journal*, 1(5), 396-399.
- Salmawati, L., DW, S., & Soebijanto. (2018). The Relationship between OHS Commitment and Work Environment with the Implementation of Occupational Safety and Health Management System (SMK3) in the Workplace.