

# OCCUPATIONAL HEALTH AND SAFETY PROCEDURES FOR EMPLOYEES IN THE DEPARTMENT OF DESIGN AND CONTRUCTION AT PT PUPUK ISKANDAR MUDA KRUENG GEUKUH NORTH ACEH

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## Abstract

PT Pupuk Iskandar Muda is a company operating in the petrochemical industry, this company is a state-owned company that produces various types of fertilizer including urea prill and urea granule. PT Pupuk Iskandar Muda is a company operating in the urea fertilizer industry. PT PIM is the first urea fertilizer factory in Indonesia which was built by Indonesian sons and daughters through the national contractor PT Rekayasa Industri. PT Pupuk Iskandar Muda has established the best possible K3 system, because the company is aware of the importance of occupational safety and health within the company. Occupational Health, namely: a science whose application is to improve the quality of life of workers through improving health, preventing work-related diseases which is realized through health checks, treatment and nutritious food intake. Occupational safety can be said to be the science and application relating to machines, work tools, materials and processing processes, the basis of the workplace and work environment as well as ways of carrying out work to ensure the safety of workers and company assets to avoid accidents and other losses. Occupational safety and health are conditions in work that are healthy and safe, both for the job, the company and for the community and environment around the factory or workplace. After carrying out Field Work Practice activities in the Design and Build Department at PT Pupuk Iskandar Muda, it can be concluded that the implementation of occupational safety and health (K3) is very necessary because it concerns the company and its employees. The implementation of K3 also has correct procedures that must be followed in accordance with statutory regulations. The procedures used at PT Pupuk Iskandar Muda, especially the Design and Build Department, in implementing Occupational Health and Safety (K3) for employees are based on Government Regulations in article 6 Number 50 of the Year 2012.

**Keywords:** *Procedures, Health, Work Safety, Design and Build Department*

## 1. INTRODUCTION

In the development of construction projects in Indonesia, the implementation of occupational safety and health is still not optimal. Many construction workers experience work accidents every year, material damage, production failures and construction worker delays which cause many companies to suffer losses. Work accidents often occur due to lack of attention by construction project implementers to the requirements and regulations in Occupational Safety and Health. Therefore, occupational health and safety is a necessity in every part of work, whether in the field or indoors. Occupational health and safety is one of the efforts for workers to obtain guarantees for occupational safety and health which may threaten them both from individuals and their work environment. In Law Number 23 of 1992 concerning Health, article 23 paragraph (3) states that K3 efforts must be carried out in all workplaces, especially workplaces that pose a risk of health hazards. The more the industrial world develops, the more potential dangers and risks faced by workers, such as various chemicals which are raw materials, by-products, and various other dangerous factors that can pose risks to workers.

With the implementation of Occupational Health and Safety (K3) which is always based on potential hazards, namely the potential that indicates the existence of something that results in injury or illness, such as damage or loss that can be experienced by workers or agencies, as well as

potential risks, namely the risk that the event can have an impact on achieving organizational targets and comparing the possibility of an event occurring, whether against existing risk levels or criteria as well as previous K3 data, so that efforts must be made to ensure that the health level of the workforce is always in an optimal condition. Sickness or health problems in workers will reduce their physical work ability, sharpness of thinking to make quick and correct decisions, alertness and speed with the result that the workers concerned are vulnerable to work accidents. There are several accidents that have occurred in companies over the last 5 (five) years based on the Occupational Safety and Health Services Company (PJK3), namely:

**Table 1.** Occupational Accident Population

No	Year	The accident that happened	Information
1	2018	Work accident insurance claim	173,105 cases
2	2019	-	-
3	2020	-	-
4	2021	Work accidents and occupational diseases	82,000 and 179 cases
3	2021	-	-

From the table above, 65.89 percent of work accidents occurred inside the work location, then 25.77 percent of traffic accidents, and only 8.33 percent occurred outside the work location, while the greatest number of accidents occurred in the morning, namely at 06.00 to 12.00. The Social Security Administering Agency (BPJS) for Employment noted that in 2017 the number of work accidents reported reached 123,041 cases, while throughout 2018 there were 173,105 cases with claims for Work Accident Insurance (JKK) amounting to IDR 1.2 trillion. In 2019 there were 114,000 cases, and there was an increase in cases of 55.2% to 177,000 cases in 2020. Then, from January to September 2021, there were 82,000 cases of work accidents and 179 cases of work-related illnesses, 65 percent of which were caused by Covid-19. According to data released by the Indonesian Ministry of Manpower in 2020, 57.5% of the total 126.51 million working population in Indonesia have a low level of education. This condition influences workers' low awareness of the importance of K3 (Occupational Safety and Health) culture. At the same time, employers are also at risk of having to bear large costs if workplace accidents occur.

According to Law Number 1 of 1970, work accidents are a problem that must be immediately handled together, the government has explained that work accidents must be prevented and handled by workers, employers and the government. Accident cases can be handled through the development of a clear, measurable and directed system to regulate every activity to be safe, so there is a need for an Occupational Safety and Health Management System (SMK3). The implementation of SMK3 provides many positive things to companies. SMK3 can reduce the risk of danger in the workplace and can create productive working conditions. Based on Law Number 13 of 2003, it explains the implementation of SMK3 in the form of obligations regulated in article 87 paragraph (1) which reads "Every company is obliged to implement an occupational safety and health management system that is integrated with the company management system". SMK3 is not only a company's obligation to fulfill demands from the state, but is an effort to protect workers. As defined in SMK3 based on Government Regulation Number 50 of 2012. SMK3 is part of the company's overall management system in the context of controlling risks related to work activities in order to create a safe, efficient and productive workplace.

The result of a lack of awareness among employees will have implications for the large risks that must be borne by the workforce and the company, such as additional costs for handling work accidents, or can even cause death to employees due to a lack of awareness in safety behavior, even though as is known, the company itself In this case, PT Pupuk Iskandar Muda has established the best possible K3 system, because the company is aware of the importance of occupational safety and health within the company. PT Pupuk Iskandar Muda is a company operating in the petrochemical industry, this company is a state-owned company that produces various types of fertilizer including urea prill and urea granule. In this process, fatal accidents can cause death and affect work risks due to non-compliance and even tend to ignore the requirements for implementing occupational safety and health by employees. Awareness of the risk of work accidents among these employees has been realized by the company PT Pupuk Iskandar Muda since the company was founded. This is based on the awareness that the business being run is a service business in the petrochemical industry where this business has a high risk of work accidents, so with the awareness that has been built, PT Pupuk Iskandar Muda has established a standard K3 (Occupational Health and Safety) system, So with this the author would like to highlight the title "Work Health and Safety Procedures for Employees in the Design and Build Department at PT Pupuk Iskandar Muda Krueng Geukueh North Aceh".

## 2. IMPLEMENTATION METHOD

### Definition of Procedure

Procedure comes from the English word "produce" which can be interpreted as a method or procedure. However, in Indonesian it is often used with the word procedure, which is known as procedure vocabulary. In other words, the sentence can be defined as a method or procedure. However, in Indonesian we use the word that produces, which can be called a procedure. And in the management dictionary, procedure means a way of working that is formulated and required. According to Ismail Marsya in the Book Class Management in Elementary School (2019) Procedure is a series of interconnected tasks which are sequences according to certain times and procedures for carrying out work that is carried out repeatedly. Meanwhile, according to Nur Afni, S.Pd., M.Pd., Abrina Maulidnawati Jumrah, S.Pd., M.Pd in her book (2019) Procedure according to the General Indonesian Dictionary is a way of doing a job according to its levels. According to Pranaswati in Syahreza's Scientific Work (2018), procedures are a meaningful aspect in carrying out tasks and work, both in the field of operational activities and in the field of office work. The word procedure comes from English, namely procedure, namely the method, path, rules used. Even so, the word procedure is commonly used in Indonesian vocabulary, known as procedure.

According to Rifka in Hidayatullah's Literature Review (2021), a procedure is a planned sequence of work or activities to handle repetitive work in a uniform or integrated manner. Based on several opinions from the experts above, it can be concluded that a procedure is a series or association of people assigned to carry out a series of specific tasks consisting of writing activities.

## 3. RESULTS AND DISCUSSION

### Understanding Health

Optimal productivity in the world of work is the dream of every manager or business owner, because in this way the profit target can be achieved. According to Pamono, Atmoko and Subekti in the book Occupational Health and Safety (2022), Health means the degree or level of the individual's physical and psychological well-being (the degree of physiological and psychological well-being of the individual). Occupational Health, namely: a science whose application is to

improve the quality of life of workers through improving health, preventing work-related diseases which is realized through health checks, treatment and nutritious food intake.

Occupational health is described as a level, where the physical and psychological condition of an individual. In general, in terms of health, it is an effort to obtain the best possible health by preventing and eradicating diseases that occur in workers, preventing work fatigue, and creating a healthy work environment. Health is something that is desired by all living creatures on this earth because in essence the condition of a person's body can make the body unproductive and has the potential to cause several diseases which can cause a person to become unproductive and be at risk of death. Meanwhile, according to Republic of Indonesia Government Regulation Number 88 (2019) concerning Occupational Health, worker health as part of public health needs to receive attention and protection so that workers are healthy and productive, thereby supporting nation development. Meanwhile, according to Law 36 of 2009 concerning health, health can be defined as a healthy condition, both physical health, spiritual and social health, which allows everyone to live a productive life socially and economically.

### Understanding Safety

In general, occupational safety can be said to be the science and application relating to machines, work tools, materials and processing processes, the basis of the workplace and work environment as well as ways of carrying out work to ensure the safety of workers and company assets to avoid accidents and other losses. Work safety also includes the provision of Personal Protective Equipment (PPE), machine maintenance and humane working hours. Another opinion says that safety includes: (1) Controlling losses from accidents (control of accident loss) and (2) The ability to identify and eliminate (control) unacceptable risks (the ability to identify and eliminate unacceptable risks) according to Satoto (2020) in the 2022 Occupational Health and Safety Book. Safety comes from the English word "safety" and is usually always associated with the condition of someone being free from accidents or near-misses. Work safety can also be described as efforts aimed at protecting workers or the safety of other people, whether it is protecting equipment, workplaces and production materials as well as preserving the environment and creating a smooth production process. There is Law Article 5 No 1 of 1970 concerning Work Safety:

1. The Director carries out general implementation of this law, while supervisory employees and work safety experts are assigned to carry out direct supervision of compliance with this Law and assist in its implementation.
2. The authority and obligations of directors, employees, supervisors and work safety experts in implementing this Law are regulated by statutory regulations.

Safety is also a state of security in a condition that is safe physically, socially, financially, emotionally, work, psychologically or educationally and is protected from threats from these factors. In article 8 No. 1 of 1970, Work Safety:

1. Managers are required to check the physical health, mental condition and physical abilities of the workers they will accept or transfer according to the nature of the work assigned to them.
2. Management is required to periodically examine all workers under their leadership by a doctor appointed by the employer and confirmed by the Director.
3. Norms regarding health examiners are determined by statutory regulations.

## Understanding Occupational Health and Safety

Within the company there are several aspects of protection for employees, one of which is safety, protection provided to employees which aims to make employees feel safe in carrying out their daily work to increase productivity within the company. Employees in a company must receive protection from problems around them and within the employees themselves which could befall or interfere with them and the implementation of their work. Occupational safety and health are conditions in work that are healthy and safe, both for the job, the company and for the community and environment around the factory or workplace. Occupational safety and health is also an effort to prevent any unsafe acts or conditions, which could result in accidents. According to philosophy, Occupational Safety and Health (K3) is an idea and effort to ensure the physical and spiritual integrity and perfection of the workforce in particular and humans in general as well as the results of work and culture towards a just and prosperous society. According to science, Occupational Safety and Health (K3) is all knowledge and its application to prevent work accidents, work-related diseases, fires, explosions and environmental pollution according to Candrianto in the Introduction to Occupational Safety and Health Book (2020).

There is a Government Regulation of the Republic of Indonesia No. 50 of 2012 concerning the Implementation of an Occupational Safety and Health Management System. In government regulations, what is meant by this definition is all activities to guarantee and protect the safety and health of workers through efforts to prevent work accidents and work-related diseases:

1. The Occupational Safety and Health Management System, hereinafter abbreviated to SMK3, is part of the company's overall management system in the context of controlling risks related to work activities in order to create a safe, efficient and productive workplace.
2. Occupational Safety and Health, hereinafter abbreviated to K3, are all activities to guarantee and protect the safety and health of workers through efforts to prevent work accidents and work-related diseases.
3. Labor is every person who is able to do work to produce goods or services either to meet their own needs or for the community.
4. A worker or laborer is anyone who works and receives wages or other forms of compensation.
5. Companies are:
  - a. Any form of business whether incorporated or not, owned by an individual, owned by a partnership, or owned by a legal entity, whether privately owned or state owned which employs laborers or employees by paying wages or other forms of remuneration.
  - b. Social enterprises and other businesses that have management and employ other people by paying wages or other forms of compensation.
6. Entrepreneurs are:
  - a. Individuals, partnerships or legal entities who run their own company;
  - b. Individuals, partnerships or legal entities who independently run a company that is not their own;
  - c. Individuals, partnerships or legal entities located in Indonesia represent companies as intended in Letters (a) and (b) which are domiciled outside the territory of Indonesia.
7. An SMK3 audit is a systematic and independent examination of the fulfillment of predetermined criteria to measure the results of activities that have been planned and implemented in implementing SMK3 in a company.
8. The Minister is the minister who carries out government affairs in the field of employment.



### **Occupational Health and Safety Procedures for Employees in the Design and Build Department at PT Pupuk Iskandar Muda Aceh Utara**

Occupational Health and Safety is very much needed in a company, this is because by creating a healthy and safe work environment, it can reduce the probability of work accidents or illnesses due to negligence which results in work productivity. According to the Basic Health Law of the Republic of Indonesia no. 9 of 1960 Chapter 1 Article 2 Occupational Health is a health condition which aims to ensure that working people obtain a degree of physical, spiritual and social health by preventing disease or health problems caused by work and the work environment as well as general illnesses. In article 2 of the Republic of Indonesia Government Regulation No. 50 of 2012, the implementation of SMK3 (Occupational Health and Safety Management System) aims to:

1. Increase the effectiveness of planned, measurable, structured and integrated occupational safety and health protection.
2. Prevent and reduce work accidents and occupational diseases by involving elements of management, workers or laborers, and trade unions or labor unions.
3. Create a safe, comfortable and efficient workplace to encourage productivity.

Occupational health and safety are key factors for all industries to preserve the welfare of employees and companies. In article 5 of the Republic of Indonesia Government Regulation No. 50 of 2012, the obligations of every company;

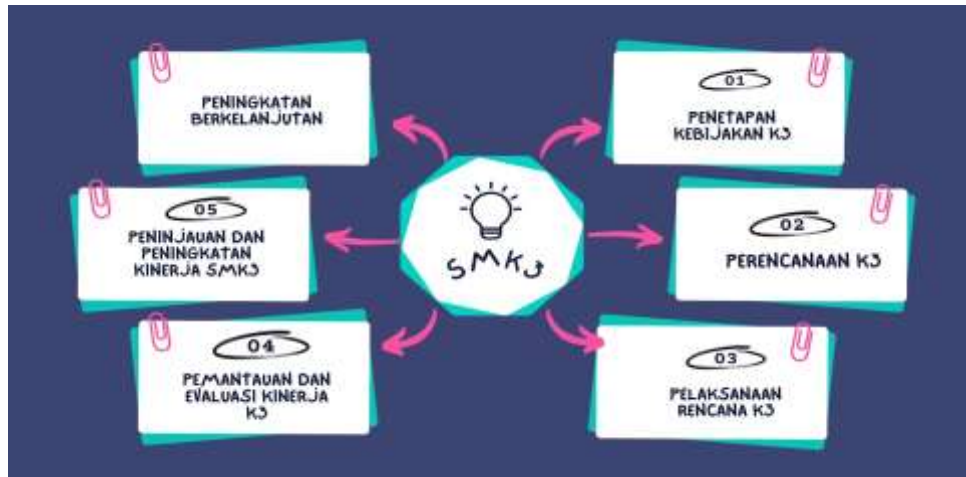
1. Every company is required to implement SMK3 in its company.
2. The obligations as intended in paragraph (1) apply to companies:
  - a. Employ at least 100 (one hundred) workers; or
  - b. Has a high level of potential danger.
3. Provisions regarding high levels of potential danger as referred to in paragraph (2) letter (b) are in accordance with the provisions of statutory regulations.
4. Companies in implementing SMK3 must be guided by Government Regulations and statutory provisions and can pay attention to international conventions or standards.

Therefore, it is the company's obligation and responsibility to ensure employee protection. The company carries out its social responsibility towards employment and work safety by referring to applicable regulations and laws, including:

1. Law no. 01 of 1970 concerning Work Safety
  - a. That every worker has the right to receive protection for their safety in carrying out work for welfare and increasing national production and productivity.
  - b. That everyone else in the workplace needs to be guaranteed their safety.
  - c. That every production source needs to be used and used safely and efficiently.
  - d. In this regard, every effort needs to be made to develop work protection norms.
  - e. That the development of these norms needs to be realized in a law which contains general provisions regarding work safety which are in accordance with the development of society, industrialization, engineering and technology.
2. Law No.13 of 2013 concerning employment, in this law what is meant by (attachment):
  - a. Employment is everything related to workers before, during and after the work period.
  - b. Labor is every person who is able to do work to produce goods or services either to meet their own needs or for the community.
  - c. A worker is anyone who works and receives wages or other forms of compensation.

- d. Employers are individuals, entrepreneurs, legal entities, or other bodies that employ workers by paying wages or other forms of compensation.

As an object in the industrial sector, PT Pupuk Iskandar Muda places the SMK3 aspect (Occupational Health and Safety Management System) as an occupational health and wellness management procedure based on Article 4 of the Government Regulation of the Republic of Indonesia No. 50 of 2012. Corporate sector supervisory agencies can develop guidelines for implementing SMK3 (Occupational health and safety system) as intended in paragraph (1) is in accordance with requirements based on statutory provisions.



**Figure 1.** SMK3 Procedures (K3 Management System)

The human resources as referred to in the procedure above must have:

- a. Work competency proven by certificate.
- b. Authority in the field of K3 as evidenced by work permits, operations and performance letters from authorized agencies.

The infrastructure and facilities as referred to in the procedure above are:

- a. Organization or unit responsible for K3
- b. Adequate budget
- c. Operation or work procedures, information and reporting and documentation;
- d. Work instruction

### **Obstacles Faced in Occupational Health & Safety Procedures for PT Pupuk Iskandar Muda Employees in the Design and Build Department**

Obstacles have a very important meaning in carrying out each implementation. A task or work will not be carried out if there is an obstacle that interferes with the work. Circumstances that can cause implementation to be disrupted and not carried out well. The obstacles faced in implementing Occupational Safety & Health Procedures are:

1. SMK3 (Occupational Health and Safety Management System) must be implemented in all other parts of management in the company and many people think that implementing SMK3 (Occupational Health and Safety Management System) will increase costs for the company.
2. Many workers in companies do not demand occupational health and safety guarantees because many employees or companies do not understand and understand the concept and system of occupational health and safety.

3. Technological developments in SMK3 (Occupational Health and Safety Management Systems) in companies must be developed, this is useful in order to minimize accidents that will occur. Such as being able to detect and control hazards.
4. There is a social gap in society regarding occupational safety and health issues, this can be seen from the culture of society which does not fully understand the dangers that exist in industrial companies so that there is a culture of trivializing things such as being "relaxed" and "not caring" from society.
5. Lack of enforcement of checks on SMK3 (Occupational Health and Safety Management System) procedures within the department can therefore be dangerous for employees.

Based on several obstacles above, the author tries to provide countermeasures that might be useful as possible solutions regarding the implementation of K3 (Occupational Health and Safety) in companies: (1) Companies should pay more attention to employees regarding (Occupational Health and Safety Management System) OHSMS, such as by providing training. regularly to employees and the surrounding community so that the above problems do not occur again. (2) The K3 (Occupational Health and Safety) Regulations already have laws that are valid in the eyes of the law. However, the government itself still does not monitor the implementation of these legal regulations. So it is hoped that the government must also be more assertive in monitoring the implementation of K3 (Occupational Health and Safety) so that the K3 (Occupational Health and Safety) program can be implemented and implemented properly and correctly in each company. (3) Every K3 (Occupational Health and Safety) expert must also always pay attention to the validity or (expired date) of safety equipment such as the contents of the first aid box, APAR (Fire Extinguisher) in each department.

#### 4. CONCLUSION

After carrying out Field Work Practice activities in the Design and Build Department at PT Pupuk Iskandar Muda and based on the discussion in the previous chapter, based on this discussion it can be concluded that:

1. The implementation of occupational safety and health (K3) is very necessary because it concerns the company and its employees. The implementation of K3 also has correct procedures that must be followed in accordance with statutory regulations. Because if K3 is not implemented well it will certainly have a bad impact on the company and its employees.
2. The procedures used at PT Pupuk Iskandar Muda, especially the Design and Build Department, in implementing Occupational Health and Safety (K3) for employees are based on Government Regulations in article 6 Number 50 of 2012. The procedures are: (1) Determining K3 policies, identifying hazards, assessing risk control , carry out a review of the causes and consequences of dangerous events. (2) K3 planning, identifying potential hazards and controlling risks by involving K3 experts (3) Implementing the K3 plan, requiring experts in the K3 field (4) Monitoring and evaluating K3 performance, with inspections. (5) Testing, measuring after monitoring (6) Reviewing and improving the performance of SMK3 (Occupational Health and Safety management system), such as monitoring evaluations that have been carried out.

Likewise with the procedure for health examination of workers at PT Pupuk Iskandar Muda based on the Government Regulation of the Minister of Manpower in Articles 2 and 3, namely: (1) All workers who have been accepted into the company have undergone a complete physical



examination, physical fitness, lung x-ray. and routine laboratories. (2) Carry out necessary inspections according to procedures, depending on the job. (3) Conduct regular inspections at least once a year.

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