

## Analysis of the Level of Compliance with the Use of Personal Protective Equipment at PT XX Industrial and Construction Development

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### Abstract

*The industrial and construction development sector is a sector that really needs workers in the field, therefore with the work in the field, PT must always be vigilant under any circumstances to keep workers from work accidents. By using personal protective equipment to workers. The government has considered the issue of protection for labor, namely through Law No. 1 of 1970 concerning Labor Safety Work safety equipment is equipment that can protect workers from workplace hazards. Compliance with the use of personal protective equipment in PT XX Industrial and Construction Development has been very good. This research uses qualitative research methods. This research was conducted by interviewing workers of pt. XX Industrial and Construction Development. The focus of this study is on the analysis of the level of compliance with the use of personal protective equipment. The population taken was 4 informants, namely 3 workers and 1 safety man. Data taken includes interviews, observations, documentation and data recording. The knowledge of workers in PT XX Industrial and Construction Development is very good, compliance with the use of worker personal protective equipment is also quite good, the personal protective equipment facilities provided by PT are very complete, and the supervision provided by PT is also very routine and has sanctions for those who are caught not wearing PPE in the form of reprimands.*

**Keywords :** Compliance, personal protective equipment, worker, Construction

## INTRODUCTION

According to Juan Somavia, Director General of the ILO, the construction industry is among the most vulnerable to accidents, followed by food and beverage invoices (Kompas, 1/05/04). Not only in developing countries, even in developed countries construction work accidents still require serious attention. Research conducted by Duff (1998) and Alves Diaz (1995) states the results of statistical analysis from several countries show the incidence of fatal accident rates in construction projects is higher than the average for all industries, in Suraji (2000).

There are several theories that explain the cause of an accident. In the past, the theory of the cause of accidents held that accidents were caused by the wrong actions of workers (people) (for example in The Accident-Prone Theory). Since the introduction of The

Chain-of-Events Theory, The Domino Theory, and The Distraction Theory, it is the organization and management that are considered to play a role as the cause of an accident. The assumption about work accidents that originate from unsafe actions carried out by workers has shifted with the assumption that work accidents originate from organizational and management factors (Andi, 2005).

The construction sector is a field of work that has a high risk. Therefore, the application of K3 is absolute in order to minimize the risk and work accidents to achieve zero accidents. The implementation of K3 in the construction world is not only useful for protecting construction workers. However, it is also able to increase worker productivity and performance. On the other hand, the implementation of K3 will also ensure the quality and safety of a job. In this case, infrastructure is built that is guaranteed quality and security, of course, will provide safety guarantees for its users, namely the community. Meanwhile, for construction service providers, the application of K3 in accordance with standards and procedures will foster trust and confidence in the safety and security guarantees of construction service users. However, it is undeniable that K3 has not been optimal as a work culture in the construction sector. Awareness of the importance of K3 from the entire construction community still needs to be improved. This can be seen from a number of construction and post-construction accidents that occurred in the construction of several strategic infrastructures in the country. (Ministry of Public Works 2018).

Efforts to prevent work accidents are to eliminate risks or control the source of hazards and the last effort is to use personal protective equipment (PPE). According to ILO (1989), the hazard control hierarchy contains 5 (five) hazard controls, namely elimination, substitution, engineering, administration and personal protective equipment (PPE). Such prevention is more directed at the work environment, equipment, and especially workers.

Work safety equipment is equipment used by construction workers to protect themselves from unwanted things, such as accidents while working. Work safety equipment can be head protection (project helmet), foot protection (project shoes), hand protection, respiratory protection, hearing protection, eye protection, safety vest and safety strap. According to the Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia No. 8 (2010), Personal Protective Equipment is a device that has the ability to protect a person whose function is to isolate part or all of the body from potential hazards in the workplace. For a worker and a company, work safety is the main thing. Occupational Health

and Safety or K3 is also regulated in the Manpower Law. Companies and workers alike must know about work safety in accordance with applicable standards, one of which is by using Personal Protective Equipment (PPE) in accordance with standards. PPE is a device that has the ability to protect someone whose function is to isolate part or all of the body from potential hazards in the workplace. This PPE consists of mandatory equipment used by workers in accordance with work hazards and risks used to maintain the safety of workers as well as those around them. And employers are required to provide PPE in accordance with the Indonesian National Standard (SNI) for their workers (Yahya Firdaus, 2019).

Hazard control can be done in various ways, one of which is by using personal protective equipment (PPE). PPE is a tool used to protect oneself or the body against the dangers of work accidents, which can technically reduce the severity of work accidents that occur. Personal protective equipment does not eliminate or reduce existing hazards, this equipment only reduces the number of contacts with hazards by placing barriers between labor and hazards (Suma'mur, 2009).

PT XX is engaged in the development industry in which there are potential hazards such as stone piles, welding sparks, welding noise, height and so on. The potential and high danger factor, Personal Protective Equipment (PPE) is needed which is indispensable as a form of protection for labor. The type of PPE provided must be able to provide adequate protection against specific hazards faced by the workforce. The purpose of this study is to see whether PT XX industry and construction of this development already has good PPE for its workers or not.

## **METHOD**

This research method is using qualitative research methods. This research was conducted by interviewing PT. XX INDUSTRIAL AND CONSTRUCTION DEVELOPMENT. The focus of this study is on the analysis of the level of compliance with the use of personal protective equipment (PPE). The population taken was 4 informants, namely 3 workers and 1 safety man. Data taken includes interviews, observations, documentation and data recording.

## **RESULT**

### **Characteristics of informants**

The age of informants in this study is adult and the last education of the highest informant is S.T (Bachelor of Engineering) and the lowest is SD (Elementary School), for the longest working period of 15 and 13 years.

### **Knowledge**

The results of interviews about workers' knowledge about worker PPE. On average, all workers already understand the function of PPE for themselves, as stated by one of the workers I interviewed:

Worker 2: *"Yes.. PPE is useful to protect us while working so that unwanted things do not happen, such as head protection is useful for protecting the head if there are small stones that fall from above during construction. "*

Worker 1 & 3: *"We know how the PPE use deck is.. What is certain is that to help protect us while working, we also always have regular training and checks on deck PPE... before we work. Usually, the safety father who checks us is complete, not the PPE we use."*

Mr. safety: *" As long as you work, surely the workers here have hit PPE.. Surely it is very important for PPE to be as important. "*

So it can be concluded from the results of the interview above that all workers already know the function of PPE for themselves.

### **Work compliance**

From interviews from workers about work compliance regarding personal protective equipment, one of the worker informants stated the following:

Worker 2: *"Sometimes when I glass in the building it's hot and stuffy. So, I sometimes take off the mask with the helmet. Because it's stuffy in Dalem Dek it's a bit difficult to breathe if you wear a mask."*

In the results of the informant interview above, it can be seen that sometimes when worker 2 is stuffy because in the building doing welding, sometimes the worker opens his helmet and mask.

Then there is also a statement of workers 1 & 3 who are obedient to the use of PPE as for the results of the interview as follows:

Worker 1: *"if I personally deck . . I still wear PPE even though it is stuffy or whatever it is because I am afraid that something unwanted will happen due to negligence in using this PPE deck."*

Worker 3: *"if I personally never take off the deck PPE.. I see also around here everyone also wears PPE because here is indeed a mandatory area to use deck PPE."*

In the results of the interview above, it can be concluded that welding workers wear PPE with complete safety gloves, safety suits, safety helmets. Welding goggles, and helmet.

Then, the actions taken when seeing colleagues not wearing PPE from the results of informant interviews are as follows:

Worker 1: *" usually the deck.. if it's his co-worker, let it be... yes that's the deck.. If it is with Mr. Safety, then he will call the worker deck. "*

Worker 2: *"If I am the decker.. usually I just say eh use tu PPE mu nnti get reprimanded by the father of safety.. Usually I remember that's just the deck.. "*

It can be concluded from the results of the interview above that there are some colleagues who remind if they see other workers not wearing PPE and there are also some who leave it alone.

Mr. safety: *" if it is found that the worker is not wearing PPE, then as a K3 in the field I will reprimand him and not allow him to enter the work area before wearing PPE. That's also a regulation from PT as well. "*

From the observations made, there are still found some workers who do not obey to wear PPE and the actions of their colleagues do not care and even do not reprimand when their colleagues do not wear PPE. From the results of the documentation, it can be seen that workers do not wear gloves and welding helmets when welding, and the actions of colleagues around him do not care or even reprimand the worker. Fellow coworkers should care about the safety of their own colleagues / coworkers because that way it will increase mutual care for fellow colleagues.

## **PPE Facilities**

From the results of interviews with informants regarding facilities about what PPE is provided by PT are as follows:

Mr. safety: "Oh yes For PPE construction projects that are used are: Helmets, bodyharnes (for height), Safety shoes, reflector vests, welding gloves (if needed), Welding glasses (if needed). For the main PPE that must be used every day according to the type of work."

Worker 3 & 1: "All of our PPE that provides it is pt dek.. We just use it. "

Worker 2: "We usually pt the deck who provide PPE we don't buy and buy PPE..."

It can be concluded that PPE facilities used by workers for work have been provided by pt. And the workers just wear it in the workplace area.

Then, the question of if employee PPE is damaged, how to buy it yourself or there are rations that are like one day or more. The results of the interview are as follows:

Worker 1 & 3: "usually the deck if our PPE is torn or no longer safety we just report the deck to the safety section, later the parents will take a new one for us to deck "

Mr. safety: "PPE, God willing, has been fulfilled deck at our PT so if something is damaged, employees here just report it will be taken for them later."

It can be concluded that if there is damage to PPE then pt will immediately replace their PPE with a new one.

Then for the question of whether in this area have signs about PPE and K3 are available. The results of the interview are as follows:

Workers 1 & 3: " *There must be a deck. every lane to enter the area must have many safety signs and PPE decks.*"

Worker 2: " *Yes, what I saw in earlier was the sign for the mandatory use of PPE at the entrance deck.* "

Mr. safety: " *For our k3 signs have been installed, some are permanent, some are mobile so that they can be moved in dangerous areas, for dangerous area pointers. Then in front of the*

*project has also been installed k3 work rules k3 commitment with workers. Then for PPE, there is also an ambunya, the main thing is complete and according to existing rules. "*

From the observation of PPE facilities such as matrix boards for the use of PPE and K3 signs in the work area are adequate, there are already matrix boards in the work area and K3 signs installed in each lane.

## **Supervision**

From the results of interviews regarding any time supervision is carried out are as follows:

Worker 3 & 1: *" Every day the safety deck person conducts surveillance in the field."*

The statement was also supported by one of the supporting informants, who stated the following:

Mr. safety: *"Supervision is carried out every day with different times, there is from the safety function to supervise patrols every day then the function is also the same because yes, the front line is because we involve also safety inspectors so it can be ascertained that the supervision deck is very good and good we have done."*

It can be concluded from the results of the interview above that the supervision carried out in the field is very good and good from supervision when workers start working, supervision of the use of PPE, and actions taken by supervisors when workers do not work according to procedures such as not wearing complete PPE, the worker will be subject to sanctions, namely in the form of reprimands and not being znkan into work control.

## **DISCUSSION**

### **Knowledge**

This study states that all workers already understand the function of PPE for themselves. These workers already understand very well the use of PPE, especially since they have been working for quite a long time, some are 7-9 years. But there is one worker who is still minimal about the importance of PPE based on interviews with these workers, they expressed discomfort in using PPE.

Knowledge is the result of knowing someone and occurs after people make observations and senses of a particular object. Knowledge is very important in shaping a person's behavioral actions. Knowledge of the use of PPE is one of the important aspects as an understanding of its importance in implementing the use of PPE for its workers (Notoatmodjo, 2010).

Knowledge is the result of knowing and this happens after people have sensed a particular object. Sensing occurs through the human senses, namely the senses of sight, hearing, smell, taste and touch. Most knowledge is acquired through the eyes and ears (Notoatmodjo, 2014).

### **Compliance**

Worker compliance in the use of PPE from the results of the study is good even though there are still a few people who are negligent in using PPE because it is stuffy when carrying out activities. Then the colleagues who saw this also did not remind the workers who were not to open PPE in the work area. Imanuddin (2019) stated that three factors affect worker compliance in using PPE, namely knowledge, behavior, and facilities. Lack of knowledge on the use of PPE and K3 in the workplace. And there are no strict rules and sanctions in the use of PPE in the workplace.

### **PPE Facilities**

In Law No. 1 of 1970 and Permenakertrans No. 08 of 2010, one of the company's obligations is to provide PPE and provide free of charge all PPE required to workers. According to Green (1980) the availability of facilities can bring out a person's behavior, good behavior is also supported by comfort and suitability of facilities with the type of work. PPE facilities at PT XX industry and development construction are very good, because all PPE facilities have been provided by PT, workers just use it. Septiana (2018) found that the proportion of PPE availability is 100%. Then, regarding the K3 signs in the development area are very good and adequate.

### **Supervision**

Supervision is very important to see the condition of workers in carrying out work and compliance in the use of PPE. According to Azwar (2010), supervision is to assess and at the same time correct each employee's appearance to achieve goals as set in each plan and staffing



is also a process to measure the appearance of a program which is then continued by directing it in such a way that the goals that have been set can be achieved.

In this study, the supervision carried out by PT. XX industrial and construction development towards workers has been very good and routine. The PT conducts training and also routine supervision of workers in the field. And also from the results of the study, there have been actions given in the form of reprimands and warnings for workers who do not comply with the use of PPE.

## **CONCLUSION AND ADVICE**

### **Conclusion**

Based on the results of the research conducted, it can be concluded that:

- a) The average worker's knowledge about the importance of PPE is very good even though there are still a few workers who are still trivial about the use of PPE.
- b) Workers' compliance with the use of PPE is quite good. Most workers are compliant in the use of PPE even though there are still a few workers who are not obedient about the use of PPE because these workers are not comfortable doing activities in stuffy conditions in the building and also lack of concern for colleagues to remind each other to use PPE while working.
- c) Facilities provided by PT. XX industrial and construction development is already very good and also complete. Then, regarding the k3 signs, it is also very complete and adequate in the eight areas of development.
- d) Supervision carried out by PT. XX development industry is already very good and PT already has action in the form of a reprimand not allowed to enter the development field area if workers do not wear PPE completely.

### **Suggestion**

Further research is needed to further explore the level of worker compliance in wearing PPE.

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