

INFLUENCE OF MANAGEMENT COMMITMENT TO SUCCESSFUL IMPLEMENTATION OF OCCUPATIONAL SAFETY AND HEALTH

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Abstract: Labor protection covers considerable aspects, namely protection of safety, health, moral maintenance of work and treatment in accordance with human dignity and religious morals. These safeguards are meant to ensure safety of workers doing their daily work to increase production and productivity. Empirical data shows that the role of management is an important factor in successful implementation of Occupational Safety and Health (OSH). This involves in many occasions handling very high risk situations, and therefore, commitment is absolutely necessary. This study aims to analyze the influence of management commitment, OSH culture and Work environment on occupational safety and health. In order to build management commitment for successful OSH implementation, important indicators need to be developed is to explain the leadership decisions and actions for the working group. Using the advice of the working group, explaining the objectives of the company's rules for the working group, setting good examples, and to discuss the focus of the work group in stages, as well as setting high standards for work with its behavior in work, teaching group members to solve problems in self-employment and show attention to team members who have worked well. Management commitment which is the key to success in the implementation of OSH is still relatively low, while work environment has the greatest influence compared to the management commitment and work environment. Management Commitment, OSH culture and Work environment have a positive and significant influence on Occupational Safety and Health performance.

Keywords: Management Commitment, OSH Culture, Work environment, Occupational Safety and Health

INTRODUCTION

The 1945 Indonesia's Constitution implies the right of every citizen to decent work and income for humanity. New jobs must meet eligibility for humanity if the safety of their workforce is to be assured. Manpower as a human resource needs to be continuously developed, given protection against the influence of technology and and given care and rehabilitation.

Labor protection covers considerable aspects, namely protection of safety, health, moral maintenance of work and treatment in accordance with human dignity and religious morals. These safeguards are meant to keep the worker in safely doing their daily work to increase production and productivity.

The Ministry of Health, the Ministry of Manpower and other ministries and the private sector have actually set the safety and health work so it is expected that the establishment of healthy workers who work comfortably can be realized as much as possible without any negative impact on the communities around each company. As has been affirmed in Indonesia's Law Number 1 Year 1970 "That every worker shall be entitled to protection for his safety in doing his work for the welfare of life and increase national production and productivity". And in the Mining Minister's Decree No. 555 of 1995 Concerning General Mining Safety and Health "In every mining activity based on consideration of the number of workers and the nature or extent of the work, the chief executive of the mine inspection may require the

employer to establish an organizational unit on occupational safety and health under supervision of the mining engineering chief”.

Empirical data shows that the role of management is an important factor in successful implementation of OSH. This involves handling very high risk, so commitment is absolutely necessary. On that basis, this study aims to analyze the influence of management commitment, OSH culture and work environment to occupational safety and health performance.

THEORY

Work safety

Safety is associated with the machine, the work equipment, the materials and its management processes, the basis of the workplace and its environment, and the ways in which it does its work (Suma'mur, 2001: 1).

Meanwhile, according to Budiono (2003: 227), safety is related to the machinery, equipment, materials and management processes, workplace and environment and ways of doing the work. In carrying out the duties and procedures for performing work in accordance with the rules of work, the use of security devices is required at the time of work. To avoid any accidents, the employee must be able to maintain safety and security in the work and must use the safety equipments that have been recommended from the company.

Occupational Health

Occupational Health refers more to a broader effort whereby occupational health does not merely protect the workforce from the threat of injury alone, but includes the maintenance of health on all matters which may cause disruption to the health of the workforce (Azwar, 2001).

According to Mangkunegara (2011) the purpose of occupational safety and health are:

1. for each employee to receive safety and health insurance, both physically, socially and psychologically.
2. for every equipment and equipment to be used as well as possible, as effectively as possible.

3. for all production to be kept secure.
4. for the guarantee of maintenance and improving of nutritional health of employees.
5. to increase enthusiasm, harmonious work and work participation.
6. to avoid health problems caused by the environment or working conditions.
7. and, for every employee to feel safe and protected in work.

Thus, it can be concluded that occupational health focus on creating healthy workers by eradicating occupational diseases, maintaining and improving health, care, eradicating work fatigue and multiplying the excitement and enjoyment of work, and protecting the surrounding community from harm- hazards posed by pollution of company wastes.

Working Protection Tool

According Suma'mur (2001: 34) Protective Equipment work are tools that can provide protection against the dangers of accidents.

Based on the Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per.08/MEN/VII/ 2010, provide the explanation that of the various Self Protection Instruments shapes and types classified according to the protected body parts. The type of self-protection equipment is divided according to the following requirements: head protector (helmet), eye protection devices (glasses), ear protective devices, hand protector (glove), protective clothing, breathing, work shoes and first aid. Such is the standard OSH equipment in the project that should be available and provided by the contractor and should be a liability. Preventive action is much better to reduce the risk of accidents.

Work procedures

According to Muhammad Ali (2000: 325) “Working procedure is the procedure work or how to run a job. Further work procedures are activities that must be done sequentially because the procedure is a stage that must be passed a good job from where it came and where to go, when the work must be completed.

In essence work procedures are used to avoid or prevent the possibility of errors that ultimately can lead to work accidents. Because the procedure is as a tool for learning and teaching then a procedure must be clear, concise, correct, and complete.

Working Procedure Purpose

1. In order for employees to maintain consistent and level performance of employees or teams within the organization or work unit.
2. To know clearly the role and function of each position in the organization.
3. Clarify the workflow, authority, and responsibilities of the related employees.
4. To avoid failure or error, doubt, duplication, and internet.

Function Working Procedure

1. Streamlining the duties of employees or teams or work units.
2. As a legal basis in case of deviation.
3. Be clear about the obstacles and traceability.
4. Direct employees to equally work discipline.
5. As a guide in carrying out routine work

Work Procedures if obeyed by everyone in the organization will bring positive consequences. The various positive outcomes, among others, are:

1. Current coordination
2. There is no overlap or duplication
3. The fostering of a harmonious working relationship
4. Clarity of authority and responsibility of everyone
5. Organizational avoidance of various types of waste
6. Current decision-making process

Guaranteed balance between the rights and obligations of the members of the organization.

Work accident

Work Accidents (according to the standard specialization of operational procedures) is something unplanned or

unexpected and undesirable. Accidents can happen anytime, anywhere and can happen to anyone and cause harm to human, material or production or equipment.

In the general mining business activities referred to mine accidents are accidents that meet the following criteria:

1. Accidents really happen
The accident actually happened in the sense that there was no intentional element of the other party or from the victim himself.
2. Afflict employees
Those who are experiencing such woes are actually employees who work for the mining company.
3. Working relationship with mining business activities
That the work of the victim is to have a working relationship/mining business relation of the company concerned.
4. Working hours
The accident occurred within the working hours of the victim that is the time between starting work until the end of work.
5. In the mining area
The accidents that occur are still within the business area of the mining business activities of the company concerned.

If the accident occurring in a mining company meets all (five) criteria above, then based on *Kepmen Nomor.555.K/26/M.PE/1995 on Occupational Safety and Health of General Mining Field* can be classified as Mine Accident.

Accidents occur when there is always a cause, the cause is as follows:

1. Unsafe actions (88%) include:
 - a. Not wearing personal protective equipment
 - b. Not following the specified work procedure
 - c. Not following the safety rules that have been made
 - d. Drive over speed
2. Unsafe conditions (10%) include:
 - a. Slippery work floor

- b. Workplace scattered with useless/secondhand goods
 - c. Less lighting
 - d. Dusty workplace environmental conditions
 - e. Equipment that is damaged/not standard
3. Others beyond human capability (2%).

Work environment

According Mardiana (2005: 152) That Working Environment is the environment where employees do their daily work. A conducive working environment provides a sense of security and allows employees to perform optimally.

Nitisemito (2004: 86) Declared “The work environment is everything that is around the workers and affect himself in carrying out the tasks that are embedded”. Workers will be able to carry out activities well, so as to achieve an appropriate working environment.

In addition, the hazard factors of the work environment that can affect the health and productivity of work in the form of health problems, illness, accident of poisoning, and pollution or environmental damage that can be classified in several factors include:

1. Physical factors, ie physical disturbances such as noise, vibration, temperature, or too high or low heat, light, radiation.
2. Chemical factors, namely the influence of chemicals in the form of gas, steam and dust.
3. Ergonomic Factors, namely due to attitude and work that is not correct or appropriate procedures and the use of improper equipment.

In this case the Head of Mine Engineering shall:

1. Take steps to reduce the incidence of dust during drilling, blasting.
2. Require mining workers to wear appropriate dust protection equipment.
3. Establish company regulations on dust control at each workplace.

Health Maintenance

Health maintenance is intended to increase labor productivity, so it can perform well and is a health effort

in the field of development. For that company is obliged to conduct health care work. The Company may organize its own health maintenance program for its workforce with better benefits from basic health care insurance packages.

The legal basis used in health care is Law No.13/2003 on employment Article 35: “Maintenance of labor shall provide for the protection of welfare, safety and health of the workforce”. And Law No.3/1992 on labor social security provides that the company is required to provide health care insurance for employees and their families.

Health Maintenance Guarantee has the following characteristics:

1. Diversity of disease with the healing process. The type and variety of causes a person develops illnesses raises the diversity of healing facilities such as physician practice, hospital services including various types of equipment and medicines, the scope of the healing process of a disease of miniature requires its own expertise.
2. Administrative. Replacement health expenses are retail and occur on a daily basis. Details of the information contained in the healing cost recovery process require high administrative discipline.
3. The cost of providing health facilities increases every year. The facts show that the cost of each type of health service each year rises higher than the general rate of inflation.
4. Risks facing sick do not know who, when and where. Disease attacks can occur to any employee at any time. From the company's point of view the uncertainty of the occurrence of disease, the type and process of healing raises the risk of providing unpredictable costs.

Bipartite and Tripartite Functionalization

Refer to the workplace health (WHO, 2015), among others: Employment protection from the risks of several factors that interfere with health, prevention of health problems caused by working conditions, placement of workers in a work environment in accordance with

physical and psychological will; Adjustment of each workforce to the work and promotion and maintenance of physical, mental and social health of the workforce.

Furthermore, Hiperkes provide reference to the management company that aims to work healthy and productive workers. In the future, the company's management gives special attention to safety and health during the activity in stable condition. At least the company can carry some dictum as follows: preventive health prevent workers from health problems or occupational diseases, security hazards that may arise by the production process so as to lower the degree of health; welfare and work productivity and harmonization among the workforce and work with the goal of excitement and work efficiency as well as the promotional impact in improving the health of the workforce.

Management Commitment system based on Labor Ministry Regulation No. Per 05/Men/1996 assumed the task of: forming organizational structure of OSH, planning and utilizing OSH function in company. Implementation of OSH management system includes commitment and policy, SMOSH planning, SMOSH implementation, measurement and evaluation, management review and improvement. Occupational Health and Safety Management is a behavioral science that covers social aspect and exact aspect in decision making.

The interconnection of element is strong in carrying out routine work ie company management in certain respects is the manager, where the manager is responsible to fully manage the work unit. The organized structure shows the delegation of authority, all rules and work norms are governed by management. In addition, the second is the employee community. Both elements (managerial and employee community) must be communicative, both of which have no chance of dropping each other, the two are synergistic. Understanding bi partite is laying the foundation of symbiotic relationship, both have a common perception in advancing the company and increase work productivity. The understanding of tri partite is a symbiotic relationship step, both have a common perception in advancing the company and increase work productivity.

The understanding of tri partite is a step of symbiotic relationship between the related offices in charge of labor and company management as well as physical observation of labor activities by the relevant offices after the regional autonomy. The Occupational Safety and Health Inspector is entitled to conduct an examination of safety concerns, to consult with company's management. The management commitment followed by cooperation of various parties has an important role in overcoming the risk, as presented in Figure 1 below.

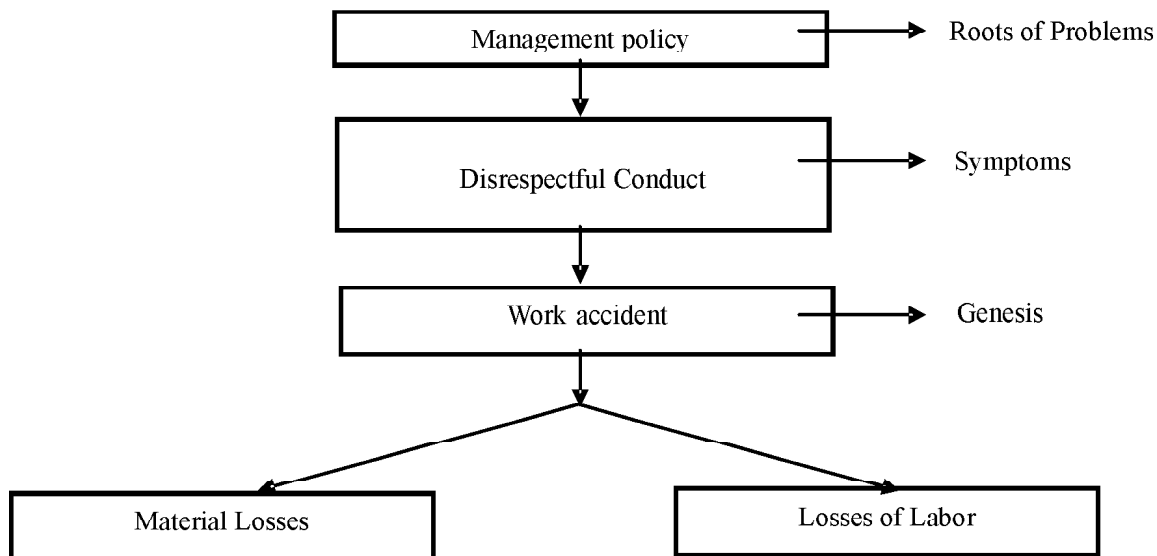


Figure 1: The Important Role of Management in Overcoming Losses

Based on the above description, the research problem to be analyzed is how much management commitment to overcome accidents in Indonesia to successful the implementation of occupational safety and health. Based on more than two decades of empirical experience and literature review, in addition to management commitment as mentioned above, other variables that play an important role are OSH culture and work environment in the successful implementation of occupational safety and health.

The purpose of this study is to analyze the effect of management commitment, OSH culture and work environment on success of occupational safety and health.

METHODOLOGY

This research is conducted on oil and gas mining workers who have high work risk in Riau Province. Chevron is one of the largest oil and gas producers in Indonesia. One of the areas of operation is in Riau Province. The company is working with the Indonesian government. Specifically, the survey was conducted purposively on a group of oil and gas miners with a total population of 197 people. The current study adopts Slovin random sampling formulate, which is mostly used in state,

$$n = \frac{N}{1 + N(e)^2} = \frac{197}{1 + 197(0.05)^2} = 131,99 = 132$$

n = sample size

N = population size

e = error

In order to verify its relevance, a pilot study is conducted resulting in a cronbach alpha of 0.93 to 0.97 att the acceptable threshold. The final questionnaire ia administered to 132 respondent across the mining workers in Riau Province Indonesia.

The parameter estimation method used is multiple regression and hypothesis tested by t test.

$$\hat{Y} = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Y : occupational safety and health (OSH)

X_1 : management commitment

X_2 : OSH culture

X_3 : work environment

With the equation model above, the research hypothesis can be expressed as follows

1. H1 : $b_1 > 0$ management commitment has a positive effect on occupational safety and health.
2. H2 : $b_2 > 0$ OSH culture has a positive effect on occupational safety and health.
3. H3 : $b_3 > 0$ work environment has a positive effect on occupational safety and health.

RESULTS AND DISCUSSIONS

One important part that wanted to be analyzed in this research is management commitment. Of the 17 indicators built, it can be seen that management is obliged to explain the decisions and actions that leaders make for the working group. This indicator has the strongest influence, that is 80.1 percent. The second indicator is to use the advice of your work group to make decisions that will affect your working group. This is very positive, where both parties between management and employees have good communication, so the real problem faced by employees in the field can be an input for management in the implementation of OSH. With such input, the management also has an obligation to explain the purpose of the company's rules to the working group. This indicator is able to give effect of 77.9 percent.

One important and powerful indicator is management's commitment by setting an example. This indicator has a strong influence, namely 77.3 percent. Exemplary management will be reflected from the presence of management and sincerity of management in implementing OSH well. In addition, preparing time to discuss the focus of the working group gradually also gave a strong influence, ie 77.3 percent. The results of research on management commitment are shown in Table 1.

Table 1
Indicators in Management Commitment in OSH Implementation

<i>No</i>	<i>Indicator</i>	<i>BigIts influence (%)</i>	<i>Category</i>
1	Describes the decisions and actions that leaders make for the working group	80.1	Very strong
2	Use the advice of your work group to make decisions that will affect the working group.	78.9	Strong
3	Describe the purpose of company rules for workgroups	77.9	Strong
4	Lead by example	77.3	Strong
5	Prepare the time to discuss the focus of the working group in stages	77.3	Strong
6	Setting high standards for work with behavior in work	76.7	Strong
7	Teach group members to solve problems in self-employment	75.9	Strong
8	Showing attention to team members who have worked well	70.5	Strong
9	Paying attention to the work effort undertaken by the working group	69.6	Strong
10	Help your work group to focus on the work group objectives.	69.3	Strong
11	Listen to ideas and suggestions from workgroups	68.9	Strong
12	Realize which work areas need more training	66.3	Strong
13	Describe how your work group can contribute to the company.	65.3	Strong
14	Encourage group members to express ideas and suggestions	65	Strong
15	Describes the rules and expectations of expectations for the working group	63.1	Strong
16	Setting that good example is with the behavior it shows	55.8	Medium
17	Shows attention to the success of work group members.	37.9	Weak

In addition, setting high standards for work with behavior in work is also required. With high standards, the management wants a high level of safety. This indicator has an effect of 76.7 percent on the success of Management Commitment. Teaching group members to solve problems in self-employment is also indispensable, because when in the field, employees and members of the group who are involved directly deal with the risks that can occur. From the overall indicator, it appears that

attention to the success of working group members shows the lowest impact. This needs attention from management, in order to also pay attention to the psychological aspects of handling OSH.

The functional relationship between Management Commitment (X_1) and OSH (X_2) culture and OSH (X_3) climate together with OSH (Y) behavior was calculated using multiple regression analysis techniques as given in Table 2.

Table 2
Functional Relation Table Variable X_1 , X_2 and X_3 with Y

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1 (Constant)	-3.619	4.863		-.744	.458
Management Commitment	.077	.034	.124	2.249	.026
OSH Culture	.141	.068	.156	2.066	.041
Work environment	.364	.033	.716	11.073	.000

a. Dependent Variable: OSH (occupational safety and health)

The Multiple regression equation is $\hat{Y} = -3,619 + 0,077 X_1 + 0,141 X_2 + 0,364 X_3$.

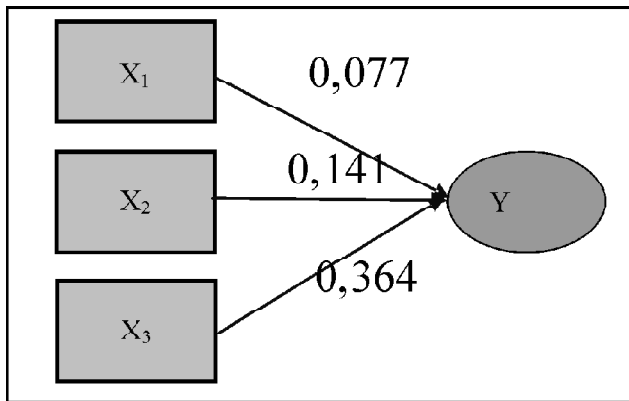


Figure 2: The Effect of Management Commitment, OSH Culture and Work environment on Occupational Safety and Health

- Y : Occupational Safety and Health
- X₁ : Management Commitment
- X₂ : OSH Culture
- X₃ : Work environment

This figure reflects a very low value if the company does not have Management Commitment and also the OSH culture does not exist, then the behavior of OSH is bad and even reflects the negative number. By considering the regression coefficient above, it can be seen that the regression coefficient b1 is 0.077, that is, the OSH's management has a positive influence on the behavior of OSH. If Management Commitment is improved, then the behavior of OSH will increase by 0.077 score units. The regression coefficient b2, of 0.141 indicates that OSH culture has a positive influence on Occupational Safety and Health. If the culture of OSH increases one unit score, then the behavior of OSH will increase by 0.141 score unit. Similarly, the regression coefficient b3, ie equal to 0.364 means, the culture of OSH has a positive influence on the behavior of OSH. If the culture of OSH increases one unit score, then the behavior of OSH will increase by 0.364 unit score.

The results of research on the influence of commitment management, OSH culture and work

environment on occupational safety and health can also be stated in the following figure.

By comparing the three independent variables, it can be seen that the management commitment (X1) is still relatively low. This is one of the key success factors in OSH implementation. The results showed that Work environment, has the greatest influence compared to the other two independent variables. This has implications for the importance of creating a conducive climate and health and safety environment.

The result of hypothesis testing shows that all the independent variable, both management commitment, OSH culture and work environment have significant influence on health and safety behavior. This is reflected in the larger statistical t value of the t table value (1,978) or of the significance value of the alpha test smaller than 0.05.

From the value of determination coefficient of 0.975, it can be stated, as much as 97.5% of occupational safety and health diversity can be explained by independent variables, management commitment, osh culture and work environment together. In other words, management commitment, OSH culture and work environment have a positive effect on occupational safety and health.

CONCLUSIONS AND FUTURE RESEARCH

In order to build a management commitment in the success of OSH implementation, important indicators need to be developed is to explain the leadership decisions and actions for the working group, using the advice of the working group, to explain the objectives of the company's rules for the working group, to model, to discuss the focus of the work group in stages, set high standards for work with its behavior in work, teach group members to solve problems in self-employment and show attention to team members who have worked well.

The results showed that the management of OSH (X1) has not been well run, especially the management commitment while this is one of the keys to success in the implementation of OSH. Work environment was found having the greatest influence compared to the other two independent variables. This has implications for the importance in creating a conducive climate, health and

safety environment. The results of hypothesis testing shows that all independent variable, both Management Commitment, OSH culture and Work environment have positive and significant influence toward Health and Safety Behavior. A suggestion for future research is how to create a strong management commitment, in addressing the risks of work accidents. In addition, it is also advisable to make it to manufacturing companies in Indonesia.

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