

THE CHALLENGES OF OCCUPATIONAL SAFETY AND HEALTH
ACTS REQUIREMENTS AT CONSTRUCTION SITE FROM THE
PERSPECTIVE OF SAFETY OFFICER

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ABSTRACT

Implementation of Occupational Safety and Health Act (OSHA) in the construction sector is not a new thing. Occupational Safety and Health Act (OSHA) in Malaysia is the Act which provides the legislative framework to secure the safety, health and welfare among all Malaysian workforces and to protect others against risks to safety or health in connection with the activities of persons at work gazetted on 24th February 1994 by Malaysian Parliament. OSHA has issued Guidelines for Managing the voluntary protection program to encourage employers to do more than just comply with regulations to prevent injuries and occupational diseases.

However, this is often a problem when there are situation implications OSHA at the construction site. We often associate implications OSHA safety requirements is one of the main tasks of the office. Other than that, implementation of OSHA requirements at construction site involves many parties. Cooperation is among all parties very important in helping the effectiveness of the implementation of OSHA requirements.

This is a challenging task for the safety officer. However the challenge comes from the OSHA requirements. Nevertheless, there are many aspects that affect the implications OSHA requirements as a challenging task. That aspect is only known by the safety officer itself.

ABSTRAK

(Bahasa Melayu version)

Pelaksanaan Akta Keselamatan dan Kesihatan Pekerjaan (OSHA) dalam sektor pembinaan bukanlah satu perkara yang baru. Keselamatan dan Kesihatan Pekerjaan Akta Kesihatan (OSHA) di Malaysia adalah Akta yang menyediakan rangka kerja perundangan untuk memastikan keselamatan, kesihatan dan kebajikan di kalangan semua tenaga kerja di Malaysia dan untuk melindungi orang lain terhadap risiko kepada keselamatan atau kesihatan berkaitan dengan aktiviti orang-orang di tempat kerja diwartakan pada 24 Februari 1994 oleh Parlimen Malaysia. OSHA telah mengeluarkan Garis Panduan Pengurusan program perlindungan sukarela untuk menggalakkan majikan untuk melakukan lebih daripada sekadar mematuhi peraturan-peraturan untuk mencegah kecederaan dan penyakit pekerjaan.

Walau bagaimanapun, ini sering menjadi masalah apabila terdapat implikasi keadaan OSHA di tapak pembinaan. Kita sering mengaitkan implikasi OSHA keperluan keselamatan adalah salah satu tugas utama pejabat. Selain daripada itu, pelaksanaan keperluan OSHA di tapak pembinaan melibatkan banyak pihak. Kerjasama adalah antara semua pihak amat penting dalam membantu keberkesanan pelaksanaan keperluan OSHA.

Ini adalah satu tugas yang mencabar bagi pegawai keselamatan. Walau bagaimanapun cabaran yang datang dari keperluan OSHA. Walau bagaimanapun, terdapat banyak aspek yang memberi kesan implikasi keperluan OSHA sebagai tugas yang mencabar. Aspek yang mempengaruhi hanya diketahui oleh pegawai keselamatan itu sendiri.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Operation of building and engineering work of the construction industry in Malaysia has achieved significant progress in recent years and the increase in their activities affect the safety and health of the people. Construction site creates the risk not only for construction workers, but also for people who move around the site or who may live adjacent to them.

Occupational Safety and Health Act (OSHA) in Malaysia is Act which provides the legislative framework to secure the safety, health and welfare among all Malaysian workforces and to protect others against risks to safety or health in connection with the activities of persons at work gazetted on 24th February 1994 by Malaysian Parliament. OSHA has issued Guidelines for Managing the voluntary protection program to encourage employers to do more than just comply with regulations to prevent injuries and occupational diseases. Increasing of Occupational accidents at construction site which is probably due to lack of safety culture and noncompliance of OSHA requirements (1994) (Hui-Nee: 2014). The scope of OSHA was made to covers all persons at work in both private and public sectors except on board ships and the armed forces. Occupational Health

and Safety regulations are expected to positively impose penalties in the presence of unsafe working conditions for employers who do not comply with standards (Hui-Nee:2014).

According to Record of DOSH, there are 49,883 accidents at work placed reported during the period of 2012 to March of this year with 664 fatalities recorded. Deputy Human Resources Minister which is Datuk Ismail Abd. Muttalib said, the sectors involved in workplace accidents is manufacturing and construction, manufacturing, mining, agriculture, forestry, fisheries, transport and services to the public. For accidents at construction sites, the number of cases reported in the period from 2009 to 2013 was 15,419 cases which are 14,946 were injured while 473 fatalities. He emphasized that the government is revising upwards the penalties on employers and contractors who are found guilty and enforce and audit security acts in order to prevent accidents in the workplace.

However, the contractor or an employer will appoint a safety officer to cover all expenses and responsibilities related to the safety and health of workers at construction sites. . Safety Officer is appointed and employed by the main contractor in addition to helping for ensures the safety and health of the construction site. One of the responsibilities of a Safety Officer is to ensure that all activities and works carried out at the construction site must comply with all OSHA regulations and requirements. This study is to analyse the challenges of OSHA requirements at construction site for perspective Safety Officer.

1.2 PROBLEM STATEMENT

In general, the Occupational Safety and Health Act (OSHA) have been introduced by government agencies which is Department of Occupational Safety and Health (DOSH) to parties involve in construction. Various methods have been implemented for conducting and practice OSHA in construction site. The reason of these initiatives is to reduce the accidents from occurring. However there are many deficiency and constraints that occur in implementation safety and health at construction site.

There many issues were raised in implementation of OSHA requirements at construction site. As a Safety Officer, ensure the project follow all the OSHA requirements is the main of his/her responsibility. Not only for Safety Officer but all parties that take part in works and activities at construction should aware about safety and health. The OSHA requirements are appoint the parties and their responsibility in safety and health section. The problem that will inextricably in this study is to identify whether Safety Officer had any challenges in ensuring all parties follow and carry out their responsibly as has been specified in OSHA requirements.

1.3 RESEARCH OBJECTIVE

The main objectives of this research are as follow:

- i) To identify the OSHA requirement that gives the most challenges.
- ii) To identify the factors that influent OSHA requirement as challenging task.
- iii) To study how that factors can give influent to the OSHA requirement.

1.4 RESEARCH QUESTIONS

- 1.4.1 Which one of Occupational Safety and Health Acts requirements are challenges to implement at construction site?
- 1.4.2 What are the factors that influent Occupational Safety and Health Acts requirements as challenges?

1.4.3 How those factors can give influent to the OSHA requirement?

1.5 SCOPE OF STUDY

The scope of this study is targeted to implementation of OSHA requirements of construction project in area Kuala Lumpur. This study will focus on the OSHA requirements (1994). Data analysed were from Safety Officer that involve in construction project in Setapak district.

1.6 SIGNIFICANCE OF RESEARCH

Occupational Safety and Health (OSHA) is very importance in construction site. Occupational Safety and Health can reduce the amount of accident occur in construction site. The objective of Occupational Safety and Health is to ensure safety, wellness welfare of people of peoples at work and to protect people in the workplace which is other than those who are working. Other than that is to foster a work environment that is compatible with the physiology and psychology of the people who are working. Occupational Safety and Health also create a legal system based on the rules and procedures as well as industry practices provisions of the Act. Therefore, Safety Officer is the one of people was responsible and trusted by DOSH to implement the OSHA requirements at construction site.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature review is a study that systematically and clearly to identify, evaluate and interpret the results contributed by researchers, scholars and experts in related fields and issues being studied. Continue on what previous research has reached up to the study. Before writing the literature review for this study, it should be started making literature search. Literature search means that searching the information from reading materials such as journals.

In this study there are many researches on safety and health in construction site. For an example is safety management. It is particularly useful in achieving the goal of this chapter. This can facilitate the writing of literature review about implementation and the challenges of Occupational Safety and Health Act (OSHA) in construction site. This chapter is a review on the related journals about implementation of OSHA. That include the aspects OSHA requirements, parties involve, role of parties involve and the way the can contributed in implementation of OSHA in construction site.

2.2 OCCUPATIONAL SAFETY AND HEALTH ACTS (OSHA)

An Act to make further provisions to ensure the safety, health and welfare of persons at work, for protecting others against risks to safety or health related to the activities of people at work. Occupational Health and Safety Act came into effect on February 25, 1994. Act 514 enacted on the basis of self-management, which is responsible for ensuring the safety and health at work is to employers and employees alike as they manage other things at work as production administration and money gets tight. Occupational Safety and Health Act does not dispose of but complement and streamline existing laws such as the Factories and Machinery Act 1967 (Factories and Machinery Act & Regulations). However, in the event of any inconsistency, the Occupational Safety and Health will be used.

In 1980 the idea of industrial accidents in Malaysia reported 50,000 cases and rose to 134,000 in 1993. These accidents involve injury and death. Based on the observation of the accident is caused no safety and health management right. In line with the concept of self-regulation, the Act set out in detail and clearly related to general obligations of all parties involved in the work to preserve the safety and health at work.

The group that was given the responsibility in this Act is employer, those who are self-employed and employees. While those involved in the design, manufacture, import and supply of equipment and materials used in the workplace was also given a general duty to ensure that the equipment and materials supplied is safe and does not cause harm when used. ACT 514 Occupational Health and Safety Act gives responsibility to all parties involved in order to create a system of effective safety and health in the workplace, including aspects of security policy, organization and working system.

The purposes of this Act are:

- To ensure safety, health and welfare of those who work against risks to their safety or health arising from the activities of people at work
- To protect people in the workplace than those who are working toward safety or health risks arising from the activities of persons at work
- To promote a work environment for people who are at work that are tailored to their physiological and psychological needs
- To provide the means whereby occupational safety and health legislation related can be replaced in stages by the regulatory system and industry codes of practice approved, running in combination with the provisions of this Act for the purpose of maintaining or improving health and safety standards.

2.3 OCCUPATIONAL SAFETY AND HEALTH ACTS RESEARCH

In this study, the Occupational Safety and Health Acts requirements are consider:

1. Notification of an operation.
2. Notification and reporting of an accident and dangerous occurrence.
3. Safety and health organization.
 - Safety and health Officer
 - Establishment of safety and health committee at place of work

4. General duties of employers.
 - Duty to Formulate Safety & Health Policy
 - Provision and maintenance of a working environment for his employees that is, so far as is practicable, safe, without risks to health, and adequate as regards facilities for their welfare at work.
 - Provision of such information, instruction, training and supervision as is necessary to ensure, so far as is practicable, the safety and health at work of his employees.
5. General duties of employees.
 - Duty not to interfere with or misuse things provided pursuant to certain provisions
 - Wear or use at all times any protective equipment or clothing provided by the employer for the purpose of preventing risks to his safety and health.
 - To comply with any instruction or measure on occupational safety and health instituted by his employer or any other person by or under this Act or any regulation made thereunder.
6. Prohibition against use of plant or substance.

2.3.1 NOTIFICATION OF AN OPERATION

In this requirement the employer must provide evidence including the production of documents to show that he has identified the hazards major accidents, take adequate measures to prevent major accidents and to minimize their effects if applicable. In addition, the employer also has to provide information, training and equipment necessary to the people working on site to ensure their safety.

An employer who has control over an industrial activity shall provide evidence including the production of documents to the Director General when asked to show that he had: -

- identify the hazards of major accidents; and
- take adequate measures to prevent any major accidents or minimize the consequences to people and the environment and provide information, training and equipment needed to people working on site to ensure safety them;
- prepare and update a site emergency plan

Inadequate detailing how major accidents could be addressed.

Identifying the potential hazards of major accidents should also be made

- All hazardous materials and quantity available on site.
- The type of hazardous material whether raw material, finished products, intermediate or output side.
- Physical and chemical and toxicological information on these substances and criteria dangers.
- Position of hazardous materials and the quantities indicated above scale site plan.
- How can the causes, dangers and consequences of accidents workers, the public and the environment.

Besides that, the employer must provide information about OSHA requirements. The information regarding hazardous materials and emergency measures in the workplace will be conveyed to employees by training. Training will be given to all workers who are signed. There are three types of training:

- Induction Course.
- The course of operation of the installation.
- Training for emergencies

The record of the training should be kept for use as evidence of the training that was held.

2.3.2 NOTIFICATION AND REPORTING OF AN ACCIDENT AND DANGEROUS OCCURRENCE

Under section 32, an employer should notify the nearest Occupational Safety and Health office of any accident, dangerous occurrence, occupational poisoning or disease which occurred at workplace. Every registered medical practitioner or medical officer called in to visit, shall report the matter to the Director General, if there is a patient whom he believes to be suffering from any of the diseases listed in the Third Schedule of the Factories and Machinery Act 1967 [Act 139], or any disease named in any regulation or order made by the Minister under this Act, or occupational poisoning.

Accident means any incident or during work causing fatal injuries or non-fatal injury. Fatal injury means injury leading to immediate death or death within one year of the accident.

Non-fatal injury means:

- 'lost-time injury that prevents an employee from performing work common and lead to permanent incapacity for work or temporary

- 'injury has no time to lose "in which no work time is lost after time medical attention.

Director General may direct inquiry to be held for identification cause of the accident, dangerous occurrence, occupational poisoning or occupational disease. Director General may cause such an inquiry to be held by an occupational safety and health officers. The Director General also may appoint one or more persons of engineering, medical or other appropriate skills or expertise to serve as assessors in any such inquiry.

ACTION REPORT ACCIDENT

- Head of Centre should ensure that any accident, dangerous occurrence, poisoning or occupational disease which occurs in the workplace each reported to the Health and Safety Committee Work through the Chairman of the Occupational Safety and Health. These report shall be made immediately upon the incident recognized or accepted in their department
- Send Form Report of Accident / Dangerous Occurrence JKKP6 as soon as practicable, as set out in the Annex and copied to the file Occupational Health and Safety Committee PTJ respectively.
- For a serious accident, the accident should not be disturbed except to prevent a more serious accident or facilitate the passage help. Advice or opinion from the Safety Division accident should be obtained immediately.

2.3.3 SAFETY AND HEALTH ORGANIZATION

Safety and Health Officer

In section 29, it is related to Safety and Health Officer. An occupier of the workplace to which this section applies shall employ a competent person to act as a safety and health officer of employees at work. Safety and health officer shall be employed solely to ensure due compliance with the provisions of this Act and any regulations made thereunder and the promotion of a safe conduct in the workplace. Safety and health officer shall have any qualification or have received training prescribed by the Minister by notice in the Gazette, from time to time prescribe. An occupier who contravenes this section commits an offense and shall, on conviction, to a fine not exceeding five thousand ringgit or to imprisonment for a term not exceeding six months or both.

Establishment of safety and health committee at place of work

In section 30, every employer shall establish a safety and health committee in the workplace in accordance with this section if there are forty or more persons employed in the workplace. The Director-General ordered the establishment of such a committee in place of work. The safety and health committee established under subsection (1), election or appointment of persons to committee, powers of the members of the committees and any other matters relating to the establishment or the procedure of the committee shall be as prescribed. Every employer shall consult with safety and health committee in order to create and maintain arrangements which will enable the employees to work effectively in promoting and developing measures to ensure the safety and health at work of employees, and in measuring the effectiveness of that step.

Functional safety and health committee to keep under review the measures taken to ensure the safety and health of people at work. Safety and health committee shall investigate any matter considered at the workplace is not safe or is a risk to health.

Other functions of committee:

- Assist in developing a health and safety system and safe system of work.
- Review the effectiveness of occupational safety and health program.
- To study and to study the trend of accidents, dangerous occurrences, incidents, poisoning or occupational disease which occurs in the workplace, and to report on the management of state or unsafe practices or unhealthy in the workplace together with proposals for remedial action
- Review policies on safety and health at work and make recommendations to management for the revision of the policy.
- Considering any statements related occupational safety and health, occupational health and safety audit submitted by officers, reports and information relating to occupational safety and health and reports by other government agencies on matters related to occupational safety and health.
- Meet as often as necessary commensurate with the risks inherent in the nature of the work; but not less than one (1) times in three (3) months.
- Conduct workplace inspections.
- Investigation work.

- Monitor the performance of safety and health at the Department / Unit;

2.3.4 GENERAL DUTIES OF EMPLOYERS

Under section 15, is the duty of every employer to ensure, so far as practicable, the safety, health and welfare at work of all his employees. Moreover it is providing the information, instruction, training and supervision as is necessary to ensure the safety and health at work of its employees. With respect to any workplace under the employer's control, maintenance in a safe and without risks to health and the provision and maintenance of means of access and egress from it that are safe and without such risks. Employers need to provision and maintenance of a working environment for his employees that are safe, without risk to health, and associated facilities adequate for their welfare at work.

Safety working conditions to be established:

- 1) The layout updates
- 2) Comfortable work area
- 3) Lighting is adequate for the work done
- 4) Good ventilation
- 5) The noise controlled
- 6) The equipment works well and fit
- 7) The security device at the appropriate machine
- 8) Hazardous chemicals are stored in a safe place
- 9) A system that works
- 10) The fire suppression system is a complete and functional
- 11) A warning sign danger clear and sufficient
- 12) Marks safety instructions are clear and sufficient.

Maintenance:

- 1) All equipment and utensils should be held from time to time to ensure it is safe to use.
- 2) There should be evidence of maintenance has been done. If maintenance is not carried out according to schedule, should inform the Management.

However, the employers can be categorized into two parties:

- General or main contractors
- Subcontractors

General or main contractors

There are many studies on how active safety and health management approach focused by General Contractors. This is closely linked with the implementation of the Occupational Safety and Health Act (OSHA) in construction site. Its show how General Contractors can play vital role in ensuring site workers' safety while working in construction site. In order to ensure the safety of site workers, the way of General Contractors manage and handle the safety at construction site is also important. Therefore, there is implementation of the Occupational Safety and Health Act (OSHA) in construction site to ensure safety maintenance of site workers at construction site running smoothly. There is much aspect focus in OSHA according to safety and health. At the same time it can guide General Contractors to control the safety of site workers in the best way. For example are guidelines for public safety and health at construction sites (2007), trenching for construction safety (2000), and the prevention of falls at workplaces (2007).

General Contractors have high ability to analyse visible unsafe conditions. It is common routine for General Contractors to take responsibilities in construction site (T. Michael Toole, 2002). Many construction contracts required General Contractor is present whenever any work have achieved. The emphasis on safety and health management adopted by the General Contractors awarded to subcontractor. In other words, General Contractors have control on subcontractor safety and health. They are decidedly tasked with monitoring and coordinating the work of the Subcontractors (T. Michael Toole, 2002).

There are various factors that influence the General Contractors control on subcontractor safety and health. In this literature review, there are some factors that influence the General Contractors control on subcontractor safety and health are as follow:

- Emphasizes the important role to be played by General Contractors in managing the safety and health of subcontractor. There is a study on safety sponsored by Construction Industry Institute revealed that the generally safety subcontractors were affected more by General Contractors more than the subcontractor themselves (Hinze and Figone, 1988; Hinze and Talley, 1988). Chen and Jin (2012) stated that there is study on the effect of a General contractor's site-wide safety program showed that the program was impressive in decreasing accidents and safety violations among General Contractor's works but not efficient on subcontractor's safety performance.
- The level of control on subcontractor's workforce identified to have an effect on effectiveness of the main contractor's safety program (Tam and Fung, 1998; Goldenhar et al, 2001). However, less positive view of the safety condition from the site employees of subcontractors can decrease the General Contractor's control on its jobsites as well as the levels of worker commitment in safety (Fung et al, 2006).

There are many way that can be applied by General contractors to improve the safety and health in construction site. Improving the employees' or site workers' safety performance

by observing and check out whether the work carried out by them safely executed or not (Geller, 1998a; DePasquale and Geller, 1999; cooper, 2003; BSMS, 2013). This can be carried out through the implementation of the Occupational Safety and Health Act (OSHA) in the construction site. Improve the Occupational Safety and Health by focusing more in aspect of site workers' attitude and administrative safety culture (Geller, 1998b; Williams, 2003; Geller and Wiegand, 2005). Other than that, General Contractors can promote and provide safe environments and improving safety awareness, attitude and climate to limit the site workers' unsafe behaviour (Mohamed, 2003; Coudhry et al, 2007a, b; Zhou et al., 2008).

Subcontractors

Beside General Contractor, Subcontractor performance is very importance in ensures the safety in construction site. Because the extensive involvement of Subcontractor to construction (Qian Chen and Ruoyu Jin, 2015). In recent years, the subcontractor's safety performance has become a critical issue, receiving increasing attention in project management, research of safety and rules in the safety and health (Johnstone et al.,2000; Toole, 2002; Hinze and Gambatese, 2003; Fang et al.,2006). Johnstone et al. (2000) stressed that subcontracting increases the likelihood of a multi-employer worksite, corner-cutting, dangerous form of irregular employment, and other safety risks.

Subcontractor has ability to assess site conditions for an unacceptable hazard varies with the type of hazardous condition. Reliable Subcontractors can observe the work and construction site at all times to ensure their workers performing the actual construction work on site (T.Michael Toole, P.E, M.ASCE, 2002). This can be done through persistent and regular inspections of construction site, material and equipment. T. Michael Tool (2002) state that Subcontractors high ability in identify visible unsafe conditions.