

# EVALUATION OF OCCUPATIONAL SAFETY AND HEALTH POLICIES IN MALAYSIA

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## ABSTRACT

*The initial Occupational Safety and Health (OSH) legislation in Malaysia was constructed by the British administration. Malaysia continued to improve the legislation's scope to ensure that it continues to support the nation's growth. Workers in the warehousing and storage industry or third party logistic providers in some cases suffer high rate of occupational accidents as reflected in considerable share of occupational fatalities and lost-time injuries. OSH of workers should be integrated into the management plans so as to yield the benefits of high efficiency workforce. The main OSH national policy in Malaysia is the enactment of Factories and Machinery Act (FMA) 1967 and Occupational Safety and Health Act (OSHA) 1994. Other legislation was also formulated to address specific issues and concerns. This paper reviews their implementation and various impacts on OSH in Malaysia. Data were obtained from official sources. This paper discusses the current OSH status of warehousing and storage industry. The OSH problems are tied largely to the companies' organization and how the work is performed. Occupational accidents happened which resulted from many factors including poor OSH management system, inadequacies in access to information, inadequate training of personnel, machinery was not provided with appropriate tools and improper adoption of personal protective equipment, while the employees lacked awareness and knowledge of OSH and emergency response. Recommendations to improve OSH level are discussed in the paper. Potential solutions are such as enhancement in labor-management OSH planning and management, training of employees, adoption of new technologies, up-to-date regulation, and continuous health monitoring.*

**Keywords:** Occupational Accidents, Factories and Machinery Act 1967, Occupational Safety and Health Act 1994, Occupational Safety and Health Management System.

## INTRODUCTION

There are various types of accidents happening at workplace. Lessons from accidents have influenced occupational safety and health (OS&H) legislation and acceptance of OS&H management system (OSHMS). The society in general suffers great loss if there is no comprehensive OSHMS because the productivity of a healthy and safe worker is higher than a worker with permanent disability and receiving Social Safety Organisation (SOCISO) benefits. There is no complete cure for most occupational diseases that the suffering is permanent. The purpose of the OS&H legislation is to prevent accidents, ill health and injury at workplace.

## LITERATURE REVIEW

Lavicoli et al. (2006) compare the main published projects to identify research priorities in the OS&H field, methods, approaches and results. Ab. Rahman (2007) studies the direction and challenges of safety and health at work legislation in Malaysia. Abdul Rashid (2009) compares the departments which implement the law, the regulations, the general duty of employers and employees, and the construction activities in United Kingdom, Australia and Malaysia. Hussin (2001) discusses the responsibility of ensuring worker safety at the construction site from the perspectives of legislation and common law. Soehod and Laxman (2007) in their study on the law of safety and health in Malaysia recommend further research on the problem and difficulty of the enforcers, SHO and SHC, implementation of OSHA regulations, codes of practices and guidelines and awareness of the employers.

The policy framework or the public measures including OS&H related legal framework were regulations enacted in response to the need to counterbalance the negative effects of the industrial revolution. In early industrial years, the workers lacked social protection and ill health. The British specified safety and health legislation such as transportation of machinery on the train. The earlier legislation was Selangor Steam Boiler Enactment 1892 and Perak Steam Boiler Enactment 1903. All four Federated States enacted boiler legislation in 1908. These enactments were replaced by the Machinery Enactment 1913 which introduced the inspection of Internal Combustion Engines, and later the Machinery Enactment 1932 whereby the registration and inspection of installations were started. The Machinery Department was established to address machine safety, and remained a branch of the Mines Department until 1952. Machinery Ordinance 1953 was passed and applied to the Federation of Malaya. With emergence of industry activities, Factories and Machinery Act (FMA) 1967 was enacted to protect workers working with machineries. The weakness in the Machinery Ordinance 1953 was that the workers were not protected if they are working in a workplace that does not use machinery (DOSH, 2010).

FMA 1967 covers safety, health and welfare of workers in factories and working with machinery. Notification of occupational diseases to the Director General of the Machinery Department is required. It is prescriptive in nature, using checklist and stressing on government enforcement. The objective is to control factories and machinery to matters relating to the safety, health and welfare of workers, and the registration and inspection of machinery. The regulations of the Act are:

- F&M (Administration) Regulation 1970
- F&M (Building Operations And Work of Engineering Construction) (safety) (BOWEC) Regulation 1986
- F&M (Certificates of Competency) Regulation 1970
- F&M (Electric Passenger and Goods Lift) Regulation 1970
- F&M (Fencing of Machinery and Safety) Regulation 1970
- F&M (Notification, Certificate of Fitness and Inspection) Regulation 1970
- F&M (Persons in charge) Regulation 1970
- F&M (Safety, Health and Welfare) Regulation 1970

- F&M (Steam Boiler and Unfired Pressure Vessel) Regulation 1970

The occupational health regulations cover the standard of action level and permissible exposure limit ó time-weighted average (PEL-TWA), control measures, surveillance of exposure monitoring and medical examination and record keeping:

- F&M (Leads) Regulation 1984
- F&M (Asbestos Process) Regulation 1986
- F&M (Mineral Dust) Regulation 1989
- F&M (Noise Exposure) Regulation 1989

The major policy concerning OS&H was Occupational Safety and Health Act (OSHA) 1994 (Act 514) formulated mainly referring to the British Occupational Safety and Health Act of 1970 that includes a general duty for employers. The tragedy of Sungai Buloh Bright Sparkler firework factory explosion in 1991 had claimed twenty-three lives and contributed to acceleration of new legislation. The OSHA1994 was made considering the fact that the FMA 1967 only covered occupational safety and health in the manufacturing, mining, quarrying and construction industries, whereas the other industries were not covered. The scope of OSHA 1994 covers all persons at work except on board ships and the armed forces.

OSHA 1994 has established the responsible self-management by business and extended duties to company decision makers. The safety and health system is based on the principle of assessing the risks and managing them sensibly, encouraging the employers to focus their energy and resources more on the significant hazards that can cause real harm. The main principles of this Act are self-regulation, tri-partite consultation and co-operation between employers and employees. The objectives of OSHA 1994 are to secure the safety, health and welfare of persons at work against risks, to protect persons at a place of work other than persons at work against risks, to promote an occupational environment for persons at work which is adapted to their physiological and psychological needs, and to provide the means whereby the associated occupational safety and health legislations may be progressively replaced by a system of regulations and approved industry codes of practice (DOSH, 2010). The main provisions of the OSHA 1994 are the General duties of the Employer (Section 15, Section 17 and Section 18), OSH Policy (Section 16), General Duties of Designers, Manufacturers and Suppliers (Section 20 and Section 21), General duties of the Employee (Section 24), Medical Surveillance (Section 28), Safety and health Officer (Section 29), Safety and health committee (Section 30 and Section 31), and Reporting of accident, dangerous occurrence, occupational poisoning, and disease and and Prohibition of the use of plant or substance (Section 32). The national OS&H policies are formulated by the National Council for Occupational Safety and Health (NCOSH) under MOHR. The membership of the Council consists of organisations representing employers, organisations representing employees, Ministries or Departments, and from organisations of whose members are related to OS&H. MOHR is the policy formulator and service regulator for the workforce. Under the

OSHA 1994, Machinery Department was re-designated as Department of Occupational Safety and Health (DOSH). The regulations of the Act are:

- OS&H (Employers' Safety and Health General Policy Statements) (Exception) Regulation 1995
- OS&H (Control of Industrial Major Accident Hazards) (CIMAHA) Regulation 1996
- OS&H (Safety and Health Committee) (SHC) Regulation 1996
- OS&H (Classification Packaging and Labelling) (CPL) Regulation 1997
- OS&H (Safety and Health Officer) (SHO) Regulation 1997
- OS&H (Safety and Health Officer) (SHO) Order 1997
- OS&H (Prohibition of use of substance) Order 1999
- OS&H (Use and Standards of Exposure to Chemicals Hazardous to Health) (USECHH) Regulation 2000
- OS&H (Notification of Accidents, Dangerous Occurrences, Occupational Poisoning and Disease) (NADOPOD) Regulation 2004

## **METHODOLOGY**

This paper uses secondary data collected from published data e.g. government agencies websites. This paper examines the occupational health and safety indicators and describes their relationship with occupational health and safety policies. Development of an efficient OS&H legal framework is also examined.

## **THE ROLES OF INTERESTED PARTIES**

### **Government roles**

The functions of DOSH are (a) to study and review the policies and legislation of OS&H, (b) to enforce OS&H legislation, (c) to conduct research and technical analysis on issues related to OS&H, (d) to carry out promotional and publicity programs to employers, workers and the general public to foster and increase the awareness of OS&H, (e) to provide advisory service and information to government and private agencies pertaining to management and technical aspects of OS&H, and (f) to become a secretariat for the NCOSH (BLESS, 2010).

There are short to medium term plans to improve OS&H situation. The DOSH Strategic Plan 2005-2010 aims for 20% reduction in Occupational accidents, Permanent disability (PD), No permanent disability (NPD), and Occupational death (SOCISO, 2009). Decent work agenda was introduced by International Labour Organisation (ILO) in 2000. MOHR Strategic Plan 2008-2010 ensures employability of workforce and decent work for all. (MOHR, 2008) MOHR Decent Work agenda focuses on developing an industrial society which is productive, knowledgeable, disciplined, caring and responsive to changes in the labour environment. Decent work calls for the integration of economic and social objectives and for a well-orchestrated combination of measures converging towards four dimensions of the concept on labour

standards and fundamental principles and rights at work; employment opportunities; social protection; and social dialogues (MOHR, 2009). The ultimate goal of decent work is to provide all members of the workforce with tangible opportunities to acquire decent and productive work, while not compromising on the ideals of freedom, equity, security and dignity (MOHR, 2008b). The DOSH realises the strategies to implement dynamic safety and health practices at workplace (MOHR, 2008a). The Strategic Thrust 2009-2010 provides details in four areas i.e. employment and industrial harmony, skills development, sustaining OS&H culture and social security, implemented with the strategy of dynamic OS&H programs which include inculcating preventive culture, Health and Safety Award of Excellence, information via internet and guidelines, standard setting, enforcement and prosecution, and special project (ōJKKPö, 2009). OS&H Master Plan 2010-2015 has been formalized and includes SOCSO initiatives in SMIs involving consultation, encouragement, cooperation and focus on OSHMS. (SOCSO, 2009)

The Government targeted the SMEs in establishing occupational health and safety management system. Small and Medium Industry Development Corporation (SMIDEC) supports implementation of Occupational Safety and Health Management System (OSHMS). The standard is encouraged to be adopted by construction companies driven by Construction Industry Development Board (CIDB) under the Do-It-Yourself (DIY) program for contractors grade 7 (G7) (CIDB, 2009).

The Director General of DOSH has issued five Code of Practice and forty-three Guidelines of implementation since 1996 to improve occupational safety and health of the workers. DOSH also aims to strengthen the Mentorómentee (Umbrella) scheme. National Institute of Occupational, Safety and Health (NIOSH) promotes OS&H with provision of occupational health and safety research initiative, consultancy, training, conference, promotion and outreaches. SOCSO provides social security such as disability benefits in times of needs through the injury scheme and invalidity pension scheme. SOCSO promotes awareness with publication of summary of accidents. The Ministry of Health (MOH) is the custodian of the nation's health to provide the curative and preventive service. DOSH worked with the MOH to develop a 10-style stretching exercise. Examples of OS&H Promotional Campaign are such as occupational health and safety Day or Week with collaboration among DOSH, NIOSH and SOCSO. Local authorities play their roles particularly in relation to construction sector as their permits are required prior to commencement of job.

### **Employer roles**

Among the Occupational Safety and Health Programmes made mandatory by the Government is the requirements for OS&H Policy. Through the OS&H (SHC)

Regulation 1997, companies with workers more than forty persons are required to establish SHC. Ten high risk industries are required to have a competent Safety and Health Officer based on the OS&H (SHO) Regulation and Order 1997.

### **Employee roles**

Section 24 of the Occupational Safety and Health Act 1994 requires the employees to give full cooperation to the employers in OS&H matters.

### **Non-Governmental Organisation (NGO) roles**

NGO such as Malaysian Society for Occupational Safety and Health (MSOSH) could participate to play their roles in promoting occupational safety and health. Other associations are such as Society of Occupational and Environmental Medicine (SOME) of Malaysian Medical Association (MMA), Malaysian Occupational Health Nurses Association (MOHNA) and Malaysian Industrial Hygienist Association (MIHA). Malaysian Integrated Occupational Safety and Health Network (MIOSH net) project, now known as Members of Integrated Occupational Safety and Health Network, is a portal specifically developed to enhance networking among OS&H practitioners for sharing informations and experiences to improve knowledges, collaborate, communicate, market products, services and their expertise (MIOSH net, 2010). The employer federations such as Federation of Malaysian Manufacturers (FMM) and employee unions such as Malaysian Trades Union Congress (MTUC) could play deeper and more active roles in encouraging safety awareness.

## **EVALUATION OF CURRENT CONDITIONS**

### **Labour Market Situation**

According to the Labour Force Survey, by second half of 2008, they were 11.1224 million employed persons. The number of employed persons data show that the manufacturing sector employs 1.9576 million persons (17.6%), construction sector employs 1.0142 million persons (9.1%) and Transport, Storage and Communications sector employs 0.5337 million persons (5.1%) of the work force (DOS, 2009).

### **Occupational Safety and Health Situation**

The Reported Industrial Accidents to Social Security Organization (SOCSO) has been reduced from 63,423 cases in 2002 to 35,947 cases in 2008, and from 68,008 cases in 2006 to 38,655 cases in 2007, while Commuting Accident has also been reduced from 18,309 cases in 1999 to 16,828 in 2004 however it increased to 18,187 cases in 2008. The Industrial Accident Rate has been improved from 165/10,000 in 2001 to 55/10,000 in 2008. In 1995, SOCSO recorded 1,247 occupational disease

cases and by 1998 the number had dipped to 178 cases. However, the trend moved up and reached 525 cases in 2008 (SOCSO, 2009). The Occupational Death was 1,046 in 1998 and dropped to 733 in 2006 but climbed to 981 in 2008. In 2006, there were 64 cases of occupational death in the construction industry i.e. 8.7% of occupational death cases in construction industry representing 1.7% of the industry's reported cases with 9.1% of workforce while there were 78 cases of occupational death in the transportation industry i.e. 10.6% of occupational death cases in transportation industry representing 2.2% of the industry's reported cases with 5.1% of workforce (SOCSO Annual Report 2006). The un-proportionately high occupational death in the transportation industry in contrast of the construction industry is probably due to the latter's better OS&H management and practices with specific regulation and authority compared to the fragmented authorities in the transportation industry. One of the important factors in implementing internal control to ensure that companies comply with the legislation is management's motivation.

### **Enforcement**

As of July 2009, there were 2,496 competent safety and health officers registered with DOSH (DOSH, 2009). DOSH issued 5,559 notices in 2008 to companies for failure to commit to provide a safe and healthy workplace (SJKKPö, 2009). In terms of compliance to main requirements of OSHA 1994, it was 84% on Section 30 (Safety and Health Committee), 76% on Section 16 (Safety and Health Policy) and 72% on Section 29 (Safety and Health Officer). DOSH has also increased punitive action against employers i.e. 320 cases in 2008 compared to 37 cases in 2004 (DOSH, 2009a).

### **DISCUSSION**

The OS&H Strategic Policies are evaluated given the corresponding indicators. The last OS&H regulation, the NADOOPOD has been implemented in 2004. However, there is no more new regulation introduced since. In relation to ergonomics of manual handling, the related regulation was the aged Safety, Health and Welfare Regulation 1970. For the transportation sector, there was Code of Practice on Safety Health and Environment for Transportation Sector published in 2007. Enactment of latest regulations such as the Global Harmonised System for hazardous substances and Transportation of Dangerous Goods for road transport need to be hastened while latest issues such as mental health and metabolism syndromes are not given much attention yet. Evaluating indicators for effectiveness of the OS&H policies such as the industrial fatality and non-fatality data, it was found that though the industrial accidents cases and rate were decreased, the fatality cases and rate were not reduced as much, more so in the transportation sector. National OS&H target has not been achieved. Aini et al. (2001) found that the common problems found in the companies were that they did not have a proper management system of safe management, had inadequate training of personnel, and the machinery was not provided with

appropriate tools and equipment for emergency response during mishaps while the employees lacked general awareness and principal knowledge of emergency response. Stephens et al. (2004) recommend, among others, provision of tax incentives, implementation of complementary interventions which increase the perception that SMEs are likely to receive the enforcer's inspection, provision of positive incentives, assessing the strengths and weaknesses of each proposed intervention, ensuring that the complementary interventions are monitored for their success, and considering whether it would be usefully supplemented by selective and more detailed guidance.

## CONCLUSION

Maintaining OS&H legislation is striking a balance between development and OS&H status where policy-making in developing countries is often skewed the interests of corporations. The implementation of OSHMS is promoted with the aim to improve working conditions. There was some achievement in transferring ownership of OS&H issues to those responsible for creating and managing the risk. The underlying philosophy of OS&H legislation moved towards a self-regulatory style while prescriptive rules remain in place. The national OS&H target has not been reached; therefore, more effort is needed. The future challenge is the behavioural safety, that is, making safety first a culture. Improvement of OS&H requires tri-partite cooperation in the best interest of a healthy and productive workforce of social and economic stability and of sustainability. In particular, greater participation of the employees is required. There is a need to further stipulate legal requirements for early detection and effective treatment to implement dynamic safety and health practices of the decent work agenda.

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