

THE CAUSES AND EFFECTS OF CONTRACTORS' NON-COMPLIANCE
WITH THE HEALTH AND SAFETY REGULATIONS IN THE
MALAYSIA CONSTRUCTION INDUSTRY.

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ABSTRACT

The statistic of accidents at construction sites give us a picture that Malaysian construction industry is one of the critical sectors that need a huge and fast overhaul. In order to improve the overall safety performance, a policy of occupational safety and health (OSH) was enforced by the government as a guideline and rules that should be followed in dealing with OSH activities at the construction site. The increase in prosecution cases under OSH legislation indicates the lack of compliance to the regulations. A prosecution can be translated as one of the frequently employed instruments for the enforcement of health and safety legislation. The objective of this study is to analyze the most common non-compliance cases of OSH legislative provision from 2019 until March 2020 compiled by the Department Occupational Safety and Health (DOSH) and also from the questionnaire. The data of the cases were analyzed using frequency distribution analysis and content analysis. The result of the study shows that the most non-compliance with OSH legislation in Malaysia relates to the general duties of employers and self-employed persons to their employees (Section 15(1)). The second most common non-compliance of OSHA is section 29 regarding the employer's failure to report the accidents and the employer's failure to provide competent safety and health officer. The third most common noncompliance of OSHA is section 17 regarding employer's failure to provide safe work system. To increase compliance to legislation, full top management commitment, active worker engagement and effective safety and health committee are amongst top preferred solutions.

ABSTRAK

Statistik kemalangan di tapak pembinaan memberi kita gambaran bahawa industri pembinaan Malaysia adalah salah satu sektor kritikal yang memerlukan baik pulih yang besar dan pantas. Untuk meningkatkan keseluruhan prestasi keselamatan, kebijakan keselamatan dan kesehatan kerja (OSH) diberlakukan oleh pemerintah sebagai pedoman dan peraturan yang harus dipatuhi dalam menangani kegiatan OSH di lokasi pembinaan. Peningkatan kes pendakwaan berdasarkan undang-undang OSH menunjukkan kurangnya kepatuhan terhadap peraturan. Pendakwaan dapat diterjemahkan sebagai salah satu instrumen yang sering digunakan untuk penguatkuasaan undang-undang kesihatan dan keselamatan. Objektif kajian ini adalah untuk menganalisis kes-kes ketidakpatuhan yang paling biasa dari peruntukan perundangan OSH dari 2019 hingga Mac 2020 yang disusun oleh Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). Data kes dianalisis menggunakan analisis taburan frekuensi dan analisis kandungan. Hasil kajian menunjukkan bahawa ketidakpatuhan paling banyak terhadap undang-undang OSH di Malaysia berkaitan dengan tugas umum majikan dan pekerja sendiri terhadap pekerjaanya (Seksyen 15 (1)). Ketidakpatuhan OSHA yang kedua paling umum adalah seksyen 29 mengenai kegagalan majikan untuk melaporkan kemalangan dan kegagalan majikan untuk memberi pegawai keselamatan dan kesihatan yang kompeten. Ketidakpatuhan OSHA ketiga yang paling biasa adalah seksyen 17 mengenai kegagalan majikan untuk menyediakan sistem kerja yang selamat. Untuk meningkatkan kepatuhan terhadap perundangan, komitmen pengurusan atasan penuh, penglibatan pekerja aktif dan jawatankuasa keselamatan dan kesihatan yang berkesan adalah antara penyelesaian pilihan utama.

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CHAPTER 1

INTRODUCTION

1.1 Problem Background

The construction industry plays the important role and key sector in the development that contributes to Malaysia's economy growth. The success of economic development will further lead to an increase in incomes, generating demand for additional construction activities. The industry also provides employment for many ranging from professional such as architects, engineers and surveyors to main contractors, subcontractors, suppliers and ultimately manual laborers who are hired by these contractors. The construction industry is an important cog in the wheel propelling the Malaysia economy.

Though the Malaysian construction industry is a matured industry, it is nevertheless plagued with problems. The problem of major concern is the statistic of accidents at construction sites give us a picture that Malaysian construction industry is one of the critical sectors that need a huge and fast overhaul. Generally, the construction industry is a high-risk industry because there is a high risk of accident occurrence. Construction workers are exposed to falling from heights, movement of plant and machinery, electrical shocks, excessive noise, etc. Reasons are time, cost and quality that are always the main factors considered ahead of safety.

Safety issues are always considered secondary and take a back seat in construction. Many employers have not established comprehensive accident prevention policies but instead concentrate on maximizing profit (Hamid et al. 2008). Therefore, on 25th February 1994 the government has enforced an occupational safety and health policies based on the provisions of the Occupational Safety and Health Act 1994 (ACT 154). This policy was established to provide guidelines and

procedures to be followed in dealing with occupational safety and health activities at site (AKKP 1994, 2006; Arditi and Chotibongs 2005; Ashari 2008).

Occupational safety and health (OSH) matter is under the jurisdiction of the Department of Occupational Safety and Health (DOSH). This government agency is responsible for administering, managing, and enforcing legislation related to occupational safety and health (OSH) in this country with the vision to cultivate an OSH culture in every workplace and to make every job and task safe and healthy (Hamid et al., 2015; Latif et al., 2006).

Other agencies which also monitor the construction safety is the Construction Industry Development Board (CIDB). Construction Industry Development Board Malaysia (CIDB) has taken the initiative to ensure that all workers in the construction sector possess a Green Card which required workers to have a safety training certificate before they start working. Besides ensuring construction workers to be aware of the importance of the workplace safety, the green card program also aims to provide information on the legal requirements and welfare for them. Occupational Safety and Health Act 1994 (OSHA 1994) is a tool for the employer, employee and manufacturer to put efforts in securing safety, health and welfare at the workplace (DOSH 2006). But, the increase in prosecution cases under OSH legislation indicates the lack of compliance to the regulations. Many employers have not established comprehensive accident prevention policies, but instead concentrate on maximizing profit (Hamid et al., 2018; Kamau 2014; Razak et al., 2017). The increase in the statistics for the prosecution cases in the construction industry reflects a lack of awareness of safety law in the construction industry in Malaysia.

1.2 Problem Statement

According to Social Security Organisation (SOCSSO), there was a rise in the number of accidents and deaths in the construction sector in 2018 compared to 2017. In the construction sector, 143 deaths and 8,191 accidents were recorded from

January to November 2018. The figures show an increase from 2017, which recorded 120 deaths from January to November and 7,870 accidents for the whole year.

Although, there have been various efforts to curb the accidents, the number of fatal accidents happened at the construction site in Malaysia has continually increased in number. Through the studies that have been conducted by Hamid et al. (2018), the statistics for accidents that occurred in the construction industry show that the accident rate in the construction industry for the country is still high. These numbers give a clear picture that the construction industry in this country is one of the critical sectors and need a big improvement in terms of safety practices at the construction site. Therefore, there is a need to conduct research on this topic as to exemplify current status with regards to fatal construction accidents which eventually could trigger greater awareness among stakeholders to come out with a better long-term solution.

1.3 Aim and Objectives of the study

The aim of this research is for to examine the compliance OSH legislation in Malaysian construction industries according to prosecution cases.

In line with this aim, the research objectives are to:

1. To profile non-compliance of the legislation provisions in health and safety
2. To determine the barriers to compliance of OSH legislation and initiatives to be taken in the construction industry.

1.4 Scope of Study

The study examines the persecution cases under OSH legislation in the Malaysian construction industry based on data compiled by the Department

Occupational Safety and Health (DOSH) found in the DOSH websites. The research's scope will focus on identifying prosecution cases in the construction industry from Jan 2019 until March 2020

1.5 Significant of Study

The aim of this study is to examine the compliance OSH legislation in Malaysian construction industries according to prosecution cases. The expected findings would provide a guidance based on two objectives which are to identify the most common non-compliance of OSH legislation provisions from the prosecution cases, and an overview the barrier compliance of OSH legislation for person in this industry and what the Initiatives to be taken. From this study, a list of common noncompliance of legislation would be created. The list will be sorted according to the top ten common non-compliance clauses or sections in OSHA 1994. For the second objective, a list of barriers of compliance the standard procedure and Initiatives that can be taken.

The importance of the research is to develop an understanding and investigate the problem of health and safety in construction in the Malaysia and make a contribution to knowledge in this area. Addressing health and safety issues should not be seen as a regulatory burden as it offers significant opportunities and benefits to the construction companies. Such benefits include reduced risks in the workplace, less absences by employees and hence increased productivity, fewer accidents and less threats of legal action, improved standing among clients and partners, and obviously reduced costs to the business.

Therefore, by referring to few case laws, it is strongly believed that the topic area of this research would provide both personal interest and be beneficial to the participants in the construction industry. This research should increase the awareness for contractors in relation Health and safety issues. It will also provide the contractors with a better understanding of their legal position if health and safety is in default.

1.6 Summary

Chapter 1 is the introduction to the research the background of the intended study. It aimed to highlight on the overview of the study, problem statement, aim and objectives, scope of study and significant of study for this dissertation.

REFERENCES

- Abdul-Hamid, A. R, Abd-Majid, M. Z. And Singh, B. (2008) Causes Of Accident At Construction Sites. *Malaysian Journal Of Civil Engineering*, II (20), 242-259.
- AKKP 1994 (2006). *Garis Panduan Bagi Akta Keselamatan Dan Kesihatan Pekerjaan 1994 (Akta 514)*. Jabatan Keselamatan Dan Kesihatan Pekerjaan, Kementerian Sumber Manusia.
- AKKP 1994 (2006) *Garis Panduan Bagi Akta Keselamatan Dan Kesihatan Pekerjaan 1994 (Akta 514)*. Jabatan Keselamatan Dan Kesihatan Pekerjaan, Kementerian Sumber Manusia.
- Ashari, H. (2008) *Keselamatan Dan Kesihatan Pekerjaan: Tanggungjawab Siapa?* *Jurnal Kemanusiaan*, P. 76.
- Arditi, D., And Chotibhongs, R. (2005) *Issues In Subcontracting Practice*. *Journal Of Construction Engineering And Management*, ASCE, 131(8), 866-876.
- Aziz, A. A., Baruji, M. E., Abdullah, M. S., Him, N. F. N. And Yusof, N. M. (2015). *An Initial Study On Accident Rate In The Workplace Through Occupational Safety And Health Management In Sewerage Services*. *Int. J. Of Bus. And Soc. Sci.* 6(2)
- Bobick Et Al. (1994). *Fall Prevention And Protection: Principles, Guidelines, And Practices*.
- Chin, Y.W., Chan, P. And Hu, G. (2001). *Construction Insurance And Risk Management : A Practical Guide For Construction Professional*. The Singapore Contractors Association Limited.
- Davies, V. J. And Tomasin, K. (1996) *Construction Safety Handbook*, Thomas Telford.
- DOSH (1983) *Factories And Machinery (Safety, Health And Welfare) Regulations 1970 (Revised –1983)*. Kuala Lumpur: DOSH Malaysia
- DOSH (1994) *Occupational Safety And Health Act 1994*. Kuala Lumpur: DOSH Malaysia
- DOSH (2006) *Guidelines On Occupational Safety And Health Act 1994, Act 514*. Putrajaya: Department Of Occupational Safety And Health Malaysia

- DOSH (2007) Guidelines For Public Safety And Health At Construction Sites (1st Revision). Department Of Occupational Safety And Health, Ministry Of Human Resources Malaysia, 1-32.
- Gunningham, N. (2007) Prosecution For OHS Offences: Deterrent Or Disincentive. Sydney L. Rev. 29 359
- Guo, B. H., Yiu, T. W. And González, V. A. (2015) A System Dynamics View Of Safety Management In Small Construction Companies. J. Con. Eng. And Proj. Mgt. 5(4), 1-6
- Hamid, A. R. A., Majid, M. Z. A. And Singh, B. (2008) Causes Of Accidents At Construction Sites Malaysian J. C. Eng. 20(2) 242-59.
- Hamid, A. R. A., Singh, B. And Kadir, M. F. A. (2015) Safety Climate Among Contractors' Organizations. Malaysian J. C. Eng., 27(2), 248-65
- Harban Singh, K. S. (2005). Construction Contracts: An Overview. The Ingenieur, 6-20.
- Hawkins, K. (2002) Law As Last Resort: Prosecution Decision-Making In A Regulatory Agency. Oxford University Press.
- Hinksman, J. (1998). Types Of Projects And Their Associated Hazards. The Encyclopaedia Of Occupational Health And Safety (4th Ed.). Vol.III. ILO Geneva: 93.22-93.28.
- Hinze, J. And Gambatase, J. L. (2003). Factor That Influence Safety Performance Of Specialty Contractors. Journal Of Construction Engineering And Management, March/April.
- Hinze, J. And Wilson, G. (2000). Occupational Safety, Construction Companies, Construction Industry, Construction Management, Accidents, Safety, Statistics. Journal Of Construction Engineering And Management, 126(5), October
- Hopton, J. G. (1969). Accident Prevention In The Construction Industry. Proceedings Of The Conference Safety On Construction Sites - Discussion, 12-13 March, The Institution Of Civil Engineers, London
- Jaselskis, E. J., Anderson, S. D. And Russell, J. S. (1996). Strategies For Achievement Excellence In Construction Safety Performance. Journal Of Construction Engineering And Management, American Society Of Civil Engineers (ASCE), 61-70.

- Johnstone, R. (2003) Safety, Courts And Crime: Occupational Safety And Health Prosecutions In The Magistrates' Courts. Policy And Practice In Health And Safety, 1(1), 105-127
- Kamau, E. N. (2014) Enforcement And Compliance On Occupational Health And Safety Measures In Industries In Thika Municipality, Kiambu County. Research Project, Kenyatta University
- Kartam, N. A., Flood, I. And Koushki, P. (2000). Construction Safety In Kuwait: Issues, Procedures, Problems And Recommendations. Safety Science, 36, 163-184
- Kartam, N. A., And Bouz, R. G. (1997). Fatalities And Injuries In The Kuwaiti Construction Industry. Journal Of Accident Analysis And Prevention, 30(6), 805- 814
- Khan, R. A. (2008). Role Of Construction Sector In Economic Growth: Empirical Evidence From Pakistan Economy. Paper Presented At The ICCIDC-I, Pakistan.
- Kheni, N. A. (2008) Impact Of Health And Safety Management On Safety Performance Of Small And Medium-Sized Construction Businesses In Ghana. Department Of Civil Engineering, Loughborough University
- Koehn, E., Ahmed, S. A. And Jayanti, S. (2000) Variation In Construction Productivity: Developing Countries. AACE International Transactions, 14A-7.
- Koehn, E. E., Kothari, R. K., And Pan, C. S. (1995). Safety In Developing Countries: Professional And Bureaucratic Problems. Journal Of Construction Engineering And Management, September, 261- 265.
- Latib, F. A., Zahari, H. Z. A., Hamid, A. R. A. And Yee, K. C. W. H. (2016) Implementing Occupational Safety And Health Requirements In Construction Project. J. Adv. Res. Appl. Sci. And Eng. Tech., 5(1), 53-63.
- Leong, K. K. (2004). A Study Of The Factors Influencing The Implementation Of Occupational Safety And Health Program For The Construction Firms In Penang, Universiti Teknologi Malaysia.
- Linder, H. G. (1998). Equipment, Machinery And Materials. Ins. The Encyclopaedia Of Occupational Health And Safety (4th Ed.). Vol.III. ILO Geneva: 93.34-93.37.

- Lingard, H. And Rowlinson, S. (2005) Occupational Health And Safety In Construction Project Management, Spon Press.
- Mcvittie, D. J. (1998). Organizational Factors Affecting Health And Safety. The Encyclopaedia Of Occupational Health And Safety (4th Ed.), Vol. III. ILO Geneva: 93.12- 93.15.
- Mekos, K. Z. (2010). Complaint Reports For Violations Of Health And Safety Legislation In The Area Of Thessaloniki (Greece). Safety Science, 48(2), 209-214.
- Muiruri, G. And Mulinge, C. (2014) Health And Safety Management On Construction Projects Sites In Kenya: A Case Study Of Construction Projects In Nairobi County. FIG Congress.
- Naoum, S. G. (2007): Dissertation Research And Writing For Construction Students, Butterworth-Heinemann
- Oon, C. K. (2002). Standard Construction Contracts In Malaysia, Issues And Challenges. Paper Presented At The Seminar On Innovations In Construction Contracts, 31 May 2002, Malacca.
- Pipitsupaphol, T. And Watanabe, T. (2000) Identification Of Root Causes Of Labor Accidents In The Thai Construction Industry. Proceedings Of The 4th Asia Pacific Structural Engineering And Construction Conference (APSEC 2000), 193-202.
- Priyadarshani, K., Karunasena, G. And Jayasuriya, S. (2013). Construction Safety Assessment Framework For Developing Countries: A Case Study Of Sri Lanka. Journal Of Construction In Developing Countries, 18(1), 33–51.
- Proden, L. And Bachofen, G. (1998). Cement And Concrete. The Encyclopaedia Of Occupational Health And Safety (4th Ed.). Vol.III. ILO Geneva: 93.46.
- Rantanen, J And Fedotov, I. A. (2000) Standards, Principles And Approached In Occupational Health Services. Occupational Health Services Convention.
- Razak, A. R. A., Halim, H. A. And Hamid, A. R. A. (2017) Construction Industry Prosecution Cases Under Malaysian Occupational Safety And Health Legislation. The Colloquium, 10, 21-7
- Siham, I. (2003). Occupational Safety And Health In The Construction Industry: An Overview. The Ingenieur, 15-18.

- Tam, C. M. And Chan, A. P. C. (1999) Nourishing Safety Culture In The Construction Industry Of Hong Kong. Chartered Institute Of Building (CIOB)
- Teo, A.I., And Phang, T.W. (2005). Singapore's Contractor's Attitude Towards Safety Culture, *Journal Of Construction Research*, 6(1), 157-178.
- Toole, T.M. (2002). Construction Site Safety Roles. *Journal Of Construction Engineering And Management*, American Society Of Civil Engineers (ASCE), 203-210.
- Vredenburg, A. G. (2002). Organisational Safety: Which Management Practices Are Most Effective In Reducing Employee Injury Rates? *Journal Of Safety Research*, 33(2), 259-276
- Wong, F. K.W., Chan, S. C. M., Tse, R. Y. C. And Love, P.E.D. (2000). Improving Safety Knowledge Through Training-The Case Of Hong Kong. *Journal Of Safety Research*, 33(2), 259-276.
- Wu, C., Wang, F. P., Zou, P. X. W. And Fang, D. (2016).How Safety Leadership Works Among Owners, Contractors And Subcontractors In Construction Projects. *International Journal Of Project Management* 34, 789–805.
- Yates, J. K. And Lockley, E. (2002). Documenting And Analyzing Construction Failures. *J. Constr. Eng. Manage.*, 128, 8-17.