

SAFETY TRAINING FOR CONSTRUCTION WORKERS: MALAYSIAN EXPERIENCE

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ABSTRACT: This paper reports on the Malaysian experience in safety training for construction workers. This programme is organised and regulated by Construction Industry Development Board (CIDB) and better known as CIDB Green Card Programme. Started since 1997, Green Card is considered as safety passport to enter construction site. Through this programme it is compulsory for all personnel that involve with construction site. They have to register and attend one-day Safety Induction Course for Construction Workers (SICW) given by CIDB accredited trainer, based on standard safety module purposely prepared by the National Institute of Occupational Safety and Health (NIOSH) for construction workers. Upon completion of this training, participant will be given a CIDB Green Card and safety helmet. This Green Card provides some vital information of the holder that also stored in CIDB database. This biennial renewal Green Card comes together with insurance coverage for the holder. Minimal fee, insurance coverage and simple approach of training are among the factors that make this Green Card Programme gains a good response from the construction community. This programme is considered among the successful safety training programme in Malaysia.

Keywords: Construction Safety, Safety Training, Construction Industry.

1. INTRODUCTION

Malaysia has experience significant economic growth at 13.5% of Gross Domestic Products (GDP) per annum during the years 1993 to 1997. The economic growth has good impact on the construction industry as the average of growth rate within the same period of years was at 14.2% of GDP per annum. The construction industry growth however coupled with the growth of fatalities. Annual reports by Social Security Organization (SOCSO) indicated that the number of reported fatalities was increasing from 50 to 160 cases in year 1993 and 2000, respectively. MPOSHCI (2005) commented that this rapid growth of injuries and fatalities is “due to lack of focus in occupational safety and health”.

In Malaysia, the main legislation that governs safety and health in construction industry are Occupational Safety and Health Act 1994 (OSHA94) and Factories and Machinery Act 1967 (FMA67). Both of these acts are regulated by Department of Occupational Safety and Health (DOSH). OSHA94 clearly define that “the management of safety and health at work place is the responsibility of those who create the risks and those who work with the risks”. Therefore the employer and employee must play important role to ensure the safety of the construction site. The FMA67 in particular, under the regulation Building Operations & Works of Engineering Construction, Regulations 1986, clearly define a good management practice in construction industry.

Realising the important of safety awareness in the construction industry, Construction Industry Development Board (CIDB) as the regulated body for construction industry in Malaysia has team up with National Institute of Occupational Safety and Health (NIOSH) to conduct Safety and Health Induction for Construction Workers (SICW) or better known as Green Card Program. It is an integrated safety and health training program for all construction workers and personnel, which involves the registration and accreditation of Construction Personnel to enhance safety levels at Construction Sites.

2. GREEN CARD PROGRAM

This program was originally started in 1997 as a construction workers registration program to comply with the Section 33 of Act 520 (1994). It was then upgraded to safety and health program when CIDB adopted the SICW module of training from NIOSH and better known as CIDB Green Card Program. In this program, participants have to register and attend one day safety and health induction given by a qualified trainer. The green card will be issued only when the participants successfully attend the induction.

The objectives of this program are;

- To ensure that the Construction Worker is aware of the importance a safe and healthy working place
- To provide a basic knowledge on safety and health at the Construction work site
- To inform Construction Workers of the legal requirements in relation to safety and health

It is considered as a safety passport for construction site. Construction site is as defined in the Section 2 of FMA67. According to CIDB Green Card Program Circular No 1/2000, it is the responsibility of the main contractor to implement the green card program in their construction site. In this program all personnel must register to CIDB and attend safety and health induction course for construction workers.

3. IMPLEMENTATION

3.1 Training Module

The training module is prepared by NIOSH and is purposely designed for construction workers. This module is called Safety and Health Induction for Construction Workers (SICW). Since construction workers are multi background, ranging from workers that illiterate up to well educated construction professionals like engineer, so the training module have to be in a simple approach and easy to understand. To achieve this, materials are delivered in the form of picture presentation and less amount of writing.

The syllabus used in this program is similar to the well known training manual for construction workers such as International Labour Office (1995), Construction Safety Association of Ontario (1993) and Construction Industry Training Board (1996). As stated in SICW Trainer's Manual (1995), the topics being covered in the module among others are OSHA94, house keeping and cleanliness, fire prevention, hazard from electric, roof work, working on live roads, hot works, chemical hazards, working at height, personnel protective equipment and case study of accidents. CIDB is adopting this SICW training module for the safety training in Green Card Program.

3.2 Training Method

The induction is conducted through training in a classroom setting delivered by a qualified trainer. It is a one day – 7 hours training session. The number of participants is limited up to forty. Participants are required to attend the whole module. Completing the whole session is considered pass and no assessment is needed. Signature of all participants will be collected and given to the CIDB office as a proof of attendance. Failure to complete the course will be considered as not attending the course. Only the one that complete the training will be given the Green Card.

3.3 Registration

All participants intended to attend this safety and health induction have to register to CIDB two weeks before the training, using special form provided by CIDB. All registration must be certified by participant's employer to ensure that information given is genuine. Nominal fee of RM 50.00 will be charged for two years insurance coverage (foreigner is charged RM 25.00 for one year coverage). After registration, applicant will be invited to attend one day safety and health induction.

3.4 Accredited Trainer

To be a trainer, one must attend two training modules namely Training for Trainer Course and SICW Trainer Course. Both of these courses are conducted by NIOSH. To attend the later course, one must have at least three years working experience in handling construction site. After passing these courses a trainer must register to DOSH, NIOSH and CIDB to be considered as accredited trainer.

3.5 Target Group

They are workers or personnel that involve in any construction works such as construction, extension, installation, repair, maintenance, renewal, removal, renovation, alteration, dismantling, or demolition. Detail definition of construction works can be found in Section 2, Act 520 (1994).

This program is open for all construction personnel between the ages of 16 to 65 years old. CIDB Green Card Program Circular 1/2001 defines clearly that those are;

- i. Construction workers
- ii. Semi skilled construction workers
- iii. Skilled construction workers
- iv. Site supervisor, Clerk of Works, Site Agent or equivalent officers.
- v. Site manager, site engineer or any equivalent officers.
- vi. Quality Assurance officer
- vii. Any workers that being identify time to time by CIDB includes anybody that involves with construction activities.

3.6 Green Card and Incentive

Upon completion of the training, every participant will be given the following items;

- a.. Green Cards will be issued to participants which also services as proof of Registration with CIDB under the category of Construction Personnel
- b. Helmet. Two codes of colour are used. White helmet is for the executive or management level of participants, whereas the yellow in colour is for the ordinary construction workers.
- c. Safety booklet – construction safety guidelines in an easy form of presentation.
The Green Card comes with a size of a credit card. Few vital information are printed on that card including photo of the holder, identity card number (passport number for foreigner), period of validity and trade of works the holder registered to. Details information are stored in the CIDB database which online all over the country CIDB offices.

The card is valid for 2 years period of time (for foreigner is one year). When the card expired, it needs to be renewed and no refresher course is needed.

3.7 Insurance Coverage

Those Construction Personnel who have been registered with CIDB and issued the Green Card are automatically covered by a special Insurance Scheme that insures the Construction Personnel against death and accidents. This coverage is 24 hours and world wide. It is not limited to accidents at work place. Amounts of the coverage are listed in Table 1. This insurance is considered as additional coverage to construction workers to recognize their contribution to the development of construction industry.

Table 1: Types and amounts of insurance coverage for Green Card holders.

SCOPE OF INSURANCE BENEFIT	AMOUNT OF BENEFIT (RM)
Death due to accident	21,000.00
Permanent disability due to accident	18,000.00
Normal death	3,000.00
Permanent disability	3,000.00
Cost for funeral services	500.00
Hospital coverage due to accident	25.00 per day. Maximum 25 days

4. RESPOND FROM THE INDUSTRY

Since started in 1997, Green Card Program gains a good respond from the construction industry. Minimal fee, insurance coverage, free helmet and safety booklet are among factors that drive the construction community to participate in this Green Card Program. CIDB has made a good approach by increasing the number of accredited trainers, that easily available for construction community to organise the safety and health induction. In term number of respond, this program is considered among the successful safety and health program in Malaysia.

In term of insurance coverage, according to CIDB News (2005), the construction workers have benefited up to RM 12.00 million between the years of 1997 to 2004.

5. PROGRAM EFFECTIVENESS

One day safety and health induction is a simple approach to train the construction workers. Without any assessment however, it is difficult to ensure the effectiveness of delivering safety and health knowledge to the participants. There is no systematic tool to measure the knowledge development of participants. There are participants who just attend the full session of induction but did not pay full attention to the training being conducted.

6. CONCLUSION

The Malaysian experience in safety and health training program for construction workers was presented. Providing safety knowledge to the worker through safety passport system is seen an effective way to get their respond to participate. The implementation of this safety passport program, however need to be addressed carefully. Without proper monitoring and enforcement of the program, it might turn to be a failure. In the other hand the effectiveness of training is also vital. Besides the need for assessment in a particular training program, workers also need to be retrained to refresh their safety and health knowledge that suit with current situation.

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