## **Construction Industry Council**

#### **Committee on Construction Site Safety**

Meeting No. 004/11 of the Committee on Construction Site Safety was held on Friday, 11 November 2011 at 2:30 pm at Meeting Room No. 1, CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wan Chai, Hong Kong.

Present:	CHEUNG Hau-wai AU Choi-kai KO Jan-ming KWAN Yuk-choi, James	(HWC) (CKA) (JMK) (YCK)	Chairman Director of Buildings
	WONG Chik-wing, Mike	(MW)	
	James BLAKE	(JB)	Kowloon-Canton Railway Corporation (KCRC)
	Philip CHAN	(PhCN)	Hong Kong Institute of Architects (HKIA)
	CHOW Ping-wai	(PCH)	Hong Kong Construction Industry Employees' General Union (HKCIEGU)
	KUOK Hoi-sang	(HSK)	Hong Kong Federation of Electrical and Mechanical Contractors (HKFEMC)
	Victor KWONG	(VK)	Hong Kong Occupational Safety and Health Association (HKOSHA)
	Dominic LAM	(DL)	Hong Kong Federation of Insurers (HKFI)
	LAU Chi-keung	(CKeL)	Real Estate Developers Association of Hong Kong (REDA)
	LAU Chi-kin	(CKiL)	Registered Structural Engineer (RSE)
	LEUNG Man-ho	(MHL)	Development Bureau (DevB)
	Derrick PANG	(DP)	Hong Kong Construction Association (HKCA)
	TSO Sing-hin	(SHT)	Labour Department (LD)
	TSANG Ting-fat	(TFT)	Hong Kong Construction Sub-contractors Association (HKCSA)
In Attendance :	Terry CHING	(TCG)	Housing Authority (HA)
	LEUNG Chi-kai	(CKaL)	Buildings Department (BD)
	Jason WONG	(JWG) 1	Occupational Safety and Health

	YEUNG Sun, Sunny Charles WONG	(SnYg) (CWG)	Council (OSHC) Hong Kong General Building Contractors Association (HKGBCA) Director (Training)
	WONG Chi-Lap	(CWG) (CLW)	Senior Manager (Safety Training & Trade Testing)
	Alex LEUNG	(AL)	Senior Manager (Council Services) 1
	Angela YUEN	(AaY)	Manager (Council Services) 1
Apologies :	Thomas HO	(TH)	
	CHEW Tai-chong	(TCC)	
	CHOW Luen-kiu	(LKC)	
	LAM Oi-ki, Peter	(OKL)	
	WAN Koon-sun	(KSW)	
	Ada FUNG	(AF)	Housing Authority (HA)
	Ian EDWARDS	(IE)	Hong Kong Construction Association (HKCA)
	PANG Long	(LP)	Construction Site Workers General Union (CSWGU)
	TANG Wah-shing	(WST)	Occupational Safety and Health Council (OSHC)
	David TSE	(DdT)	Hong Kong General Building Contractors Association (HKGBCA)
	CHAN Kin-kwong	(KnKC)	Drainage Services Department (DSD)
	Ros LAM	(RL)	Office of the Commissioner of Insurance

#### **PROGRESS REPORT**

**Action** 

### 4.1 Confirmation of the Progress Report of the Com-CSS Meeting No. 003/11 held on 16 September 2011

Members took note of Progress Report CIC/CSS/R/003/11 and confirmed the Progress Report of the last meeting held on 16 September 2011.

#### 4.2 Matters Arising from the Previous Meeting

Agenda item 3.3 As agreed in the last meeting, the Chairperson of Task Force on Site Cleanliness and Tidiness would take into consideration the suggestions

raised by the members during the experience sharing sessions with three of the major international contractors to formulate recommended measures for improving cleanliness and tidiness of sites in Hong Kong..

AL reported that CIC Secretariat had assisted the Chairperson of the Task Force to arrange a Task Force meeting in late November 2011 to discuss issues on site cleanliness and tidiness.

(Post meeting note: The Task Force meeting was held on 30 November 2011.)

- Agenda item 3.4 AL reported that CIC Secretariat had provided the views of Com-CSS on the Strengths of Hong Kong Construction Industry to the secretary of the Strategic Planning Steering Committee.
- Agenda item 3.5 This item was discussed under Agenda Item 4.10

See item 4.9 which was reported after item 4.2

# 4.3 Short Term, Medium Term and Long Term Strategies to enhance Construction Site Safety

AL introduced the paper CIC/CSS/P/026/11 on the "Short Term, Medium Term and Long Term Strategies to enhance Construction Site Safety".

In view of the recent spate of site safety incidents, the Chairman invited Members to deliberate, discuss and provide their comments and recommendations on the short term, medium term and long term strategies of Com-CSS to enhance site safety of Hong Kong construction industry.

(CWG and Mr CL Wong joined the meeting at 3:00 pm.)

Various suggestions raised by the Members were summarized as below:

4.3.1 **Construction method statements of high risk tasks** PhCN opined that some of the construction projects had unrealistic overall master programme and compressed construction period which might lead to an increase in potential risks for construction activities.

> Chairman recommended CKiL, the Chairperson of the Task Force on Review of Major Construction Method Statements, to ensure that necessary safety measures would be taken to mitigate impacts due to time constraints where possible in its review of method statements.

### 4.3.2 **Review of safety training content and safety training** for professionals and industry practitioners

As the number of public and private construction projects was increasing, the recent increase in the number of fatal accidents should be proactively addressed. Provision of site safety training at all levels should be of paramount importance to the construction industry.

CKeL suggested three major areas should be improved.

- (i) Safety should be implanted in the whole construction process from design stage to the completion stage;
- (ii) The responsibility for site safety should not only be on the Registered Safety Officers (RSO) and Site Safety Supervisors (SS), but also on all of the professionals who were involved in the construction process such as Clients, Architects, Engineers, Project Managers and all other managerial and supervisory personnel; and
- (iii) Site safety training should be provided for the new comers including youngsters and middle-aged people who had just completed re-training courses to join

the construction industry.

Both JMK and PhCN stated the importance of inserting more safety elements into the curriculum of the existing related professional training. The work safely concept throughout the whole construction processes should be implanted in both classroom and industrial training of the university courses and the awareness of the safety elements would be one of the criteria for the professional accreditations by all related professional institutes such as HKIA, HKIE and HKIS etc.

Chairman totally agreed that the concept of work safely in construction site should be implanted from project inception stage and it was of vital importance that all related professionals should be aware of and put this concept throughout the whole construction processes. Chairman recommended DWG, the convenor of the Task Force on Site Safety Training, to prepare a letter to invite the relevant faculties of the universities in Hong Kong and the relevant professional bodies to take note of the above when designing curriculum and qualification requirements.

HSK expressed that the problems of labour shortage and the aging problem of skilled lift installation workers which would become even worse as the number of construction projects increased. All those factors might lead to an increase in accident rates.

DWG explained that the Contractor Cooperative Training Scheme (CCTS) had been launched and successfully eased the manpower shortage of certain trades. CICTA was now conducting a study concerning the forecast of future manpower for the construction industry. Despite the existing training for the E&M workers which were provided by VTC, DWG invited HSK to further discuss with him to explore the possibility of involving E&M workers into the existing Contractor Cooperative Training Scheme. DWG

#### 4.3.3 Site Environment, Cleanliness and Tidiness

CKeL opined that the Com-CSS should consider how to encourage more private sectors in the adoption of Pay for Safety Scheme (PFSS) for their projects. DP expressed that it might be the suitable time to consider legislating the adoption of PFSS for all construction projects.

JB expressed that the adoption of PFSS would also be beneficial to clients in terms of their reputation, enhance efficiency and lower the insurance premium in future.

VK opined that the paid items under PFSS should be considered to cascade down to the sub-contractors' or workers' level.

Chairman concluded that there were different types of PFSS (or system with similar concept) currently being adopted in the industry, e.g. public works projects, Housing Authority's projects, projects initiated by MTRCL/CLP or private projects. Some of them had their CIC own PFSS such as HA or DevB which had been adopted for over ten years, it would be difficult for them to follow a new guidelines with implementation arrangements for all parties (both public and private sectors). CIC Secretariat was now drafting the CIC Guidelines on the application of PFSS (the Guidelines). The Guidelines would encourage industry stakeholders to take concerted HKFI & HA efforts in improving site safety performance by adopting the PFSS principle. For qualifying practically the paid safety items under PFSS, Chairman invited HKFI and HA to share their experience with Com-CSS after their informal meeting.

Chairman suggested DevB and LD to consider the possibility of imposing the application of PFSS in all construction sites through legislation.

#### 4.3.4 **Communication platform for the stakeholders**

PCH expressed support to CIC which had proactively addressed the recent fatal incidents and issued the Safety Alert to provide initial recommendations on relevant Secretariat

safety precautionary measures

Action HKCA & MTRC/HA

It was discussed that Safety Alert for near-miss cases would also help to prevent accidents. Chairman requested members from HKCA and major clients (MTRC, Housing Authority) to provide some "near-miss" cases on a voluntary basis to the Informal Working Group on Site Safety Incidents for the possible preparation of Safety Alert.

(CWG and Mr CL Wong left the meeting at 3:50 pm.)

#### 4.4 Progress of Activities of the Task Force on Site Safety of Working in Lift Shaft

AL introduced the paper CIC/CSS/P/027/11 on the "Progress of Activities of the Task Force on Site Safety of Working in Lift Shaft".

It was reported that the draft Guidelines on Safety of Lift Shaft Works (Volume 2 – During Lift Installation Stage until Issue of Occupation Permit and Handing Over to Developer) (the Guidelines) had been reviewed by the Task Force on 30 September 2011. After deliberation, the draft Guidelines was endorsed by the Task Force subject to the incorporation of the proposed amendments.

Members took note of the progress of the Task Force in the preparation of the Volume 2 of the Guidelines.

#### 4.5 Guidelines on Safety of Lift Shaft Works (Volume 2 – During Lift Installation Stage until Issue of Occupation Permit and Handing Over to Developer)

AL briefed Members on the paper CIC/CSS/P/028/11 regarding "the final draft of the Guidelines on Safety of Lift Shaft Works (Volume 2 – During Lift Installation Stage until Issue of Occupation Permit and Handing Over to Developer) (the Guidelines)". With the consideration of the comments and suggestions from Members received at the Task Force meeting

held on 30 September 2011, a core group meeting was held on 3 November 2011 to finalise and incorporate members' comments and suggestions. The final draft of the Guidelines was completed and appended at Annex A of the paper CIC/CSS/P/028/11.

Members had reviewed and endorsed the final draft of the Guidelines. The final draft Guidelines would then be submitted to the CIC (meeting scheduled on 16 December 2011) for approval. Upon approval, the CIC Secretariat would arrange for publication of the Guidelines and would arrange for the associated promotional activities (such as technical seminar).

### 4.6 **Progress of Activities of the Task Force on Working in Hot** Weather

JB, the Task Force Chairperson, reported the progress of the HKU Research Team (Research Team) on the "Management of Heat Stress on Construction Workers in Hot and Humid Weather" Research Study (the Study).

The Research Team had completed the industrial consultation of the current CIC Guidelines on Site Safety Measures for Working in Hot Weather (June 2008 version). Among the worker's sample and manager's sample, over 35% of them and half of them were aware of the current Guidelines respectively. It was also found that the workers were generally positive towards the safety measures for controlling heat stress on sites.

The Research Team was now studying on the high-risk risky time slots of working in summer, the humidex used on site, the impact of air pollution index, the data comparison between the on-site data and the data from Hong Kong Observatory.

Meanwhile the Research Team was working on the review of current practices.

Chairman stressed the need for the Study and the revised guidelines should preferably be completed by the Research Team before the summer months of next year.

(JB left the meeting at 4:05 pm.)

#### 4.7Progress of Activities of the Task Force on Safety of Repair, Maintenance, Alternations and Additions (RMAA) sites

SHT. the Task Force Chairperson, introduced Paper CIC/CSS/P/029/11 in reporting the progress of the Task Force. The latest progress was reported as below:

- (i) Increasing the Publicity Opportunity Regarding the publicity opportunity, it was suggested to liaise with Housing Society (HS) and Urban Renewal Authority (URA) to investigate the possibility of hanging banners to promote safety precautionary measures at sites of Operation Building Bright (OBB) projects. CIC Secretariat was now assisting SHT to arrange for an Secretariat informal meeting with the representatives from HS and URA to discuss the detailed design, size of the banners as well as the detailed logistic arrangement.
- (ii) Safety Alert / Guidelines on Safety & Health of Workers Engaging in Renovation Works (with volatile chemicals) in Occupied Commercial Premises For the formation of Task Group to prepare a Safety Alert/ Guidelines on this topic, SHT expressed that he would propose the membership list and nominate an officer from Labour Department (LD) as the chairperson of this Task Group.

#### SHT

CIC

#### 4.8Progress of Activities of the Task Force on Review of Major **Construction Method Statements**

CKiL, the Task Force Chairperson, reported the progress of the Task Force. The progress of the Task Force was summarised as below:

#### Background

The Task Force meeting was held on 12 May 2011. Members of the Task Force had provided their suggestions and comments on the draft study scope and approach. In response to the request from Task Force Members, LD had provided more detailed information and analysis of fatalities at construction sites on 9

September 2011.

CKiL decided to form a Task Group on Review of Major Construction Method Statements (Task Group) to discuss the scope of the consultancy service. The Task Group members included the representatives from Development Bureau (DevB), Hong Kong Construction Association (HKCA), Contractors' Authorized Signatory Association (CASA), Hong Kong Sub-contractors Association (HKSCA), Hong Kong Federation of Electrical and Mechanical Contractors (HKFEMC), Hong Kong Institution of Engineers (HKIE), Hong Kong Occupational Safety and Health Association (HKOSHA) and Labour Department (LD).

#### **Brief Summary of Task Group Meeting on 9 November 2011**

The first Task Group meeting was held on 9 November 2011. Based on the professional knowledge / site working experience, Task Group members had expressed their views and suggested some high-riskwork processes for the initial study.

Task Group Members had recommended that the proposed Research might be conducted in two phases:

Phase 1 Phase 1 might be divided into two main parts:

The first part of the study would be a pilot (Phase 1A) It was recommended the consultant to be engaged would prepare method statement for one site activity for supervisory level and working out a series of pictorial presentation to illustrate the safe working procedures for use at workers level.

#### Second part (Phase 1B)

After satisfying of the results from Phase 1A, 10 to 15 number of high risk construction activities would be selected from building projects, piling, foundation works, demolition projects, civil works, and A & A works for review of their associated work sequences and method statements.

#### Phase 2

The objective and the scope of Research in Phase 2 would be defined after obtaining feedback from the industry stakeholders regarding the application of the method statements from Phase 1.

The Task Force had proposed CIC Secretariat to consider the following items when re-drafting the Consultancy Brief:

- The Requirement of the Consultant The Task Group members had discussed and highly recommended that the composition of the research team should include RPE and RSO with relevant site working experience.
- (ii) The Expected Deliverables The format and the requirements of the expected deliverables (i.e. Method Statements) should be well defined.

#### **The Way Forward**

CIC Secretariat would summarize the suggested construction activities for Task Group Members' confirmation. Another Task Force meeting would be held upon the Consultancy Brief had been revised. Adequate time and effort should be spent in defining the scope and deliverables of the consultancy study before issuing the tender.

Members took note of the process of the Task Force and the approach of the consultancy study.

#### 4.9 **Progress of Activities of the Task Force on Site Safety Training**

CWG, the Task Force Convenor, briefed the members on the Progress of the Task Force on Site Safety Training.

CWG reported that the training requirements for site management and supervisory staff, as well the syllabi and the exemption requirements for the proposed training were almost finalized by the Informal Working Group in September 2011. Subsequent to the meeting held among CICTA, OSHC and HA in mid-October 2011, HA had liaised with OSHC concerning the recognition of their existing safety training programmes for HA resident site staff of both managerial / supervisory levels, while maintaining the remaining contents. In this connection, CWG advised that CICTA would further liaise with HA and OSHC to consider provision of a gap course as an equivalent of the proposed CICTA safety courses. It was recommended that the gap course would be in the form of taught mode or e-learning mode. A letter would be

CWG

sent to the relevant stakeholders soliciting their views and comments on the proposed syllabi and exemption criteria upon reaching consensus on the gap course by the said parties.

Members took note of the progress of the Task Force on the development of site safety training for construction industry in Hong Kong.

(CWG left the meeting at 2:50 pm.)

# 4.10 Informal Working Group on Site Safety Incidents and the Issuance of Site Safety Alert

(a) Issuance of the Safety Alert

It was reported that CIC Secretariat had made reference to similar document from LD when preparing the disclaimer of the Safety Alert. The categorisation of CIC documents and the possible request for legal advice for the respective disclaimer for each type of document might be sought in a collective manner later. The revised Safety Alert on Fabrication of Reinforcement Cages of Bored Piles (Safety Alert on FRCBP) had been circulated to core members (i.e. Informal Working Group Chairperson, Labour Department and Buildings Department) for their final review before it was issued.

The Safety Alert on FRCBP was issued on 19 October 2011.

(b) Informal Working Group on Site Safety Incidents

VK, the Chairperson of the Informal Working Group, reported VK that another informal working meeting would be arranged to discuss the recent site fatal accident and to formulate initial recommendations on safety measures for those case(s) shortly.

#### 4.11 Guidelines on Handling Construction Work Injury and Fatal Accident Cases

AL reported that CIC Secretariat was planning to arrange for two Seminars on Handling Construction Work Injury and Site Safety (one for workers; and another one for contractors, legal practitioners, and mediators). The Seminar for workers would be held on 16 December 2011 while the Seminar for contractors and

related practitioners would be held in February 2012.

(**Post Meeting Note:** The Seminar for contractors, legal practitioners, and mediators would be held on 23 February 2012.)

#### 4.12 **Any Other Business**

CIC Secretariat tabled the paper CIC/CSS/P/030/11 on the "Meeting Schedule on 2012".

Members took note of the tentative meeting schedule for Com-CSS as proposed by the CIC Secretariat.

#### 4.13 Next Meeting

16 March 2012 (Friday) at 2:30 pm at CIC Headquarters

There being no further business, the meeting adjourned at 4:30 pm.

CIC Secretariat November 2011