

For discussion on  
16 April 2013

## **Legislative Council Panel on Manpower**

### **Measures to Enhance the Work Safety Performance in the Construction Industry**

#### **Purpose**

This paper briefs Members on the measures taken by the Labour Department (LD) to enhance work safety performance in the construction industry this year.

#### **Occupational Safety Performance in the Construction Industry**

2. With the concerted efforts of various sectors of the community and the Administration, the number of accidents in the construction industry continued to decline in the past decade from 6 239 in 2002 to 3 112 in 2011. Over the same period, the accident rate per thousand workers dropped from 85.2 to 49.7. Nonetheless, the construction industry recorded 2 354 accidents in the first three quarters of 2012, representing a rise of 2.3% when compared with the same period of 2011. Although the accident rate per thousand workers decreased from 50.8 to 43.9 during the same period, we are concerned that the number of fatalities in the construction industry increased from 23 in 2011 to 24 in 2012 (9 fatalities in 2010). A breakdown of the accidents in the construction industry in the first three quarters of 2012 by type of accident is provided at [Annex 1](#).

3. The 24 fatal accidents in the construction sector in 2012 mainly involved work-at-height (12 cases) and electrical works (7 cases). Of the 12 work-at-height fatalities, most were related to fall of workers from working platforms, temporary support or ladders (4 cases) and bamboo scaffolds (4 cases).

4. With the commencement of a number of mega infrastructure projects in recent years and in anticipation of the continued growth in the construction industry in the coming years, the construction workforce will be on the rise.

The number of construction site workers increased by 40 % from 51 000 in 2009 to 71 300 in 2012, including many newcomers to the industry. In addition, the mandatory requirements for inspection of old buildings resulted in rapid growth in repair, maintenance, alteration and addition (RMAA) works. Such development poses challenges to the work safety in the construction industry.

## **Measures to Enhance Occupational Safety and Health in the Construction Industry**

### Work Safety of Mega Works Projects

5. One major work aspect of LD this year is to strengthen the monitoring of work safety of mega works projects. Apart from encouraging the industry to implement safety management systems through publicity, promotion and education, LD will step up enforcement action against duty holders to ensure compliance with the requirements of relevant legislation and codes of practice. LD has established additional dedicated teams to urge contractors to implement safety management systems on construction sites through participation in project preparatory meetings and site safety management committees. We will also monitor the implementation of the safety management systems at the works sites of the contractors and take enforcement action if irregularities are detected.

6. The Development Bureau (DEVB) has enhanced the existing merit and demerit system for public works contractors by introducing a performance-tied pay for safety scheme. DEVB will also accord heavier weighting to accident rates in tender assessment such that contractors with low accident rates will have better chance of winning a tender. DEVB is considering further strengthening site safety audits. LD will, in collaboration with DEVB, step up scrutiny of the safety audit reports of the works projects concerned.

7. To tackle systemic safety issues in a more effective way, LD will strengthen the coordination with DEVB and other public works project clients and, through involvement at the design, tendering and preparatory stages and participation in different stages of project implementation, urge contractors and site management staff to timely incorporate safety considerations in work method statements and designs.

## Work-at-height Safety

8. As more than half of the construction fatal accidents in recent years were related to fall of person from height, LD will put more effort in combating work-at-height hazards this year. An advisory letter was issued in February this year to construction contractors and sub-contractors to remind them of the need to comply with relevant safety legislation, particularly the need to take effective precautionary measures to prevent accidents related to work-at-height. LD will take immediate enforcement action without prior warning against breaches of the safety legislation. Regarding work-at-height safety, LD issued last year over 1 200 suspension notices (SNs)/ improvement notices (INs) (an increase of 70% compared with 2011) and initiated a total of 889 prosecutions (an increase of 32% compared with 2011). In March this year, LD conducted a special enforcement operation targeting RMAA works sites with 214 SNs/INs issued and 197 prosecutions to be initiated. LD will also step up area patrols as well as inspection and enforcement action during office and non-office hours.

9. Furthermore, we noticed that in many fall-from-height fatal accidents workers had fallen from places of work of just 2 to 3 metres high. In order to raise the alertness of the industry on work-at-height hazard, including the potential risk associated with working just above ground, LD in collaboration with the Occupational Safety and Health Council (OSHC) will organise a “Work-at-Height Safety Forum” in late April this year to explore with the industry measures to enhance work-at-height safety, with an exhibition of efficient and practical safety equipment. A new sponsorship scheme will be launched for small-and-medium-sized enterprises (SME) to purchase mobile working platforms. Besides, LD will collaborate with the property management sector to produce safety hints for working at external walls and work-at-height and disseminate the safety message to the property owners under their management.

10. LD and OSHC jointly launched a pilot scheme on RMAA safety accreditation in June 2012. The scheme enhances the occupational safety and health (OSH) standard of the industry through auditing safety management system, training and subsidizing SMEs to purchase fall arresting devices and related equipment. With the support of the Employees’ Compensation Insurance Residual Scheme Bureau which undertakes to offer insurance premium discount to accredited contractors, SMEs are provided with financial incentives to

continuously improve their occupational safety performance.

### Electrical Works Safety

11. In light of the seven fatal accidents involving electrocution in the construction industry last year, a series of electrical works safety promotional activities were jointly organised by LD, industry stakeholders and OSHC. We distributed publications on electrical works safety to stakeholders through electrical and mechanical trade associations and workers' unions, and issued safety alerts to around 90 000 registered electrical workers/contractors. Last year, LD stepped up inspections and enforcement actions on contravention of electrical safety regulations and conducted a joint blitz operation with the Electrical and Mechanical Services Department (EMSD): over 100 SNs/INs (increased by 4 times compared with 2011) were issued and 35 prosecutions (increased by over 100% compared with 2011) were initiated. Through concerted efforts of the industry stakeholders and the Administration, we managed to curb the trend of electrocution accidents in the fourth quarter of last year.

12. Electrical work safety remains to be LD's concern this year. We will conduct inspections targeting electrical work safety and plan for another joint blitz operation with EMSD, and will take immediate enforcement action without prior warning against breaches of the safety legislation. LD will also distribute publications on electrical work safety through electrical and mechanical trade associations and workers' unions, and organise seminar on electrical work safety to sustain the alertness of electrical contractors and workers.

### Prevention of Heat Stroke

13. To prevent construction workers from heat stroke at work, LD will step up inspections to construction sites from April to September this year. LD will in particular take immediate enforcement actions, without prior warning, against employers who fail to provide potable water for employees. We will collaborate with OSHC and relevant organisations this summer to promote heat stroke prevention in the construction industry through organizing health talks, distributing relevant guidelines and heat stress assessment checklists, broadcasting videos on mobile advertising media, radio publicity, and conducting promotional visits to worksites to introduce practical measures for preventing

heat stroke to workers.

14. In the last two summers, LD strengthened the liaison with the Hong Kong Construction Association (HKCA) and associations of relevant trades to promote the arrangement of flexible rest breaks for bar-benders in some construction sites. This arrangement (i.e. an additional rest break in the morning) will be implemented in all their construction sites this summer to reduce the risk of heat stroke to bar benders.

15. In addition, with a view to further preventing workers from heat stroke at work, OSHC has commissioned a university to study the effectiveness of personal cooling vests in preventing heat stroke. The field tests conducted last summer indicated that cooling vests would be suitable for work including that in the construction industry. This year, LD will collaborate with OSHC to launch a pilot scheme to explore the feasibility of promoting wider use of cooling vests on construction sites in future.

#### Strengthen Publicity and Promotion

16. LD reviewed the strategy on construction safety promotion last year. Apart from regular promulgation of safety messages through the mass media, we have strengthened the collaboration with trade associations and workers' unions for conveying safety messages to workers direct. These include arranging for experienced workers or workers' families to visit new works sites to share their experience with site workers and disseminate safety pamphlets to promulgate the message of safeguarding themselves for their own good as well as their families. Roving exhibitions were staged in different districts at locations with numerous renovation shops to promote OSH messages to renovation workers direct.

17. Besides, LD will continue to launch the Construction Industry Safety Award Scheme in collaboration with OSHC and the industry this year. The scheme will include a safety quiz competition, roving exhibitions, promotional visits, TV/radio broadcasts, radio programmes, a fun day and an award presentation ceremony. The experience of the gold winning sites will be recorded in DVD for dissemination to construction sites and broadcast in mobile media.

## Multi-Partite Collaboration

18. In conjunction with OSHC, LD held a Construction Safety Forum in March 2012 for industry stakeholders including contractors, sub-contractors, workers' unions, Construction Industry Council (CIC) and professional bodies to explore means to enhance construction safety. LD and the relevant parties of the construction industry have implemented various proposals by stages and the progress is summarised in Annex 2. We will work with the industry to consider further enhancing the measures this year.

19. LD will continue to work in close partnership with related organisations, such as OSHC, CIC, trade associations, workers' unions, professional bodies, district councils and other government bureaux/departments to promote OSH through enforcement, promotion and publicity.

### **Advice Sought**

20. Members are invited to note the content of this paper and give views on the aforesaid measures.

Labour and Welfare Bureau  
Labour Department  
April 2013

## Breakdown of Accidents in the Construction Industry in the first three Quarters of 2012

### Industrial Accidents in Construction Industry in 1st Three Quarters of 2012 - analysed by Type of Accident

#### 二零一二年首三季建造業之工業意外個案 - 按意外類別分析

Type of Accident 意外類別		1st Three Quarters of 2011 二零一一年首三季	1st Three Quarters of 2012 二零一二年首三季	Change 增減
Trapped in or between objects	受困於物件之內或物件之間	83	91	8
Injured whilst lifting or carrying	提舉或搬運物件時受傷	463	399	-64
Slip, trip or fall on same level	滑倒、絆倒或在同一高度跌倒	454	556	102
Fall of person from height	人體從高處墮下	285 (7)	304 (6)	19
Striking against fixed or stationary object	與固定或不動的物件碰撞	216	213	-3
Striking against or struck by moving object	被移動物件或與移動物件碰撞	382 (2)	401 (1)	19
Stepping on object	踏在物件上	24	15	-9
Exposure to or contact with harmful substance	暴露於有害物質中或接觸有害物質	16	14	-2
Contact with electricity or electric discharge	觸電或接觸放出的電流	5 (1)	14 (5)	9
Trapped by collapsing or overturning object	受困於倒塌或翻側的物件	7 (2)	4	-3
Struck by falling object	遭墮下的物件撞擊	50 (3)	44	-6
Struck by moving vehicle	遭移動中的車輛撞倒	9	6	-3
Contact with moving machinery or object being machined	觸及開動中的機器或觸及以機器製造中的物件	146	153	7
Drowning	遇溺	1 (1)	0	-1
Exposure to fire	火警燒傷	12	4	-8
Exposure to explosion	爆炸受傷	3	3	---
Injured by hand tool	被手工具所傷	79	75	-4
Injured by fall of ground	泥土傾瀉受傷	1	4 (1)	3
Asphyxiation	窒息	0	0	---
Contact with hot surface or substance	觸及灼熱表面或物質	15	19	4
Injured by animal	被動物所傷	2	0	-2
Injured in workplace violence	於工作場所暴力事件中受傷	0	0	---
Others	其他類別	48	35	-13
TOTAL	總數	2 301 (16)	2 354 (13)	53

## Notes:

1. Industrial accidents refer to injuries and deaths arising from industrial activities in industrial undertakings as defined under the Factories and Industrial Undertakings Ordinance.
2. Figures in brackets denote the number of fatalities.
3. The above accident figures are recorded as at 31 December 2012.

## 註釋:

1. 工業意外是指《工廠及工業經營條例》所界定的工業經營內發生的受傷或死亡意外，而這些意外是因工業活動而引致的。
2. 括號內的數字顯示死亡人數。
3. 上列意外數字為截至2012年12月31日所記錄的數字。

**“Construction Safety Forum” on 12 March 2012  
Progress Report for Implementation of the  
Improvement Measures**

**Strengthening site management and supervision**

**(A) Caring for new construction workers**

LD, in collaboration with the HKCA and the Hong Kong General Building Contractors Association, launched in July 2012 the “Caring Programme for New Construction Workers”. Under this programme, workers who newly join the industry are identified with the label “P” (i.e. Probationer) and workers who are new to a construction site with the label “N” (i.e. Newcomer). Contractors would assign mentors to take care of the workers who newly join the industry for a period of not less than three months. If the workers new to a site have already possessed experience in construction work, they would be required to carry the “N” labels for two weeks. DEVB incorporated a similar arrangement into the safety regulatory system of public works contractors in the end of last year and has commenced the implementation since early 2013. LD is reviewing the implementation of this programme, and will discuss with the industry stakeholders on measures to enhance the programme.

**(B) Safety training programme for site management personnel**

The CIC is formulating a safety training programme for site management personnel and resident site staff. The programme will cover safety legislation, safety management skills, risk assessment, crisis management, safety inspection, accident investigation and prevention, safety planning, and construction and design management, etc. It is envisaged that the programme will be rolled out this year.

**(C) Code of Conduct for safety practitioners and enhancement of continuing professional development programme**

The Hong Kong Federation of Occupational Safety and Health Associations (HKFOSHA) has drafted the Code of Conduct for safety practitioners for consultation with relevant organizations and professional bodies. The Code of Conduct is expected to be issued this year. Besides, HKFOSHA is consolidating the registered safety officers (RSOs)’ views on measures to enhance the continuing professional development programme. LD will consider revising the relevant guidance notes with a view to enhancing the competence and professionalism of the RSOs.



## **Enhancing safety awareness and responsibilities of workers**

### **(D) Strengthening of promotional activities on OSH**

LD will collaborate with OSHC to launch major safety promotion activities targeting high risk work processes such as working at height and electrical works. We will strengthen the collaboration with trade associations and workers' unions to make direct contact with workers through out-reach programme and roving exhibition. We will update occupational safety information from time to time to sustain the alertness of workers. We have also produced illustrated leaflets of safety reminders and notepads in Chinese and languages of ethnic minorities for dissemination to workers through outreaching site visits.

### **(E) Enhancement of the “Green Card” course**

In October 2012, LD completed the revision of the contents of the construction “Green Card” revalidation course by introducing case studies and analysis of serious accidents commonly found, and requiring course trainers to convey the messages through an interactive teaching mode and with the use of clear and easy to understand pictorial aids. We are revising the contents of the one-day full course.

## **Improving the safety management system**

### **(F) Guidelines on project clients' participation in site safety**

After studying various models of safety incentive schemes, the CIC published the “Guidelines on the Adoption of the Pay For Safety Scheme” in December 2012 with a view to encouraging project clients of private construction sites to adopt a scheme that best suits their own nature of business and safety management framework so as to improve work safety.

### **(G) Supporting SME of RMAA works to enhance work safety**

LD in collaboration with OSHC launched the “OSH Star Enterprise – Pilot Scheme on RMAA Safety Accreditation” in June 2012. Up to the end of March this year, a total of 59 applications were received. Six of them have successfully passed the safety audit and were accredited as Star Enterprise.