For discussion on 17 March 2015

Legislative Council Panel on Manpower

Work Safety Performance of Repair, Maintenance, Alteration and Addition Works

Purpose

This paper briefs Members on the current work safety situation of repair, maintenance, alteration and addition ("RMAA") works.

Recent Statistics of RMAA Works Safety

2. There were 804 industrial accidents in RMAA works in the first three quarters of 2014, a reduction of 1.3% from 815 in the same period of 2013. The provisional number of industrial fatalities in RMAA works was eight in 2014, down by 27.3% when compared with 11 in 2013 (Table 1).

Table 1 - Industrial Accidents in RMAA Works

	2011	2012	2013	2014 ¹	1 st three quarters of 2013	1 st three quarters of 2014	Total
Fatal Cases	8	9	11	8 (-27.3%) ²	4	8	36 (2011 – 2014)
Non-fatal Cases	1 382	1 164	1 132	796 (1 st three quarters)	811	796 (-1.8%) ³	4 474 (2011 – 1 st three quarters of 2014)
Total	1 390	1 173	1 143	804 (1 st three quarters)	815	804 (-1.3%) ³	4 510 (2011 – 1 st three quarters of 2014)

Notes: 1. The statistics of 2014 are provisional figures and the 2014 full year accident statistics will be completed in April 2015.

^{2.} Figures in brackets denote % change of 2014 when compared with 2013.

^{3.} Figures in brackets denote % change of the 1st three quarters of 2014 when compared with the same period of 2013.

3. In the past four years (i.e. from 2011 to the first three quarters of 2014), there were a total of 4 510 industrial accidents in RMAA works, accounting for 37% of industrial accidents in the construction industry (12 075). The number of industrial accidents in RMAA works decreased by 17.8% from 1 390 in 2011 to 1 143 in 2013. The percentage of industrial accidents in RMAA works to those of the construction industry decreased from 45% in 2011 to 35% in 2013. The percentage further decreased from 35% in the first three quarters of 2013 to 31% in the corresponding period of 2014 (Table 2).

Table 2 - Percentage of Industrial Accidents in RMAA Works to Industrial Accidents of the Construction Industry

	2011	2012	2013	1 st three quarters of 2013	quarters of	Total of 2011 to 1st three quarters of 2014
No. of industrial accidents in RMAA works	1 390	1 173	1 143	815	804 (-1.3%)	4 510
No. of industrial accidents of construction industry	3 112	3 160	3 232	2 328	2 571 (+10.4%)	12 075
Percentage of industrial accidents in RMAA works to the total no. of industrial accidents in construction industry	45%	37%	35%	35%	31%	37%

Note: Figures in brackets denote % change of the 1st three quarters of 2014 when compared with the same period of 2013.

4. The percentage of industrial fatalities in RMAA works to those of the construction industry decreased from 50% in 2013 to 40% in 2014 (Table 3).

Table 3 – Percentage of Industrial Fatalities in RMAA Works to the Industrial Fatalities of the Construction Industry

	2011	2012	2013	2014*	2011 - 2014
Industrial fatalities in RMAA works	8	9	11	8	36
Industrial fatalities of construction industry	23	24	22	20	89
Percentage of industrial fatalities in RMAA works to the industrial fatalities of the construction industry	35%	38%	50%	40%	40%

^{*} The full year accident statistics of 2014 will be completed in April 2015.

5. Of the eight industrial fatalities in RMAA works in 2014, "fall of person from height" (four cases) and "electrocution" (two cases) were the two major types of accidents. Of the 36 industrial fatalities in RMAA works in the past four years, the two major types of accidents were also "fall of person from height" (25 cases, 69% of the total) and "electrocution" (six cases, 17% of the total) (Table 4).

Table 4 – Industrial Fatalities in RMAA Works

	2011	2012	2013	20141	Total
Industrial fatalities in RMAA works (a)	8	9	11	8	36
Industrial fatalities in RMAA works involving "fall of person from height" (b)	6	6 (+0.0%) ²	9 (+50.0%) ²	4 (-55.6%) ²	25
Percentage of industrial fatalities in RMAA works involving "fall of person from height" to the total no. of industrial fatalities in RMAA works (b)/(a)	75%	67%	82%	50%	69%
Industrial fatalities in RMAA works involving "electrocution" (c)	1	$(+200.0\%)^2$	$(-100.0\%)^2$	2 (Not applicable) ²	6
Percentage of industrial fatalities in RMAA works involving "electrocution" to the total no. of industrial fatalities in RMAA works (c)/(a)	13%	33%	0%	25%	17%

Notes: 1. The statistics of 2014 are provisional figures and the 2014 full year accident statistics will be completed in April 2015.

^{2.} Figures in brackets denote % change of the year when compared with the year before.

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6. There were 25 fall-from-height industrial fatalities in RMAA works in the past four years (from 2011-2014). These 25 fatalities mainly involved 11 cases (44%) of persons falling from bamboo scaffolds, five cases (20%) from working platforms or falseworks, and three cases (12%) from ladders. Among these fatalities, five cases (20 % of the total fatalities) involved workers falling from three metres or less above ground.

Measures to Enhance Work-at-Height Safety

- 7. Owing to the ageing of buildings in Hong Kong, coupled with the launching of the "Mandatory Building Inspection Scheme" and "Mandatory Window Inspection Scheme" by the Buildings Department in 2012, there has been a rapid growth in RMAA works in recent years. It is expected that the number of RMAA works will continue to increase in the coming years. These developments pose continuous challenges to occupational safety in the industry.
- 8. LD has in recent years enhanced RMAA works safety through intensifying inspection and enforcement, tackling systemic risks, launching safety accreditation and sponsorship schemes, as well as enhancing publicity and promotional activities.

Stepping up Inspection and Enforcement

9. LD has stepped up inspection and enforcement efforts to cope with the drastic growth in construction works since 2011/12. Apart from conducting regular site inspections, LD will from time to time launch special enforcement operations targeting high-risk processes, such as work-at-height, truss-out scaffolding works, lifting operations, electrical work, etc. LD would take immediate enforcement actions without prior warning upon discovery of breaches of safety legislation. Regarding RMAA works safety, LD issued 594 suspension notices ("SNs") and 613 improvement notices ("INs"), and initiated 1 037 prosecutions¹ in 2014; including 501 SNs and 323 INs, and 497 prosecutions² in respect of work-at-height safety.

Regarding RMAA works safety, LD issued 186 SNs and 480 INs, and initiated a total of 679 prosecutions in 2011. The relevant enforcement figures in 2014 increased by 219%, 28% and 53% respectively when compared with 2011.

Regarding work-at-height safety in RMAA works, LD issued 170 SNs and 324 INs and initiated a total of 455 prosecutions in 2011. The number of SNs issued in 2014 increased by 195% as compared with 2011.

10. So far in 2015, LD has conducted special enforcement operations targeting RMAA works, with 81 SNs and 117 INs issued, and 135 prosecutions to be initiated. LD will continue to conduct more special enforcement operations to deter work practices contravening work safety requirements. LD will also continue to remind construction contractors and sub-contractors to comply with relevant work safety legislation requirements, particularly the need to adopt effective measures to prevent accidents related to work-at-height and electrical work.

Tackling Systemic Risks

- 11. With regard to work-at-height safety, LD, in collaboration with the Construction Industry Council ("CIC"), organized a "RMAA Safety Conference" in February 2014, to discuss ways of enhancing work-at-height safety while carrying out works at the external wall. CIC then published the "Guidelines on Planking Arrangement for Providing Working Platforms on Bamboo Scaffolds" in May 2014, to responsibilities among principal the contractors sub-contractors on planking arrangement for providing working platforms on bamboo scaffolds, with a view to ensuring that suitable working platforms are available for use by workers carrying out works at the external wall. LD accordingly updated the "Code of Practice for Bamboo Scaffolding Safety" ("CoP") in June 2014. LD will take into account the aforesaid Guidelines and CoP when enforcing safety regulations relating to the use of bamboo scaffolds for work-at-height. In addition, LD has organized briefing sessions for the relevant trade associations to urge the industry to comply with the relevant Guidelines and CoP.
- 12. Furthermore, RMAA industry stakeholders raised in a work safety forum that as truss-out scaffold erection/ dismantling works were of short duration, it could pose practical difficulties to the industry if the inspection and testing of anchor devices could only be conducted by a structural engineer ("SE") before commencement of the works. After consulting the OSH Committee under the Labour Advisory Board, construction industry stakeholders, professional bodies and relevant Government Departments, the Government decided to allow "competent persons" ("CP") who had received specific training to conduct the relevant inspection and testing work on the condition that such arrangement would need to be implemented in conjunction with the corresponding safety training and monitoring mechanism to ensure that the safety standard of the inspection and testing performed by a CP would

not be lower than that conducted by a SE. These supporting measures included the completion of the relevant certificate course organized by the Occupational Safety and Health Council ("OSHC") and compliance with the provisions of the "Safety Guidebook" formulated by LD, OSHC and the relevant professionals; the specific requirements of the inspection and testing of anchor devices; the provisions of the relevant licensing and monitoring mechanism, etc. OSHC launched the relevant certificate course in March 2014. As at end-February 2015, 11 classes had been organized and a total of 89 trainees had been issued with the relevant certificates. In view of the enthusiastic response to the enrolment, OSHC will continue to organize such courses this year.

Safety Accreditation and Sponsorship Scheme

- 13. LD, in collaboration with OSHC, launched safety accreditation and sponsorship schemes in recent years with a view to encouraging the small-and-medium sized contractors to adopt safe working methods, which include:
 - RMAA Safety Accreditation Scheme: LD and OSHC jointly launched the "OSH Star Enterprise Safety Accreditation Scheme" for RMAA industry in June 2012. This includes provision of safety training, subsidies for the purchase of fall arresting devices and safety audits for small-and-medium sized RMAA contractors; and offer of premium discounts up to 50% to those contractors accredited under the Scheme through collaboration with the For a small-and-medium sized contractor insurance sector. employing five scaffolding workers, he could save about \$300,000 in insurance premium every year. As at end-February 2015, 26 small-and-medium enterprises ("SMEs") had been OSHC is processing tens of applications and will strengthen the publicity programme towards works proponents in due course.
 - ii. Mobile Platform Sponsorship Scheme: Among those fall-from-height fatal accidents, quite a number of workers involved were working on places of work that were just two to three metres above the ground, and some cases involved the use of ladders. LD, in collaboration with OSHC, launched a sponsorship scheme in 2013 to encourage SMEs to purchase mobile working platforms so as to enhance work-at-height safety in the industry. As at end-February 2015, OSHC had approved about 1 700 applications, and it is estimated that around 18 700 workers have benefitted from the scheme.

iii. Light-Duty Working Platform Sponsorship Scheme: LD, in collaboration with OSHC, will launch a new sponsorship scheme in April this year, to subsidize small-and-medium sized contractors to purchase step platforms for carrying out light duties at restrictive workplaces, and will discuss with industry stakeholders ways to promote safety culture of working above ground through phasing out ladders on construction and renovation sites.

Enhancement of Publicity and Promotional Activities

- 14. With a view to enhancing the safety awareness of workers undertaking RMAA works, LD has focused the publicity work on work-at-height, scaffolding safety, as well as the proper use of personal protective equipment. Related activities include TV/ Radio broadcasts and display of publicity banners and posters in various districts across Hong Kong. In addition, LD had produced a new series of TV broadcast regarding improper use of ladders, which was launched in end-Oct 2014. LD also, in collaboration with the property management sector, produced a safe working guideline on truss-out scaffolding works in 2013 with a revised version in 2014 for dissemination to the residents and the contractors engaged in works at the buildings under their management, to enhance the safety of truss-out scaffolding works.
- 15. Furthermore, in recent years, LD, in collaboration with OSHC, has been organising work-at-height safety forums or seminars for the RMAA industry each year to explore in depth with the industry ways to enhance the safety culture of RMAA works; and implement practicable recommendations to eradicate work-at-height hazards. LD will continue to organize, in collaboration with OSHC, a "Work-at-Height Safety Forum cum Safety Equipment Exhibition" in April this year, inviting industry stakeholders for sharing with a view to enhancing work-at-height safety.

Measures to Enhance Electrical Work Safety

16. Regarding electrical work safety, LD has been conducting joint enforcement operations with the Electrical and Mechanical Services Department ("EMSD") since 2012 to deter work practices contravening work safety requirements. In 2014, LD conducted another joint enforcement operation with EMSD, with 103 SNs/ INs issued and 34

prosecutions initiated. LD will continue to closely monitor the safety performance of the electrical works sector and launch joint enforcement operations with EMSD as and when necessary.

- 17. In view of the spate of serious incidents involving electrical work in recent years, LD has conducted safety audits on the process and analyses of the underlying systemic risks with a view to formulating relevant preventive measures. LD has conveyed the relevant systemic safety problems and preventive measures to contractors of the industry, and through the issue of systemic safety alerts, appealed to registered safety officers ("RSO") and registered safety auditors ("RSA") to apply the safety management principles when discharging their statutory duties in advising their clients/ employers on the preventive measures. RSO and RSA have been reminded of the importance of taking proactive steps to ensure that their clients/ employers are fully aware of the adverse implications and potential adverse consequences should their clients/ employers overrule or neglect their advice. The aforesaid systemic safety alerts have also been uploaded onto LD's website for reference by the industry.
- LD has stepped up publicity and promotional activities on 18. electrical work safety since 2012. These included bus and radio broadcasts, organization of electrical safety talks and seminars for the electrical workers and contractors, and issue of publications and messages on electrical work safety to personnel of the industry through electrical and mechanical trade associations and workers' unions. collaboration with OSHC and the industry stakeholders, organized two rounds of "Electrical Work Safety Seminar" in 2014, reminding the industry about the potential hazards of electrical work and exploring practicable and effective precautionary measures. Furthermore, LD has been providing support to electrical and mechanical workers' unions organizing an on-going occupational safety promotional campaign, including those activities relating to electrical work safety such as talks, seminars and outreach promotional visits to construction sites.

Way Forward

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

Advice Sought

20. Members are invited to give views on the above measures.

Labour and Welfare Bureau Labour Department March 2015