



Labour Department (Headquarters)

勞工處（總處）

Your reference 來函編號：

Our reference 本處檔案編號： LD CR 1/814

Tel. number 電話號碼： 2852 4070

Fax number 傳真機號碼： 2544 3271

7 November 2012

Miss Betty Ma
Clerk to the Panel on Manpower
Legislative Council
Legislative Council Complex
1 Legislative Council Road
Central
Hong Kong

Dear Miss Ma,

Electrical Works Safety

At the meeting of the Panel on Manpower on 16 October 2012, some Members raised concern over the increase in fatal industrial accidents involving electrocution in recent months. The Labour Department (“LD”) has stepped up inspection and enforcement action on electrical works safety, and strengthened safety education and publicity in collaboration with the Occupational Safety and Health Council, relevant government departments and industry stakeholders. We would like to advise Members on the follow-up measures LD has taken to prevent the occurrence of accidents.

LD issued a letter in mid October 2012 to over 800 construction contractors, associations of electrical and mechanical / electrical appliance services, relevant professional organizations and workers’ unions to remind contractors and workers of the importance of taking adequate precautionary measures when carrying out electrical works. These include avoiding electrical works on live circuits, providing effective supervision and adequate training for workers. In particular, industry stakeholders were advised to safely isolate electricity source and exercise extra care when carrying out modification/repair works on electrical installations already put in service, working in restrictive workplaces (e.g. the voids above false ceilings) or conductive work environment, and working at height (e.g. on stepladders). LD conducted a joint blitz operation with the Electrical and Mechanical Services Department in October 2012, during which immediate enforcement actions such as prosecution and issue of suspension notices were

taken against those in breach of electrical safety requirements. We will continue our rigorous enforcement actions in the near future to deter unsafe work practice. A copy of our advisory letter to industry stakeholders is enclosed for Members' reference.

In parallel, we have launched a series of measures to enhance awareness of electrical works safety as follows:

- (1) Work Safety Alerts on fatal electrocution accidents and safety hints for electrical works were issued to industry stakeholders and such information was uploaded onto LD's website;
- (2) guidelines on safe use of electricity were issued to 80 000 registered electrical workers and 10 000 contractors;
- (3) publications on electrical works safety were distributed through workers' unions and trade associations and work safety messages with pictorial illustrations were published in newspapers ;
- (4) safety messages on use of electricity were broadcast on buses; and
- (5) a new Announcement of Public Interest on electrical works safety was broadcast on the radio.

In addition, LD has liaised with relevant government departments, trade associations and workers' unions for organising a series of talks and seminars on electrical safety for electrical workers and contractors in the coming two months. These include on-site workshops to be jointly organised with trade associations of the construction as well as electrical and mechanical services industries, to brief workers on electrical safety measures in November. LD will also compile a new casebook on electrocution accidents in recent years with relevant safety precautionary measures.

LD will continue to step up collaboration with the stakeholders concerned in promoting electrical works safety and creating a safe and healthy work environment for workers.

Yours sincerely,



(LI Chi-leung)

for Commissioner for Labour



Labour Department (Headquarters)

勞工處 (總處)

Your reference 來函編號 :

Our reference 本處檔案編號 : (40) in LD OD/1-55/77

Tel. Number 電話號碼 : 2852 4176

Fax number 傳真機號碼 : 21579250

18 October 2012

Dear Sir/Madam,

Electrical Safety at Site Works

The Labour Department (“LD”) is highly concerned about the spate of electrocution accidents in the construction industry in recent months: **a total of seven fatal cases** happened on construction and renovation works sites as at 11 October 2012. I write to rally your support in stepping up safety measures immediately on construction sites to forestall this trend.

It is the duty of employers and contractors to comply with relevant safety legislation to put in place a safe system of work, which includes the conduct of a comprehensive risk assessment by a competent person, preparation of a method statement to include necessary safety measures and procedures for ensuring safe operations, as well as provision of information, instruction, training and supervision to ensure adherence to safety procedures and rules by workers. In respect of electrical safety, the following precautionary measures should be taken :

- (a) **Electrical work on live circuit should be avoided.** Before and during any electrical work, effective arrangements should be taken to ensure that the electricity source involved is safely isolated, for instance, by locking out the power supply source with testing performed to confirm the isolation. Suitable warning notices should be displayed.
- (b) Electrical work should only be carried out by Registered Electrical Worker (“REW”). **Under no circumstance should a non-REW be allowed to carry out electrical work without effective supervision of an REW.**
- (c) If works are to be carried out under **unfavourable site conditions**, such as **wet weather, ceiling voids or situations with earthed structures/fittings in the close vicinity**, a comprehensive risk

assessment should be conducted by a competent person. A **permit-to-work system should be adopted** with appropriate safety precautions devised and implemented to eliminate or properly control the electrical hazards involved.

- (d) Protective devices of the electrical installations, such as **suitable and adequate fuses and circuit breakers**, must be installed and kept in good order. Portable electrical apparatus must be either double-insulated or properly earthed.
- (e) Safety training on electrical safety and proper handling of electrical tools and their associated fittings should be conducted regularly.
- (f) Electrical apparatus should be checked before use. Any damaged or faulty parts should be repaired or replaced immediately. Only plugs and sockets complying with the relevant safety standards should be used in conjunction with residual current device for earth leakage protection.
- (g) Suitable personal protective equipment, such as insulating gloves and mat, should be provided for use if necessary.
- (h) Adequate monitoring and effective supervision should be exercised to ensure that the above safety precautionary measures are strictly followed.

Your attention is also drawn to certain **high-risk situations for electrical work under which safe isolation of electricity supply is of paramount importance** :

- (a) **Modification/repair works on electrical installation already put in service** : making the uncompleted installation live would result in serious burns, electrocution, or even fire and explosion.
- (b) **Restrictive or conductive workplaces** : a worker working in a restrictive workplace (e.g. **the void above the false ceiling**) would find it difficult to set himself free if his body makes contact with live part incidentally, whereas a conductive workplace (e.g. inside an earthed steel tank) would provide a good return path for earth leakage/fault current.
- (c) **Working at height** : **electrical work on step ladders** should be avoided as even a mild electrical shock would likely cause loss of balance of the worker resulting in fall from height.

The above guidelines and advice on electrical safety are set out in the guidebooks and leaflets published by LD as follows :

- ◇ Guidance Notes for The Safe Isolation of Electricity Source at Work
- ◇ Basic Electrical Safety Measures in the Workplace
- ◇ Code of Practice – Safety and Health at Work for Manual Electric Arc Welding
- ◇ Guide for Safety at Work – Safe Use of Electric Plugs
- ◇ 地盤意外個案簡析系列-水電維修
- ◇ 電力工作意外致命個案集

These safety publications can be obtained free from the divisional offices of this Department or downloaded from the department's website (http://www.labour.gov.hk/eng/public/content2_8.htm) Work Safety Alerts have also been uploaded onto the Labour Department's website (http://www.labour.gov.hk/eng/news/work_safety_alert_2012.htm).

To deter non-compliance with electrical safety requirements, LD will launch a series of special enforcement operations in the coming months. During these operations, LD will take **immediate enforcement actions** such as prosecution and issue of suspension notices **without further warning**. In addition, LD will conduct joint operation and enhance referral of cases involving breaches of electrical safety requirements with the Electrical and Mechanical Services Department (“EMSD”). Apart from taking prosecution action, EMSD will consider disciplinary actions against Registered Electrical Contractors (“RECs”) and REWs if unsafe work practices or unsafe electrical installation violating the relevant legislation and code of practice are found.

We look forward to your continuous support to ensure the safety of your workplace. Should you need further information, please feel free to contact Miss WONG Pui-lam, Linda on 2852 4960.

Yours faithfully,



(LEUNG Yuk-keung)
for Commissioner for Labour