

## Safety & Health Circular No. 19/2009

### Safety Reminder: Electrical Safety and Live Work

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Of the industrial accidents that claimed lives or caused injuries in 2008, 19 cases were attributable to “contact with electricity or electric discharge”, and of these, five cases were fatal. The figures show a rising trend when compared with 2007 warranting increased vigilance by practitioners in electrical engineering and other electricity-related work.

Adequate safety precautions must be taken prior to the commencement of any electrical works to ensure work safety. An article entitled *Safety Reminder: Electrical Safety and Live Work*, has been published by Green Cross in July/August 2009 (ref: COPYRIGHT/368/2009-618) which highlights the following important areas can be download at [http://www.oshc.org.hk/oshc\\_data/files/greencross/2016/GC200907.pdf](http://www.oshc.org.hk/oshc_data/files/greencross/2016/GC200907.pdf)

- Electrical hazards
- Safety precautions against electrical shock
- Isolating power sources
- Basic safety principles and safety precautions
- Special hazards
- Safety issues that require supervisors’ special attention
- Other important safety issues

A permit-to-work system should be adopted for carrying out electric wiring and maintenance work involving special hazards in which safe isolation of power source is of paramount importance including, but not limited to, the following circumstances:

- **Modification works**

Any modification to the wiring and conductive parts of an electrical installation already put in service should be done with great care. Apart from isolating the power source and locking off the switch, workers should also consider temporarily disconnecting the power supply cable from the power source. This can prevent the uncompleted installation from being made live prematurely due to misunderstandings or mistakes.

- **Working at height**

It is particularly hazardous to work on an electrical installation fixed at height because even a mild electric shock may cause a worker to lose balance and fall from height.

- **Conductive/restrictive workplaces**

It is particularly hazardous to carry out electrical work in a conductive or restrictive workplace, e.g. inside an earthed metal tank. A conductive workplace provides an ideal return path for earth leakages/fault currents. Whereas in a restrictive workplace, workers may find it difficult to set themselves free from conductive elements which have accidentally come into contact with a live part of the circuit.

If you have any enquiries, please contact the Occupational Safety and Health Branch of the Labour Department on 2559 2297, or e-mail: [enquiry@labour.gov.hk](mailto:enquiry@labour.gov.hk)