



Work Safety Alert

Flashover while Pumping Water in a Cable Trench

- 1. Date of Accident :** May 2015
- 2. Place of Accident :** A utilities plant
- 3. Summary :**

Two workers sustained burnt injury as a result of a flashover occurred while dewatering a concrete cable trench under refurbishment with an electric pump.

4. Work Safety Alert for Contractors/Employers :

To ensure the safety and health of workers engaged in trench work, the contractors/employers should provide and maintain a safe system of work which should include, but not limited to, the following:

- appointing a competent person to conduct task-specific and comprehensive risk assessments taking into account hazardous conditions including live electric cables, space constraint and humid work environment;
- formulating detailed safe working methods and procedures, and adopting appropriate safety measures with due regard to the results of the risk assessments;
- ensuring that all live cables inside the trench are rendered dead by isolating the power source;
- where isolation of power source is not reasonably practicable, the work should only be done under a stringent permit-to-work system with adequate and appropriate safety measures devised. The safety measures should include, but not limited to, identifying the exact position of the



cables that cannot be isolated, installing temporary cable warning markers and ensuring proper protection of these cables against accidental damage; and providing workers with suitable personal protective equipment to guard against the potential electrical hazard and the risk of flashover;

- ensuring clear delineation of safety responsibilities and effective coordination and communication among the principal contractor and subcontractor(s) as necessary for full implementation of the safe system of work;
- providing all workers involved with sufficient safety information, instruction and training to ensure that they are familiar with the safe working procedures and safety measures; and
- establishing and implementing an effective monitoring and control system to ensure that the above safety measures are strictly followed.

5. Reference :

- [A Guide to the Factories and Industrial Undertakings \(Electricity\) Regulations¹](#)
- [Guidance Notes for the Safe Isolation of Electricity Source at Work¹](#)
- [Basic Electrical Safety Measures in the Workplaces¹](#)
- [《電力工作意外致命個案集》¹](#) (Chinese Version Only)
- [《電力工作意外致命個案 \(第二集\)》¹](#) (Chinese Version Only)
- [Code of Practice on Working near Electricity Supply Lines, 2005 Edition, by the Electrical and Mechanical Services Department¹](#)

¹ Click to view document



職業安全及健康部
Occupational Safety and Health Branch
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Labour Department



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