

CIC Safety Message No. 04/24

TWO WORKERS INJURED IN THE BLAST OF A MAIN SWITCH ROOM IN CHAI WAN

On 29 January 2024, two workers were burned in an explosion near a main switch room in Chai Wan during a welding work, and they were sent to the hospital for treatment. The Construction Industry Council (CIC) would like to deliver this safety message for your attention. It would be appreciated if you could distribute the message below to your fellow members, relevant personnel or other industry stakeholders where appropriate. Thank you very much.

Common Accidents

- 1. Use of naked flame (for example: electric arc or sparks, etc.) near a location where flammable gases exist.
- 2. Failure to identify all existing utilities within the works area and the associated risks, and inadvertently affect these utilities during the work.
- 3. Failure to properly connect the electrical circuits of electrical equipment, or there is insufficient leakage protection.



Please refer to the "Safety Video -Fire Prevention - Arc Welding"

4. Failure to conduct dynamic risk assessments and take appropriate safety measures in response to changes in the environment and procedures.

Critical Control Measures

- 1. Prior to the commencement of works, construction team should conduct risk assessments to identify all potential hazards associated with the work, in particular the fire and explosion hazard that may be caused by the high temperature of the electric arc used or the hot slag and sparks of molten metal produced during the process, taking into account possible presence of combustible or flammable residue.
- 2. Formulate safe working procedures for the work with due regard to the results of risk assessments.
- 3. Provision of appropriate locations and containers for storing flammable substances.
- 4. Obtain "Hot Work Permit" before conducting any hot works. Screen off sparks from all hot works and keep flammables away from all naked flame.
- 5. Appoint a competent person to identify all utilities within the works area and brief the site personnel regarding the necessary safety precautions; in addition, maintain a sufficient safe distance from these utilities during work.
- 6. Ensure that the electrical circuits to which the electrical equipment is connected are protected by suitable and adequate fuses, circuit breakers, residual current devices for earth leakage protection, etc.; in addition, ensure workers at electrical connection work have received proper training and have the relevant knowledge and experience.
- 7. Provide all workers concerned with the necessary safety information, instructions and training, and ensure that they are familiar with the relevant safe work procedures.







SAFETY ROLES AND RESPONSIBILITIES OF KEY STAKEHOLDERS IN THE HONG KONG CONSTRUCTION INDUSTRY

What if all stakeholders can act together and take one step further to fulfill their roles and responsibilities, can similar accident be avoided?

- In the design stage, designers and engineers should consider adopting design for safety methods to eliminate or reduce hot works from the sources.
- During the construction stage, the work team should appoint a competent person to mark the routing of all utilities within the works area and brief the site personnel regarding the necessary safety precautions. In addition, the contractors/owners of the utilities should regularly inspect and maintain the relevant utilities to ensure that they remain in good condition.
- The work team could constantly identify the changes in the process or the environment through dynamic risk assessment and apply control measures to eliminate the hazard.
- Workers should follow the developed safe working procedures, in case identify any risks of fire or explosion, report it to their supervisors immediately.

Reference information for sharing



Reference Material on Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry



Reference Material on Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry (Practical Reference Guidance On Electrical Work)



Posters - Fire Prevention



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