



A FIRE BROKE OUT AT A CONSTRUCTION SITE IN HUNG SHUI KIU

On 9 April 2024, a fire broke out at a construction site in Hung Shui Kiu, which suspected to be caused by a flame cutting work at basement. Various works activities are carried out in the construction sites that may cause fire incidents affecting the safety of workers and the public nearby. 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. Sparks generated during arc welding or flame cutting accidentally ignite other combustible materials.
2. Flammable or combustible materials are not properly stored.
3. Lack of fire protection system due to the non-completion of fire service installations or improper maintenance.
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. Implement the "Hot Work Permit System" to ensure that appropriate risk assessments are conducted and required safety measures are implemented before work, including:
 - Keep flammables away from all naked flame;
 - Erecting barriers to prevent the wind from blowing sparks onto the combustible materials; and
 - Conduct checking to ensure no spark left after work, etc.
2. Store all materials properly within the site and arrange designated material storage areas. Materials should be separately stored by their categories.
3. Avoid storing materials that may easily catch fire in the basement or indoor, e.g., heat-insulating materials like polyurethane foam.
4. Do not store dangerous goods exceed their exempted quantities in licensed dangerous goods, e.g. acetylene and oxygen.
5. Establish a flammable substance management system to ensure that the flammable substances are kept in an appropriate place with appropriate quantities.
6. Ensure regular removal of site wastes to avoid excessive accumulation that cause a fire to spread.
7. Clearly define escape routes with regular review, and ensure that the routes are free from obstruction.
8. Appoint fire marshal to conduct regular fire drills.
9. Adopt appropriate Smart Site Safety System (SSSS) to strengthen the monitoring to the heat sources, e.g. Thermal Infrared Camera.
10. Establish and implement an effective monitoring and management system to ensure that all fire prevention measures are strictly followed.



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

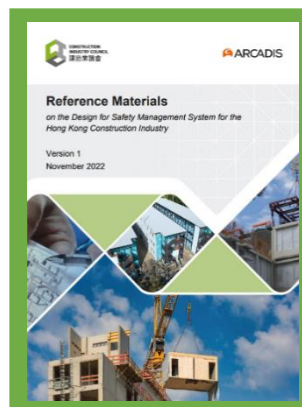
What if all stakeholders can act together and take one step further to fulfill their roles and responsibilities, can similar accident be avoided?

- In the design stage, designers and engineers should consider adopting design for safety methods to eliminate or reduce the hot works and the amount of flammable materials stored in the construction site; and properly plan the material storages in construction site.
- During the construction stage, construction team should establish and implement an effective fire prevention plan, properly manage the site housekeeping, regularly inspect all flammable material storage areas and provide adequate firefighting equipment; and conduct regular fire drills to ensure that workers are familiar with the emergency procedures.
- The work team shall effectively implement the "Hot Work Permit System" to check and ensure that no residual fire risks left at their responsible areas by end of shift.
- Workers shall follow the established fire prevention measures. If potential fire risks are identified, report it to their supervisors and take action against it immediately.

Reference information for sharing



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



Reference Materials on the Design for Safety Management System for the Hong Kong Construction Industry



Poster – Fire Prevention



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