

# CIC Safety Message No. 01/24

#### A LORRY-MOUNTED CRANE TOPPLED AT A CONSTRUCTION SITE IN WONG CHUK HANG RESULTING IN DAMAGE TO TWO TRUCKS AND THREE WORKERS BEING INJURED

On 8 January 2024, a lorry-mounted crane toppled at a construction site in Wong Chuk Hang during a lifting operation, resulting in two trucks being damaged and three workers being injured. The injured workers 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. Failure to set up the outriggers of crane properly.
- 2. Failure to check the ground condition prior to the commencement of work to ensure there is sufficient load bearing capacity.
- The weight of the loads exceeds the maximum safe working load (SWL) of the crane.
- 4. Insufficient management and barricades to the lifting and fatal zones.
- 5. Failure to conduct dynamic risk assessments and take appropriate safety measures in response to changes in the environment and procedures.

## **Critical Control Measures**

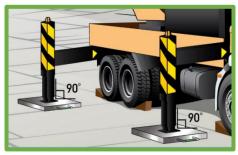
- Prior to the commencement of works, construction team should conduct risk assessments to identify the risks on toppling of a crane and develop safe working procedures with due consideration to identify lifting zone, fatal zone and proper working positions of workers, so as to eliminate or properly control the risks.
- 2. A crane shall be operated on a firm and level ground that can adequately support the weight of the crane and loads.
- 3. Proper setup of outriggers should be checked before lifting operation.
- Appoint a person with sufficient experience and qualifications to strictly monitor the lifting operation and ensure that it is not overloaded.
- 5. Fence off the lifting zone and fatal zone properly with barricades and prominent notices to ensure no unauthorised entry into the zones.
- 6. Use appropriate Smart Site Safety System (SSSS) to strengthen safety management based on the actual site situation, for example, install Dangerous Situation Alert System. If a worker is encroaching the fatal zone, siren and signal light from the system will be activated, thus securing workers' safety.
- 7. Provide all workers concerned with the necessary safety information, instructions and training, and ensure that they are familiar with the safe work procedures of the lifting operation.



Responsibilities - Lifting Operation" was held on 19 April 2023. Please watch replay at CIC website (Chinese Version only)



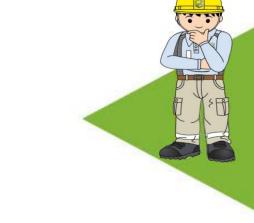
A crane shall be operated on a firm and level ground that can adequately support the weight of the crane and loads



Proper setup of outriggers should be checked before lifting operation







# 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 the working environment of the operation zone and the risks nearby (e.g. near to the roads), and select appropriate construction methods, lifting appliances and lifting gears, in order to reduce risks from the source.
- During the construction stage, construction team should implement an effective management system and appoint competent lifting supervisors to oversee the lifting operation in accordance with the lifting plan; in addition, whenever operation of crane nearby the roads could not be avoided, coordination with relevant stakeholders should be strengthened to ensure that the cranes are operated at appropriate locations during appropriate time slots.
- Work team shall conduct dynamic risk assessments for the rapidly changing activities, continuously identify the hazards, assess the risks, and take actions to eliminate or reduce risks during construction.
- Workers can identify any changes in the construction process, 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 (Practical Reference Guidance On Lifting Operation)



Lifting Safety Handbook



Poster - Lifting Safety



#### Disclaimer

This message is not intended to constitute any professional advice on these or any other subjects. The CIC (including its members and employees) will not accept responsibility for any consequences resulting from the use of or failure to use this message. For enquiries, please contact 2100 9000.