

CIC Safety Message No. 42/23



TWO RECENT INCIDENTS RELATED TO EXCAVATORS AN EXCAVATOR FELL INTO A FISHPOND AND ANOTHER WAS TOPPLED DURING TRANSPORTATION

On 5 December 2023, a worker was suspected fall into the fishpond together with the excavator during operating in Yuen Long, and he was rescued by firemen later and confirmed death at the scene; on 8 December 2023, an excavator suddenly toppled and fell to the ground at a construction site in Sheung Shui during transportation by a trailer, a worker had injured his leg and 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 operate and use the excavators in accordance with the manufacturer's manual.
- 2. Untrained workers operate excavators without authorisation.
- 3. Operate the excavators on soft and unstable slopes; or operate the excavator across the slope.
- 4. Failure to provide guard rails, kerbs and warning signs at the edges over water.
- 5. Slew the excavator boom while traveling on the ramp of a trailer.
- 6. Failure to conduct dynamic risk assessments and take appropriate safety measures in response to changes in the environment and procedures.



Please refer to the Safety Video "Lifting and Plant Operation -Loadshifting Machinery"

Critical Control Measures

- 1. Prior to the commencement of works, construction team should conduct risk assessments to identify the associated risks of ground conditions and the working environment; and formulate the safe working procedures.
- 2. Appoint an operator with sufficient qualifications and experience to operate the excavator.
- 3. The operator should follow the operating procedures of the excavator as recommended in its manufacturer's manual.
- 4. Levelling or compaction of ground, or provision of load-bearing supports should be done, as appropriate before operating an excavator on slopes, rough terrain or soft ground; and do not operate the excavators across on the slopes.
- 5. Do not apply a lateral load to the bucket and arm of the excavator during work.
- 6. Provision of guard rails, kerbs and warning signs at the edges over water to alert the operators.
- 7. Provide suitable lifejackets to the workers who work near water and ensure their wearing of these.
- 8. Prior to loading or unloading of an excavator to or from a trailer, the ramp of the trailer should be kept clean and free from mud, oil or debris so as to prevent slipping of the excavator during its movement; and do not slew the excavator boom on the ramp.
- 9. Provide all workers concerned with the necessary safety information, instructions and training, and ensure that they are familiar with the 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 the working environment of the operation zone and the risks nearby, and select the appropriate machineries and construction methods.
- During the construction stage, construction team should supervise, co-ordinate and monitor the operation of moving plants near water; and organise a rescue team and formulate emergency procedures to deal with emergency situations, such as accidents. Besides, strengthen the coordination with transportation suppliers to ensure that the transportation arrangement of excavators on site is proceeded according to the plan and under effective supervision.
- 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 should follow the developed safe working procedures, in case identifying 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



Reference Material on Fatal Zone Management



Guidelines on Safety of Site Vehicles and Mobile Plant

