

Labour Department
Brief account of a fatal industrial accident involving the collapse of a tower crane
at a construction site on Anderson Road on September 7, 2022

Background information

- In the morning of September 7, 2022, a fatal industrial accident happened at a construction site at Anderson Road Quarry Sites R2-2, Sau Mau Ping. A tower crane collapsed suddenly and struck the nearby temporary container offices, resulting in the death of three male workers and injuries to six male workers, including the tower crane operator.
- The Subsidised Sale Housing Construction Project of the Hong Kong Housing Society, mainly for the development of five residential buildings, was being undertaken at the above construction site.

Details of the accident

- On the day of the accident, three tower cranes were erected on the site for carrying out the works. The site was operated as usual at the time of the accident.
- The tower crane involved collapsed suddenly and fell onto several temporary container offices underneath. No lifting operations were being undertaken during the time of the accident.
- Three workers working in the temporary container offices were trapped under the collapsed tower crane. Two of them were certified dead on spot after resuscitation. Another worker was sent to hospital in unconscious state and also certified dead later on the same day. Six workers, including the tower crane operator, were injured in the accident.

Investigation results

- The tower crane involved was installed on a grillage foundation made of three layers of metal I-beams fabricated by arc-welding. The welded joint between the metal I-beams on the top of the grillage foundation connecting to the base of the tower crane and the second layer of the metal I-beams were found torn off after the accident, resulting in the collapse of the tower crane.

Criminal proceedings

- The Labour Department has taken out 67 prosecutions against the relevant duty holders concerned (including the contractor, sub-contractors and individuals) according to the Factories and Industrial Undertakings Ordinance (Cap.59) and the Occupational Safety and Health Ordinance (Cap. 509).

Safe operation of tower crane

To ensure the safe operation of a tower crane, the owners/ contractors/ employers should provide and maintain safe plant, which should include, but not limited to, the following:

- ascertaining the maximum pressures or forces which can be exerted by the tower crane on the ground or on other supports and tie frames;
- ensuring the ground or foundations, temporary supporting structures, grillages, packings, connections and anchorages for the tower crane should be of sufficient strength to withstand the maximum in-service or out-of-service loadings without failure;
- ensuring the siting of the crane, the assessment of maximum loads and the design of foundations, supporting structures and ancillary details should be certified by a safety supervision personnel;
- ensuring the erection of tower crane is directly supervised by an engineer who is appointed for such work;
- ensuring the tower crane is of good construction and made of robust and sound materials;
- ensuring the tower crane has been certified as in safe working order through tests and thorough examinations by a competent examiner before operation;
- ensuring the tower crane is properly maintained in accordance with the manufacturer's instructions by persons who have received suitable training and are competent for such work; and
- ensuring the tower crane is regularly tested, thoroughly examined and checked by a competent examiner and person respectively.

Labour Department
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