



Work Safety Alert Collapse of Reinforcement Bar Structure

1. Date of Accident: July 2020

2. Place of Accident: A tunnel under construction

3. Summary:

While a team of workers was working on a reinforcement bar structure in a tunnel under construction, the structure suddenly collapsed, causing the workers to fall together with the collapsing structure. One worker died and six workers injured as a result.

4. Work Safety Alert for Contractors/ Employers:

To ensure the occupational safety of workers/ employees engaged in reinforcement structure's work, the contractors/ employers responsible for the work should provide and maintain a safe system of work which should include, but not limited to, the following:

- appointing a competent engineer with adequate qualifications, competence and experience to design the reinforcement structure that is in conformity with established standards and capable of safely sustaining all loads to be applied to the structure, particularly the sufficiency and strength of its supports;
- ensuring the sequence of placing loads on the reinforcement structure is properly planned;
- appointing a competent person to conduct task-specific risk assessments to identify all potential hazards associated with the work, taking into account the nature of work, the working environment, the construction and structural stability of the reinforcement structure, and the activities to be carried out on the structure;





- formulating safe work methods, procedures and measures for the work with due regard to the results of risk assessments, the design of the reinforcement structure, the requirements of safety legislation and the relevant safety guidelines to minimise the risks exposed to the workers/ employees concerned;
- ensuring that all components of the reinforcement structure should be
 of sound material, good construction and adequate strength, free from
 patent defect and securely supported to prevent collapse or undue
 movement;
- appointing a competent construction supervisor with sufficient technical knowledge and management skills, and be able to read and understand the drawings and specifications for the reinforcement structure to supervise the construction of the structure;
- ensuring the reinforcement structure has been properly erected in compliance with the drawings and specifications before allowing workers/employees to work on the structure;
- providing all workers/ employees concerned with the necessary safety information, instruction and training, and ensuring that they are familiar with the safe work procedures and safety measures; and
- establishing and implementing an effective monitoring and control system to ensure all safety measures are strictly followed.

5. Reference:

- <u>Safe Systems of Work</u>¹
- Five Steps to Risk Assessment¹
- Five Steps to Information, Instruction and Training¹

¹ Click to view document





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This Work Safety Alert ("the Alert") is issued at the earliest possible opportunity after a serious accident with a view to drawing the attention of interested parties to the general safety precautionary measures necessary to protect people engaging in similar work activities. The material contained in the Alert constitutes general guidance only. It does not reduce, limit, or replace, any legal obligations upon any person to comply with any statutory duties under relevant legislation. Users such as Managers and Supervisors should make their own evaluation of the information contained in the Alert to determine if it can be applied to their own situations and practices. The Labour Department does NOT accept any responsibilities for any loss or damage resulting from the use of or failure to use of the information on the Alert.

Note: The material contained in the Alert is not exhaustive, and will be supplemented/ adjusted where necessary if more relevant information comes to light.