

Hazard Identification and Risk Assessment in Construction Sector

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Abstract: For any industry, to be successful it should meet not only the production requirements, but also maintain the highest safety standards for all concerned. The industry has to identify the hazards, assess the associated risks and bring the risks to as low as reasonably practicable level on a continuous basis. Construction sector being a potentially-hazardous sector has considerable safety risk to the workers associated with it. Unsafe conditions and practices in the site lead to a number of accidents and causes loss and injury to human lives, damages the property, interrupt developmental aspects etc. Because of the existing hazards of construction as an activity and the complexity of construction machinery and equipment and the associated systems, procedures and methods, it is not possible to be naturally safe. Regardless of how well the machinery or methods are designed, there will always be potential for serious accidents. It is not possible for an external agency to ensure the safety of an organization such as a construction company nor of the machinery or method it uses. The principal responsibility for the safety of any particular construction site and the manner in which it is operated rest with the management of that particular company undertaking the construction activity. Hazard identification and risk assessment involves identification of undesirable events that leads to an incident, the analysis of hazard mechanism by which this undesirable event could occur and usually the estimation of extent, magnitude and likelihood of harmful effects. The objective of hazard and risk assessment is to identify and analyze hazards, the event sequences leading to hazards and the risk of hazardous events. Many techniques ranging from simple qualitative methods to advanced quantitative methods are available to help identify and analyze hazards.

Keywords: Risk Assessment

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