

Construction Safety and Hierarchy of Hazard Controls

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Abstract

Construction safety generally focuses on the proactive action with fixed accountability on the employees. It is management's responsibility to ensure that those safety accountabilities are delivered by the employees. In construction if world class safety system expected then it must be considered equally with budget, schedule, and quality. If either one of the aspect fails, then the project is considered as unsuccessful. Management must demonstrate safety at field by following to the strict safety rules. For that the leaders must plan for the safety walk at field and do conversation with workers and highlight the unsafe actions done and explain the associated hazard and consequences. At the same time appreciate employees for the good work carried out.

Hazard is a situation, condition, object, which has potential to cause harm to the creature. Hazards are further classified into different types such as physical, chemical, biological, radiation, psychological and safety. To control the hazard there is a standard method of hierarchy shall be followed to minimize the severity of hazard effects. The industry defined hierarchy of hazard control are elimination, substitution, engineering control, administrative control and PPE. Where PPE is the last line of defence, where other hazards control if not working then PPE will save the employees for the hazard.

To understand the fact about the hazard reporting trend analysis of a project site, a safety observation data analysis was done to understand the category of hazard reported and their numbers. In this paper the emphasis has been given on the engineering hazard control. Here a typical civil piling activity in the construction activity has been taken as sample, where by applying engineering controls how the fall hazard has been minimized has been demonstrated.

The efforts have been made to highlight the folks to focus on the engineering hazard control. Accordingly, the recommendations were made to think differently to apply the most effective hazard control mechanism to safety human life.

Keywords

Hierarchy of Hazard Controls, safety accountabilities, world class safety, safety walk, Hazards classification, trend analysis, civil piling activity, engineering hazard control.