

عنوان مقاله:

Optimization of Emergency Management System in a Construction Organization in India

محل انتشار:

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خلاصه مقاله:

It is not possible to eliminate the workplace emergencies but can be mitigated by effective planning. In all the construction organizations the possibility of facing emergencies is common. The objective of emergency management is to minimize losses that result out of emergencies. The employees in construction organizations are susceptible various workplace emergencies like fire, explosion, collapse of a structure/excavated side walls, scaffolding and tower cranes etc.. Site-specific emergency plan is to be prepared to prevent emergencies in construction organizations. The emergency preparedness plan must comprise of identifying probable emergencies and how to respond to emergency situation so as to minimize the total response time of employees to report to emergency assembly point. In most of the construction organizations in India are following conventional methods instead of implementing scientific techniques in emergency planning particularly while earmarking emergency assembling points and also allocation employees to assembly points resulting into wastage of time, damage to employees and property. A study was conducted in a construction organization involved in construction of ۲*۶۶۰MW thermal power plant in India by using combination of optimization techniques like shortest route algorithm for identifying optimal paths and depending on the capacities of assembly points ,the employees are allocated to different assembly points by using transportation model .In a case of a major emergency, the minimal spanning tree technique is used to identify the shortest route for a specific assembly point.

کلمات کلیدی:

Emergency, shortest route algorithm, minimal spanning tree, network, assembly point

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