

# Safeguarding Labor Safety and Safety Facilities in Construction Projects A Case Study on IKEA Mud NMP Noida at Sector 51

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**Abstract-** Construction industry has accomplished extensive growth worldwide particularly in past few decades. For a construction project to be successful, safety of the structures as well as that of the personnel is of utmost importance. The safety issues are to be considered right from the design stage till the completion and handing over of the structure. Construction industry employs skilled and unskilled labourers subject to construction site accidents and health risks. A proper coordination between contractors, clients, and workforce is needed for safe work conditions which are very much lacking in Indian construction companies. Though labour safety laws are available, the numerous accidents taking place at construction sites are continuing. Management commitment towards health and safety of the workers is also lagging. A detailed literature study was carried out to understand the causes of accidents, preventive measures, and development of safe work environment. This paper presents the results of a questionnaire survey, which was distributed among various categories of construction workers in Kerala region. The paper examines and discusses in detail the Labor Safety in the labor camp

**Indexed Terms-** Construction Research, Technology, Technology Program Planning, Safety, Security Requirement.

## I. INTRODUCTION

Introduction In India, construction industry is the second largest employer when compared to agriculture. Throughout the world, the construction area of civil engineering is one of the most hazardous industries. The number of fatal accidents taking place

at the construction sites is quite alarming and the major cause was found to be fall of persons from height and through openings. In the present scenario, the Indian construction industry is quite large and complex involving latest technology as well as man power. On a par with the development of construction industry, drawbacks in terms of safety and health aspects are also witnessed. The Indian construction labour force is 7.5% of the total world labour force and it contributes to 16.4% of fatal global occupational accidents. In the construction industry the possibility of a fatality is five times more likely than in a manufacturing industry, whereas the risk of a major injury is two and a half times higher. India has the world's highest accident rate among construction workers, according to a recent study by the International Labour Organization (ILO) that cited one survey by a local aid group showing that 165 out of every 1,000 workers are injured on the job. Construction workers are not the only sufferers of accidents but also the public including children are affected. These accidents diminish the image of the construction industry, and as a result there is shortage of skilled labour. In the past few decades, need for safety awareness among construction industries was realized. This is due to the high cost associated with work related injuries, workers compensation, insurance premium, indirect costs of injuries, and litigation. Every year, a considerable amount of time is lost due to work related health issues and site accidents. There are several factors responsible for health problems and construction site accidents. From the result of Occupational Safety and Health Administration examination on the causes of construction fatalities, it was shown that 39.9% of fatalities in construction were caused by falls, 8.4% were struck by objects,

1.4% was caughtin between incidents, and 8.5% wereelectrocution.



Project Safety Park – As per standard practice



Project Safety Park – As per standard practice



Medical Centre at Site – As per standard practice



Safety Facilities at Site – As per standard practice



Safety Induction Room at Site – As per standard practice



Safety Induction Room at Site – As per standard practice

## II. SECURITY REQUIREMENTS

We prepare a photo identification badge for each employee, including those of subcontractors, working at site in different colors. Different badges shall be prepared for visitors, suppliers' employees, truck drivers and delivered at the entrance Gate as a gate pass. Every employee of SPCPL, all subcontractor employees, and all materialsuppliers' employees, who require access to the site of the work for any reason and for any length of time, shall wear these badges as a site access pass and keep worn as long as they are at the site.

It also allows site management to quickly and easily track what resources are on site on a day to day basis. It is a good practice from both a Health & Safety and logistics perspective to keep the pedestrian access and vehicular access for deliveries completely segregated. SPCPL shall hire an adequate number of Security Guards employed at Gates to deliver the temporary badges and Vehicle Pass, and at the stock areas and construction site.

All vehicles shall be controlled at gates. Dust control shall be provided by the Contractor by watering

through tanker vehicles regularly as agreed with the Employer’s Representative.



Dust Control at Site – Wash Bay as per standard practice

### III. CONCRETE PLANT

Concrete will be procured from External RMCs, which is located nearby to the site.

The Mix design for the external RMC will be approved from the client/consultants, before procuring to the site.

### IV. SITE BARRICADING

SPCPL, before starting the work, shall provide and maintain wherever required barricading as per the contract and shall remove them after the completion of the work.



Project Site Barricading



Project Site Barricading

The barricading will be designed as per the requirement and as per the organization standards which will have informatory graphics and signage and shall meet the purpose.

### V. WORKER’S CAMP SITE

Workers’ Camp shall be temporarily prefabricated buildings. SPCPL plans to construct a Camp that will include Camp Boss offices and accommodation facilities. Due to the space constraints the labor camp will be located outside the site. The following are the facilities provided at labor camp:

1. Prefab Buildings,
2. Well maintained toilets,
3. Mess, Dining room and RO plant for Drinking water,
4. Recreation areas,
5. STP for the Labor colony,
6. Full day/night security.

Few Photos are attached below showing the Labor colony of our other sites:



Workers Camp – As per standard practice



Workers Camp – As per standard practice



Facilities at Workers Camp – As per standard practice



RO Plant at Workers Camp – As per standard practice



Drinking Water Facilities – As per standard practice

## CONCLUSION

This Paper Ensuring labor safety in labor camps and implementing security requirements in construction sites are both critical aspects of fostering a secure and conducive work environment. "Guaranteeing labor safety within labor camps and adhering to stringent security measures on construction sites are paramount for the well-being of workers and the successful execution of projects. By prioritizing comprehensive safety protocols, including regular inspections, proper training, and the provision of necessary safety equipment, employers can mitigate potential hazards and promote a culture of care. Likewise, enforcing robust security measures, such as restricted access control, surveillance systems, and vigilant monitoring, safeguards against unauthorized entry and minimizes the risk of theft or vandalism. Ultimately, the synergy between prioritizing labor safety in camps and upholding security requirements on construction sites not only protects workers' welfare but also enhances overall project efficiency and success."

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