

CHAPTER-FOUR

CONSTRUCTION SAFETY

MANAGEMENT

SYSTEM



safety in construction

➤ Safety should be an agenda item at the Progress Meetings and safety issues should be discussed and recorded in their minutes.

➤ **This will include use of personal protective equipment, using only designated accesses, obeying controlled access and lockout procedures, etc.**

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- **safety management** are aimed at the recognition and elimination of hazards, the assessment and control of those accident/injuries/loss in construction industry.

The main objectives of construction safety management

- ✓ Gaining support from all concerned for the health and safety
- ✓ Motivation, education and training so that all may recognize and correct hazards
- ✓ Achieving hazard and risk control by design and purchasing policies
- ✓ Operation of a suitable inspection program to provide feedback

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- ✓ To ensure that hazard control principles from part of supervisory training
- ✓ Devising and introducing controls based on risk assessments
- ✓ Compliance with regulation and standards.
- ✓ To coordinate and achieve these objectives, the keystone is, a safety policy statement.

Planning, Implementation and Monitoring Process

The field staff should be familiar with the Safety Planning, Implementation and Monitoring process and that shall comply with the safety management when conducting their duties at construction site.

To ensure that the requirements of the Health and Safety at Work Regulations are met, employers are required to manage the introduction and operation of safety measures by:

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- Setting up planning, control and monitoring procedures
- Training and appointing competent persons on safety management.
- Establishing emergency procedures
- Carrying out regular risk assessments
- Auditing and reviewing procedures
- Disseminating health and safety information

Techniques of Accident Prevention

- The primary causes of accidents in the construction industry have been the target of safety law for many years.
- Relatively recently, legal requirements in several countries have begun to address the secondary causes as well, forcing attention to be paid to all organizational aspects of safety management.

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- Therefore, accident prevention in construction is not just a matter of setting up a list of rules and making safety inspections
- What is required is a system for managing health and safety which meets the needs of the business and complies with law.
- However, there are seven principles to be observed in setting up strategies for control & management of health and safety at work in the construction industry. If they are followed, accident prevention is more likely to be achieved.

(Allan St John Holt, BA, FOSH, RSP, "Principle of Construction Safety", foreword by Sir Frank Lampl)

Advantages of accident prevention

- ❖ To reduce human life sacrificed
- ❖ To reduce temporary and permanent Injury
- ❖ To reduce loss of materials and equipment
- ❖ To reduce cost of workman's compensation insurance
- ❖ To reduce Loss of time because of accident

seven principles safety management system

- 1) If possible, avoid a risk altogether by eliminating the hazard.....
- 2) Tackle risks at source
- 3) Adapt work to the individual when designing work areas and selecting methods of work
- 4) Adapt technical progress or use technology to improve conditions
- 5) Give priority to protection for the whole workplace rather than to individuals
- 6) Replace dangerous by non- dangerous /less dangers.
- 7) Make sure health and safety management is accepted by everyone, and that it applies to all aspects of the organization's activities

Safety management Performance Measures

Performance Measuring can enable management to:

- Identify the causal factors involved in injury and loss
- Locate areas where controls are not working adequately
- Have a basis for comparing trends
- Describe the level of safety within the organization
- Predict future safety problems
- Evaluate the success of the control program

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- Assess the costs of injuries and loses
- Maximize cost-effectiveness of decisions on the allocation of resources
- Benchmark against other similar organizations

Safety management measuring tools

1. **The counting of failures** (lost-time injuries however defined; first-aid case; property damage incidents and ‘near misses’), and
2. **Attempts at measuring the financial costs of losses** resulting from failures to control safety, health and the environment.

Duties and responsibilities of construction stakeholder of safety management in construction industry

1) Client

- ❖ Facilitate safety management
- ❖ Instigate safety management team
- ❖ Fund rising for safety management works
- ❖ Prepare health and safety plan
- ❖ Employee professionals of safety mgmnt

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2) **supervisor/engineer**

- Design safe structure/safe construction method
- Try to minimize a risk during built/maintain
- Provide adequate information on possible risk
- Cooperate with others team on prevention risk
- Help draw up the health and safety plan.
- Keep the health and safety file

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3) Contractor

- Take into account health and safety issues during tender preparation.
- Develop and implement site health and safety plan.
- Co-ordinate activities of sub-contractors to comply with health and safety legislation
- Provide information and training on health and safety issue for workers.

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- Consult with employees and self-employed persons on health and safety.
- Ensure subcontractors are adequately resourced for the work in their domain.
- Ensure workers on site are adequately trained.
- Ensure workers are informed and consulted on health and safety.
- Monitor health and safety performance.
- Ensure only authorized persons are allowed on site

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- **Display the HSE notification of the project.**
- **Exchange information on health and safety with the planning supervisor.**
- **Ensure subcontractors are aware of risks on site.**

EHS Legal and Regulatory Requirements for Construction Projects

- ✓ The **continuing role of management** is to ensure the requirements of the safety policy, which are actively carried out by managers, supervisors, and employees.
- ✓ **safety rules** are the first and important point one should consider before starting any activity.
- ✓ While performing an activity you should concentrate on your work

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- ✓ Health and safety arrangements for all persons on site or who may be affected by the construction work.
- ✓ Managing and monitoring the health and safety of construction work
- ✓ Detailed arrangements of the site welfare facilities
- ✓ Evidence of arrangements for keeping the health and safety file

Safety policy in practice

- Safety policies, as written statements of the intentions of management, acquire a quasi-legal status.
- Therefore, sight of the document will be useful when evaluating another contractor's competence
- Keeping policy simple & straightforward makes it understandable to the employees and comply with it.
- **The safety policy will refer to the manual for details on the technical points.**

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For further understanding read

❖ ILO- code of practice



safety and health in construction

❖ ILO- training manual



safety, health and welfare on
construction sites