Session1

Class 1 on Safety Requirement, Hazards, Electrical Accidents and prevention, First Aid

Performing a field survey on safety requirements, hazards, electrical accidents, and prevention, as well as first aid, involves assessing the existing safety measures, identifying potential hazards, understanding the causes of electrical accidents, and ensuring appropriate preventive measures are in place. Here's an outline for conducting a field survey on these topics:

Objective: Define the objective of the field survey, which could be to evaluate the safety requirements, identify hazards, assess the risk of electrical accidents, and review the first aid provisions in a specific location or facility.

Site Inspection:

a. Safety Equipment and Signage: Assess the presence and condition of safety equipment, such as fire extinguishers, emergency exit signs, safety showers, and eye-wash stations. Evaluate the adequacy and visibility of safety signage indicating electrical hazards, restricted areas, and emergency procedures.

b. Electrical Installations: Inspect the electrical installations, including wiring, switches, circuit breakers, transformers, and grounding systems. Identify any signs of wear and tear, improper installations, or potential electrical hazards, such as exposed wiring or inadequate grounding.

c. Work Areas and Practices: Observe the work areas and practices to identify any unsafe conditions or practices related to electrical work. Look for potential risks, such as improper storage of electrical equipment, use of damaged tools, or lack of proper personal protective equipment.

Hazard Identification:

a. Electrical Hazards: Identify potential electrical hazards, such as exposed live wires, inadequate insulation, improper grounding, overloaded circuits, or poor maintenance of electrical equipment. Pay particular attention to areas with a high risk of electrical accidents, such as switchboards, electrical panels, or confined spaces.

b. Fire Hazards: Identify potential fire hazards associated with electrical installations, such as flammable materials in proximity to electrical equipment, improper storage of combustible materials, or inadequate fire suppression systems.

c. Environmental Hazards: Assess any environmental hazards that could affect electrical safety, such as the presence of water or corrosive substances near electrical equipment or overhead power lines in close proximity to structures.

Review of Electrical Accidents:

a. Incident Reports: Review any available incident reports related to electrical accidents that have occurred in the past. Analyze the causes of these accidents to identify common factors and potential areas for improvement.

b. Interviews: Conduct interviews with relevant personnel, such as maintenance workers, electricians, or supervisors, to gather information about previous electrical accidents, near-miss incidents, and any safety concerns they have encountered.

Preventive Measures:

a. Safety Training and Procedures: Assess the availability and effectiveness of safety training programs for employees working with electrical equipment. Review the presence and adherence to safety procedures, including lockout/tagout procedures, arc flash protection, and equipment maintenance protocols.

b. Risk Assessment and Mitigation: Conduct a risk assessment to determine the probability and severity of potential electrical hazards. Identify and prioritize actions to mitigate these risks, such as implementing additional safety measures, upgrading equipment, or modifying work practices.

c. Maintenance and Inspections: Evaluate the effectiveness of routine maintenance and inspections of electrical equipment. Verify the existence of regular inspection schedules, documentation of inspections, and prompt resolution of identified issues.

First Aid Provisions:

a. First Aid Kits: Assess the availability, adequacy, and condition of first aid kits in various locations. Ensure that the kits contain appropriate supplies for treating electrical injuries, such as burn dressings, non-conductive gloves, and CPR equipment.

b. Training and Awareness: Evaluate the level of first aid training provided to employees and their awareness of the appropriate actions to take in case of electrical accidents. Review the existence of emergency response procedures and communication channels for reporting incidents.

Report and Recommendations: Document the findings of the field survey, including observations, identified hazards, and recommended actions. Prioritize the recommendations based on the severity and potential impact of the identified hazards. Prepare a comprehensive report to share with relevant stakeholders and management.

Note: Ensure the field survey is performed by qualified personnel with expertise in electrical safety. Follow all safety protocols, regulations, and guidelines during the survey. Consult local regulations and standards specific to electrical safety, hazard identification, and first aid provisions.