Scaffold - Inspection

Scaffold safety is critical in NCC T&D operations, particularly during substation construction, transmission line installation, and maintenance activities. Proper inspection of scaffolds ensures structural integrity, worker safety, and compliance with NCC T&D's HSE management system and client requirements.

General Inspection Guidelines

During a general inspection of a scaffold:

- Confirm that the scaffold has been erected in accordance with the design drawings before use.
- Identify any structural defects, such as missing parts, improperly fitted components, or inadequate materials.
- Verify that all required safeguards (e.g., guardrails, toe boards) are correctly installed.
- Ensure the scaffold's use and load correspond to its structural specifications.
- Confirm the scaffold is in good condition and has not suffered any deformation or damage.

Pre-Use Inspection Requirements

Before a scaffold is placed in service:

- Supported Scaffolds and Work Platforms: Must be inspected by a competent person designated by the project supervisor. The inspection must be documented in writing.
- Multi-Point Suspended Scaffolds: Must be inspected by a competent person or professional engineer before each use at a new location (new anchorage point).
- Suspended Platforms and Boatswain's Chairs: Must be inspected by a competent person before initial use and whenever relocated.

Periodical Inspections

- Weekly Inspections: All suspended scaffolds, platforms, and boatswain's chairs operated by mechanical power must be inspected at least once a week by a competent person.
- Environmental Considerations: If scaffolds are used in corrosive or harsh environments (e.g., coastal areas or industrial sites), the inspection frequency should be determined by a competent person to account for potential degradation.
- Record Retention: Inspection records must be maintained at the project site for the duration of the scaffold's use.

Key Components to Inspect

When inspecting scaffolds, use a checklist to ensure all critical components are evaluated. The design drawings should include a list of components to be inspected. Key areas to focus on include:

- Components: Ensure no parts are missing, defective, or incompatible with the scaffold.
- Stability:
 - >Ensure the scaffold is not overloaded and is used within its load-bearing capacity.
 - >Verify that the scaffold is properly tied and braced, especially if its height exceeds four times its base width.
 - > Check that base plates, wheels, and fittings are installed according to the manufacturer's instructions.
- Guardrails and Safeguards: Confirm that guardrails, toe boards, and other fall protection measures are securely installed.

NCC T&D Project Leaders Key Responsibilities

Project Leaders must ensure:

- Inspection Compliance: Scaffolds are inspected before use and periodically as required.
- Training: Workers and inspectors are trained on scaffold safety and inspection procedures.
- Documentation: Maintain accurate records of all inspections, including pre-use and periodic checks.
- Defect Reporting: Ensure any defects or issues identified during inspections are promptly reported and addressed.
- Rescue Planning: Develop and maintain rescue procedures for scaffold-related emergencies.



Worker Responsibilities

Workers must:

- Pre-Use Inspection: Inspect scaffolds and components before each use.
- Report Defects: Immediately report any damaged or defective equipment to their supervisor.
- Follow Training: Use scaffolds in accordance with training and safety guidelines.
- Adhere to Load Limits: Avoid overloading scaffolds and follow specified load capacities.
- Report Incidents: Immediately report any scaffold-related incidents or near-misses.

Additional Considerations for NCC T&D Projects

Given the nature of T&D wrokplaces, additional measures include:

- Environmental Factors: Consider weather conditions (e.g., wind, rain) that may affect scaffold stability.
- Electrical Hazards: Ensure scaffolds are not used near live electrical equipment unless proper precautions are taken.
- Access Planning: Ensure safe access to and egress from scaffolds.
- Emergency Preparedness: Maintain rescue equipment and procedures for scaffold-related emergencies.

Key Takeaways

- Inspection Frequency: Scaffolds must be inspected before use and periodically as per NCC T&D's HSE management system.
- Training: Workers and inspectors must be properly trained and certified.
- Documentation: Maintain all inspection records and ensure they are readily available.
- Defect Management: Address and report any defects immediately.
- Rescue Planning: Ensure rescue procedures are in place and understood by all workers.

For more information, refer to NCC T&D's relevant HSE procedures or consult the HSE Department for expert guidance and training resources.

