# North Carolina Department of Labor Division of Occupational Safety and Health

Field Information System

**OSHA** Instruction

CPL 1

CPL 2-1.23

Inspection Procedures for Enforcing Subpart L, "Scaffolds Used in Construction"

# **DISCUSSION:**

On August 30, 1996, federal OSHA promulgated a revised standard for scaffolds used in the construction industry. This Final Rule for 29 CFR 1926 Subpart L (.450, .451, .452, .453, .454 and non- mandatory Appendices A through E) was published in Federal Register Vol. 61, No. 170, pages 4602646131. The revised standard begins on page 46104. On November 25, 1996, OSHA published their first change to this new scaffold standard with a partial stay in Federal Register Vol. 61, No. 228, pages 59831-59832. These documents were adopted in North Carolina on Feb. 11, 1997 and promulgated as CFR 142 in the Field Information System. OSHA's CPL 2-1.23, dated January 7, 1997, establishes inspection procedures for enforcing Subpart L, "Scaffolds Used in Construction," 29 CFR 1926. 450454. OSHNC accepts these inspection procedures as valid and effective.

### ACTION:

The federal OSHA inspection/ enforcement procedures established by CPL 2-1.23 are now in effect for all construction activity in North Carolina, and will serve as a guideline for OSHNC compliance officers.

Please file this document in CPL Volume I of your Field Information System.

Signed on original

10/17/1997	Signed on Original
Date	Charles N. Jeffress, Director
	Division of Occupational Safety and Health

January 7, 1997

Directorate of Construction

# SUBJECT: Inspection Procedures for Enforcing Subpart L, Scaffolds Used in Construction - 29 CFR 1926.450-454.

- A. **Purpose.** This instruction establishes inspection procedures and provides clarification to ensure uniform enforcement of the scaffold standards for construction.
- B. **Scope.** This instruction applies OSHA-wide.
- C. References.
  - 1. Construction Safety and Health Standards, Subpart L, 29 CFR 1926.450, .451, .452, .453, and .454.
  - 2. OSHA Instruction CPL 2.103, the Field Inspection Reference Manual (FIRM).
  - 3. **Federal Register**, Vol. 61, No. 170, August 29, 1996, pages 46026 46131, Safety Standards for Scaffolds Used in the Construction Industry.
- D. **Cancellation.** OSHA Instruction STD 3-14.1, October 30, 1978, Citation Policy Specific Scaffold Requirements, is canceled, as are all interpretations issued prior to this date which are in conflict with the standard or the directive.
- E. **Action.** Regional Administrators and Area Directors shall ensure that the guidelines in this instruction are followed and that compliance officers are familiar with the contents of the standard.
- F. **Federal Program Change.** This instruction describes a Federal program change which affects State programs. Each Regional Administrator shall:
  - 1. Ensure that this change is promptly forwarded to each State designee using a format consistent with the Plan Change Two-way Memorandum in Appendix P, OSHA Instruction STP 2.22A, State Plans Policies and Procedures Manual (SPM).
  - 2. Explain to each State designee as requested the technical content of the change and the State designee as requested.
  - 3. Ensure that the State designees acknowledge receipt of this Federal program change in writing to the Regional Administrator when the State's intention is known, but not later than 70 calendar days after the issuance (10 days for mailing and 60 days for response). This acknowledgment must include a statement indicating whether the State will follow the guidelines in this instruction or develop alternative guidance.
  - 4. Ensure that State designees submit a plan supplement in accordance with OSHA Instruction STP 2.22A, CH-3, as appropriate, following the established schedule that is agreed upon by the State and Regional Administrator to submit non-field Operations Manual/OSHA Technical Manual Federal program changes.
    - a. The State plan supplement should be in the form of a State directive or policy/procedure document, which details procedures for implementing the safety guidelines in the State.
    - b. The State's acknowledgment of the Plan Changes Two-Way Memorandum may fulfill the plan supplement requirement if the appropriate documentation is provided.

- 5. The Regional Administrator shall review policies, instruction and guidelines issued by the State to determine that this change has been communicated to the State.
- G. **Effective Date.**, The effective date for the Scaffold Standard is November 29, 1996, exc1. 1926.453(a)(2) will not take effect until an OMB control number will have been received and displayed for this "collection of information." The National Office will inform the Regional Administrators when clearance is received. 2. 1926.451(e)(9) and 1926.451(g)(2) are delayed until September 2, 1997.
- H. **Background.** The Occupational Safety and Health Administration has issued a revised standard for Scaffolds Used in the Construction Industry (Subpart L to 29 CFR 1926).
  - 1. On November 25, 1986, OSHA issued a notice of proposed rulemaking on scaffolds (51 FR 4268). The comment period was extended or reopened several times (most recently closing on March 18, 1994) and OSHA convened an informal public hearing on March 23, 1988 (53 FR 2048, January 26, 1988).
  - 2. Proposed Subpart L was reviewed by the Advisory Committee on Construction Safety and Health (ACCSH). Many of the revisions made to the proposal reflect recommendations from ACCSH and from other interested parties.
  - 3. The final rule resolves many issues raised in earlier attempts to regulate this activity within the construction industry. a. This rule establishes one set of requirements which is applicable to all scaffolds used in construction, except that 1926.451 does not apply to aerial lifts (covered by 1926.453). b. Where provisions of Subpart L are intended to cover only one type of scaffold, the final rule makes that clear.
  - 4. Any questions involving enforcement, including compliance concerns raised by employers, should be promptly reported to the Office of Construction Standards and Compliance Assistance at (202) 219-7207

### I. Overview of Subpart L - Scaffolds

- 1. Paragraph (a) of 1926.450 states that this standard does not apply to Crane- or Derrick-Suspended Personnel Platforms.
  - a. The standards applicable to aerial lifts are set out **exclusively** in 1926.453.
  - b. Paragraph (b) of 1926.450 provides definitions for particular terms used in Subpart L.
- 2. Section 1926.451 sets general requirements that apply to all scaffolds, with variations for some specific types of scaffolds or work situations.
  - a. The standard distinguishes between supported scaffolds (paragraph 1926.451(c)) and suspension scaffolds (paragraph 1926.451(d)).
  - b. This section references criteria in Appendix A that the qualified person may consult when designing scaffolds to meet capacity requirements.
- 3. Section 1926.452 sets additional requirements for 23 specific types of scaffolds. Section 1926.452 includes references to Appendix A, which provides technical criteria to be used by the employer in designing, installing, and loading these specified types of scaffolds and related guardrail systems.
- 4. Section 1926.453 covers requirements for aerial lifts, and refers to Non-mandatory Appendix C of the standard, which lists the consensus standards related to aerial lifts.

- a. This standard is solely a renumbering of the previous standards for aerial lifts to bring them under Subpart L and does not change substantively any requirements previously covered under 1926.556 or 1926.451(f).
- b. General requirements for scaffolds contained in 1926.451 do not apply to aerial lifts covered by 1926.453.
- c. Compliance with the pertinent ANSI A92 standard for any of the newer, specialized types of equipment (as listed in Non-mandatory Appendix C) will provide employee protection equivalent to that provided through the application of ANSI A92.2-1969, which is referenced in 1926.453.
- 5. Section 1926.454 covers training requirements and refers to Non-mandatory Appendix D for additional information related to training for employees engaged in the erecting and dismantling of scaffolds.
- 6. The appendices, which are non-mandatory, provide important compliance guidance, examples of acceptable measures, and specific information for the compliance officer's and the employer's understanding of Subpart L.
- J. Compliance Guidelines for Significant General Issues In Subpart L. The following information provides guidance that will aid in understanding the overall requirements in the revised standard for scaffolds.
  - 1. **Competent Person.** Although Subpart L provides employers with flexibility in the design of scaffolds and the selection of fall protection, the employer is required to have a competent person who has the training and experience necessary to make determinations as to fall protection, integrity of scaffolds and that the scaffold is maintained and used in a safe manner. NOTE: OSHA recognizes that an employer may have more than one competent person on the worksite to deal with different aspects of scaffolding.
    - a. The compliance officer shall determine the identity of the competent person and assess the training and experience qualifications of that person at an early stage of any inspection.
    - b. Appendix A of this directive provides guidance for the compliance officer and the employer in evaluating compliance with requirements pertaining to competent person and qualified person responsibilities.
  - 2. Safe Access and Fall Protection During the Erection and Dismantling of Supported Scaffolds. (NOT EFFECTIVE UNTIL SEPTEMBER 2, 1997.) The prior standard did not require that employers provide safe access and fall protection during erection or dismantling operations.
    - a. OSHA recognizes that compliance may not be feasible during certain scaffold erection and dismantling operations. However, employers will be required to determine at each stage of erection and dismantling if safe access and fall protection can be provided and, if so, to comply with the pertinent requirements.
    - b. The employer has the responsibility to evaluate whether providing access and fall protection for employees is feasible and safer (i.e., does not create a greater hazard.)
      - (1) A competent person who has the knowledge and experience necessary must be used to make the appropriate determination.

- (2) This evaluation shall include a determination whether, alternatively, partial compliance may be feasible and safer under the circumstances present at the site.
- c. Provisions for safe access during erecting and dismantling of supported scaffolds are contained in 1926.451(e)(9).
  - (1) Failure of the employer to have the operation initially evaluated by a competent person or failure to use fall protection during erecting and dismantling when it is feasible and safer to do so is a violation of 1926.451(g)(2).
  - (2) The CSHO shall document specific worksite factors and compliance considerations encountered by the competent person when evaluating the feasibility of providing safe access or fall protection during these operations for use in developing and updating Appendix B.
- d. The CSHO shall ascertain whether employees engaged in erecting and dismantling scaffolds have been trained in these activities and in the hazards specific to the types of scaffolds involved. Training guidelines are addressed in Appendix D of the standard.
- 3. **Fall Protection Requirements.** Fall protection is required for employees when working 10' or more above the next lower level.
  - a. The employer has the option, in many instances, of providing a guardrail system or of having each employee use a personal fall arrest system. Exceptions are provided in 1926.451(g)(1)(i) through (vi), and are discussed below.
  - b. Fall protection must be provided on all supported and suspended scaffolds.
    - (1) In most instances on supported scaffolds, this will be a guardrail system.
    - (2) However, there may be some unique situations in which a personal fall arrest system may be necessary on a supported system. In such cases the requirements in section 1926.502 for safe anchorage of the system must be met.
  - c. For some types of scaffolds (such as single-point or two-point adjustable suspension scaffolds), both a guardrail system and personal fall protection are required.
  - d. On some types of scaffolds, only personal fall arrest systems are required (catenary, float and needle beam scaffolds, boatswains' chairs, roof bracket scaffolds and ladder jack scaffolds). Therefore, the employer must provide personal fall arrest systems for fall protection on these types of scaffolds.
  - e. When employees are installing suspension scaffold support systems employers must provide fall protection meeting the requirements of Subpart M Fall Protection.
  - f. The fall protection to be provided for employees working on aerial lifts will vary according to the type of aerial lift involved.
    - (1) Some lifts are intended to be used with guardrails, while others are designed to be used by employees protected by personal fall arrest systems.

- (2) The consensus standards listed in Non-mandatory Appendix C indicate what fall protection would be appropriate for particular types of aerial lifts.
- K. Inspection Guidance and Compliance Procedures for Selected Scaffold Requirements. This section highlights changes from the previous scaffold standard and clarifies certain issues to assist in compliance with Subpart L.
  - 1. Capacity Requirements -- 1926.451(a).
    - a. Paragraph (a)(1) states that the scaffold must be capable of supporting four times the maximum **intended** load (not the rated load).
      - (1) The intended load includes all personnel, equipment, and supply loads.
      - (2) The intended load will often be less than the rated load but should never exceed the rated load unless such design is approved by an engineer and the manufacturer.
      - (3) The requirement not to overload the scaffold is found in subparagraph .451(f)(1).
    - b. Paragraph (a)(2) requires that direct connections and counterweights used to balance adjustable suspension scaffolds be capable of resisting at least four times the tipping moment of the scaffold, including stall loads.
      - (1) CSHO's are not expected to perform these calculations in the field but shall ensure that the competent person directing the rigging of the suspended scaffold has performed them.
      - (2) The competent person's duty to supervise and direct the rigging of the scaffold is set out in 1926.451(f)(7).
      - **NOTES:** 1. The stall load of the suspension hoist equipment referenced in 1926.451(a)(2), (4) and (5) means the load at which the hoist motor of a power-operated hoist stalls or automatically disconnects its power when overloaded or obstructed.
      - 2. If the stall load (not to exceed 3 times the rated load) is not listed or labeled for the scaffold in use, the CSHO shall determine whether
        - (a) The qualified person has determined the stall load of the scaffold hoist prior to the lift or
        - (b) The scaffold is counter-balanced by at least 4 times the rated load of the hoist.
    - c. Paragraph 1926.451(a)(6) requires that scaffolds be designed by a qualified person. This requirement is discussed in depth in Appendix A of this Instruction. Information to assist the employer in complying with capacity requirements is also contained in Appendix A of the standard.

### 2. Scaffold Platform Construction -- 1926.451(b)

a. Paragraph (b)(1) allows exceptions to the full planking of platforms but requires that the platform be planked or decked "as fully as possible." Employers may leave an opening between uprights and planking but the opening may not exceed 9 1/2 inches.

- b. Paragraph (b)(2) requires that scaffold platforms be at least 18" wide, but exceptions are provided in paragraphs (b)(2)(i) and (ii).
- c. Paragraph 1926.451(b)(11) is meant to ensure that dissimilar metal components that could cause galvanic action are not used together at the job without evaluation by the competent person.
  - (1) If the competent person believes that significant galvanic action may result from the use of dissimilar metal components and that this galvanic reaction can reduce the strength of any scaffold component to below the requirements of subpart L, corrective action must be taken promptly.
  - (2) If the competent person cannot make this evaluation, scaffold parts of dissimilar metals cannot be used. The competent person may, of course, rely upon the manufacturer's recommendations.

# 3. Criteria for Supported Scaffolds -- 1926.451

- a. Paragraph (c)(1) requires vertical and horizontal tie-ins on all supported scaffolds with a height to base ratio of more than four times the minimum base width.
  - (1) Vertical and horizontal tie-ins are to be installed to keep a scaffold from falling into and away from the structure.
  - (2) Scaffold tie-ins, as with all other scaffold component designs, must be designed by a **qualified** person to keep the scaffold steady and capable of resisting pushing and pulling forces created by wind and load conditions.
- b. Paragraph (c)(2) requires the use of both base plates **and** mud sills or other adequate firm foundations.
  - (1) Base plates are always required.
  - (2) However, a concrete slab would be considered a firm foundation, and therefore, mud sills would not be necessary.
- c. Paragraph (c)(2)(iv) states that front-end loaders and similar type equipment may not be used to support scaffolds, **unless** specifically designed by the manufacturer for such use. The CSHO may ask the employer to produce the manufacturer's literature demonstrating that the equipment has been designed for this use.
- d. Paragraph (c)(2)(v) provides that fork lifts may only be used if the entire platform is attached to the forks. "Attached" does not mean merely placing the platform on the forks. A positive means of attachment, such as bolting, must be present.
- e. When these types of equipment are used to support scaffolds, all other requirements of 1926.451 (capacity, construction, access, use and fall protection, etc.) must be met. NOTE: These types of equipment are not considered aerial lifts unless the employer can demonstrate that they are primarily designed and used to position personnel **and** they meet all other requirements for aerial lifts.

#### 4. Criteria for Suspension Scaffolds -- 1926.451(d)

- a. Paragraph (d)(3)(ii) prohibits the use of flowable material as counterweights, such as sandbags or water buckets, which are easily displaced or may leak. Solid materials, such as large blocks of concrete specifically designed for use as counterweights, or large ingots of metal (such as lead) are examples of acceptable counterweights.
- b. The use of 3/4" inch manila rope or equivalent as a secondary means of anchorage is no longer acceptable. See (d)(3)(vii).

#### 5. Access -- 1926.451(e)

- a. Under paragraph (e)(1) the use of cross bracing as a means of access is prohibited.
- b. The revised standard does not specifically prohibit climbing over or through a guardrail.
  - (1) There is no consensus with regard to climbing over or through guardrails; therefore, OSHA has not adopted a rule prohibiting the practice.
  - (2) Gates, removable rails or chains across the point of access are preferred.
- c. 1926.451(e)(1) and (e)(8) both address direct access.
  - (1) Paragraph (e)(1) addresses vertical access, and paragraph (e)(8) addresses direct access both vertically and horizontally.
  - (2) Compliance officers should cite (e)(1) when the direct access is more than 24 inches away vertically and (e)(8) when direct access is more than 14 inches away horizontally.
- d. 1926.451(e)(2) is not intended to require the use of ladder climbing devices or cages on scaffolds.
- e. 1926.451(e)(5) requires that ramps and walkways 6 feet or more above a lower level shall have guardrail systems which comply with subpart M.
- f. See paragraph K.7.b. of this instruction for walkways which are located within the framing of scaffold units.

#### 6. Use of Scaffolds -- 1926.451(f).

- a. Paragraph (f)(7) requires that the employer ensure that a competent person having the required training, knowledge, and experience on the type of scaffold system used, **is at the site** directing and supervising the work during all erecting, dismantling, alteration, and moving of the scaffold.
- b. Employees engaged in this activity must also be trained in accordance with 1926.454 and selected by the competent person.
- c. Paragraph (f)(15) allows the use of ladders only on "large area scaffolds."

  Ladders may not be used on other types of scaffold platforms to increase the working height.
- d. Paragraph (f)(16) is intended to apply only to wood scaffold planks.

# 7. Fall Protection -- 1926.451(g)

a. 1926.451(g)(1)(iv) requires personal fall arrest systems in addition to guardrail systems for employees whenever a self-contained adjustable scaffold is

- supported only by ropes with no safety catch to support the platform in the event of rope failure. The standard applies whenever the platform is at a work level or is being raised or lowered.
- b. Under paragraph (g)(1)(v), walkways which are within a scaffold, such as inside the frame of a fabricated frame scaffold, have to be guarded on at least one side of the walkway, and the guardrail system must be within 9 1/2" of the walkway. (See paragraph K.5.d. above for walkways which are not an integral part of the scaffold.)
- c. Paragraph 1926.451(g)(3) permits lanyards attached to personal fall arrest systems to be attached to vertical lifelines, horizontal life lines or scaffold structural members.
  - (1) This decision is at the discretion of the competent person.
  - (2) If the lanyard is attached to a supported scaffold structural member, the scaffold must be properly braced and tied-in to the structure before being used as an anchorage point and must meet the requirements of 1926.502(d), which defines the criteria for anchorage points and other components of a personal fall arrest system.
- d. Paragraph (g)(4) covers criteria for guardrail systems and components. Appendix A of the standard provides specifications for certain types of scaffolds, to assist in determining whether the guardrails meet the strength requirements of the standard.
- e. Paragraph (g)(4)(ii) covers the required minimum and maximum height of the top rails.
  - (1) Note that the requirements for top rail height of guardrails on supported scaffolds have been changed from 36 to 45 inches to between 38 to 45 inches. However, this new provision applies only to scaffolds manufactured or placed into service after January 1, 2000.
  - (2) Also, for platforms where personal fall arrest systems are required as the primary type of fall protection, such as for suspended systems, the top rail minimum height remains at 36 inches. As with subpart M, guardrail toprails can exceed 45 inches only if all other pertinent provisions of 1926.502(b) are followed.
- f. While the previous standard was silent on the use of cross bracing for guard rails, paragraph (g)(4)(xv) states that cross bracing is acceptable in place of either the top rail or the midrail on a scaffold system, **but not both**, when the crossing point is at the specified height.

#### 8. Falling Object Protection -- 1926.451(h)

- a. Paragraph (h)(1) clarifies that hard hats shall not be the sole means of protecting employees from overhead falling objects.
- b. The use or non-use of hard hats by employees shall be documented by compliance officers whenever it could affect the gravity of a violation of this standard, for failure to institute any of the additional protective measures mandated.

# 9. Additional Requirements for Specific Types of Scaffolds -- 1926.452

a. Item 2(z) of Appendix A provides guidance regarding the use of tank builder's scaffolds, a type of scaffold which is covered only by the general requirements of 1926.451, and which has no additional specific provisions within 1926.452.

#### 10. Aerial lifts -- 1926.453

- a. Paragraph 1926.453(b)(2)(v) requires a body belt and lanyard attached to the boom or basket. As of January 1, 1998, Subpart M (1926.502(d)) provides that body belts will no longer be acceptable as part of a personal fall arrest system.
- b. The use of a body belt in a tether system (i.e., to keep the employee from going over the guardrail) is acceptable, however, and is regulated under 1926.502(e).

### 11. Training Requirements -- 1926.454.

- a. In accordance with paragraph (a), each employee working on a scaffold must be trained regarding the requirements of Subpart L that are associated with the type of work that employee is performing. Specifically, training in associated hazards, methods of protection, and the maximum intended load and load-carrying capacities of the scaffold must be included, as applicable.
- b. Training is particularly important for employees engaged in erecting and dismantling operations. Paragraph (b) specifies the training needed for those employees.
  - (1) Non-mandatory Appendix E of Subpart L provides specific training topics for employees engaged in erecting and dismantling scaffolds.
  - (2) The CSHO shall interview those employees engaged in erecting and dismantling operations to ascertain whether they have received the necessary training required under 1926.454(b)(1)-(4).
- c. The standard does not specify criteria for training employees who have responsibilities as a competent person.
  - (1) If the compliance officer determines that an employee (or management official) who has been serving in the capacity of a competent person does not have the necessary knowledge to carry out those responsibilities, violations of the requirements addressing specific competent person duties under Sections 451 and 452 of Subpart L would also exist.
  - (2) Refer to **Appendix A** of this Instruction for additional guidance in assessing the capabilities of the competent person.
- d. Section 1926.454 does not require certification, or other documentation, of training. Compliance officers shall evaluate compliance with the training requirements through observation of work practices, inspections of rigging, correct utilization of scaffold equipment, and interviews with employees and management representatives.
- e. If training has been conducted but employees do not understand or are not adhering to the requirements of Subpart L, a violation of 454(c), which requires retraining to maintain proficiency, may exist.

# APPENDIX A COMPETENT/QUALIFIED PERSON

Under the scaffold standards, "competent persons" and "qualified persons" have specified responsibilities. This Appendix summarizes the provisions in Subpart L using those terms.

## I. Competent Person.

- A. **Definition.** "Competent person" is defined at 29 CFR 1926.450(b) as one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. 29 CFR 1926.450(b).
  - 1. A competent person must be knowledgeable about the requirements of this standard and have sufficient training or knowledge to identify and correct hazards encountered in scaffold work.
    - a. For the purposes of this Subpart, a competent person must have had specific training in and be knowledgeable regarding the structural integrity of scaffolds and the procedures needed to maintain them.
    - b. For example, a competent person must be able to evaluate the effects of such potentially damage-causing occurrences as a dropped load or a truck backing into a support leg.
  - 2. By definition, the competent person must have the authority to take prompt corrective measures to abate potentially hazardous work site conditions. The exercise, or lack thereof, of this authority may frequently be the deciding factor in assessing whether a particular individual is in fact a competent person under Subpart L.

# **B.** Duties of the Competent Person.

- 1. 29 CFR 1926.451(b)(10). Only a competent person can permit the modification of scaffold components manufactured by different manufacturers when they are used in conjunction with each other, and must ensure that the resulting scaffold is structurally sound.
- 2. 29 CFR 1926.451(b)(11). Scaffold components made of dissimilar metals are not to be used together unless a competent person has determined that galvanic action will not reduce the strength of any component to a level below that which is required by 1926.451(a)(1), i.e., capable of supporting, without failure, its own weight and at least four times the maximum intended load applied or transmitted to it.
- 3. These two preceding provisions reflect that, unless adequate precautions are taken, an unsafe condition could be created by the intermingling of differing scaffold components, or by the occurrence of galvanic action. a. If scaffold components of different manufacturers or of different metals are used together, the competent person must carefully evaluate the scaffold to ensure structural soundness and the absence of galvanic action. b. OSHA expects a competent person to be able to identify the causes and significance of any deterioration present in scaffold components and take the necessary corrective actions. c. With respect to both these issues, the manufacturer's recommendations should be reviewed and may be relied upon by the competent person.

- 4. 29 CFR 1926.451(d)(3)(i) requires that direct connections on suspension scaffolds be evaluated by a competent person before the scaffold is used to confirm that the surfaces are capable of supporting the loads to be imposed. a. OSHA anticipates that compliance with this provision will ensure that roof or floor decks are capable of supporting the loads to be imposed as well as ensuring that those connections are properly designed and made. b. The competent person must have the ability to identify any problems with the direct connections and the authority to make any necessary corrections.
- 5. 29 CFR 1926.451(d)(10) requires the competent person to inspect all ropes used in suspension scaffolds for defects prior to each work shift and after every occurrence which could affect a rope's integrity.
  - a. Paragraph (d)(10) goes on to require the replacement of damaged, kinked, or abraded rope, as well as to specify other conditions requiring replacement.
  - b. This paragraph adopts the ANSI standard provisions describing damaged and defective rope as representing good industry practice. See ANSI A10.8-1988, Par. 6.7.10.
- 6. 29 CFR 1926.451(d)(18). A competent person is also required to evaluate multipoint suspension scaffolds to determine whether they need to be tied or otherwise secured to prevent them from swaying.
- 7. 29 CFR 1926.451(e)(9)(i). For employees erecting or dismantling supported scaffolds, a competent person will have to determine the feasibility and safety of using a "safe means of access," based on, for example, site conditions and the type of scaffold being erected or dismantled.
  - a. OSHA has determined that, while there may be some situations where providing safe access for scaffold erectors and dismantlers is difficult, employers who carefully evaluate their scaffold operations can provide safe access or, at least minimize employee exposure to hazards.
  - b. The competent person, therefore, will be expected to determine the appropriate means of access for erectors/dismantlers based on a site-specific analysis of the workplace conditions.
- 8. 29 CFR 1926.451(f)(3). The competent person is also required to inspect the scaffold and its components for visible defects before each work shift and after any occurrence which could affect the scaffold's structural integrity.
  - a. However, on very large frame systems, the inspection is only required for areas to be used that work shift by employees.
  - b. The standard does not require that the competent person document the inspection findings.
- 9. In addition, 29 CFR 1926.451(g)(4)(xiv) requires that any manila or synthetic rope being used for top rails or midrails be inspected by the competent person as often as necessary (daily and/or prior to use) to ensure that it continues to meet the strength requirements of 29 CFR 1926.451(g).
- 10. 29 CFR 1926.451(f)(7). A competent person qualified in scaffold erection, moving, dismantling or alteration is required to supervise and direct all scaffold erection, moving, alteration or dismantling activities.

- a. Such activities are to be performed only by trained and experienced employees selected by the competent person.
- b. The standard makes clear that, for these activities, the competent person must actually be on site and directing the work.
- 11. 29 CFR 1926.451(g)(2). For each scaffold erection and dismantling operation, the competent person will have to determine the feasibility of providing fall protection.
  - a. Employers must provide fall protection to scaffold erectors and dismantlers unless there are valid reasons not to.
  - b. The standard does not require that these reasons be documented.
  - c. Compliance officers shall evaluate the employer's claims of infeasibility or greater hazard and document on-site observations and interviews with the competent person and other affected workers relating to any such claim.
- 12. 29 CFR 1926.451(f)(12). During storms or high winds, work on or from scaffolds is prohibited unless a competent person has determined that it is safe and that employees on the scaffold are protected by a personal fall arrest system or wind screens. High winds are any wind conditions that adversely affect the stability of the scaffold or the safety of the employees. Rather than setting a specific wind speed limit, the standard directs the competent person, after analysis of all pertinent information, to ensure that the scaffold is safe under high wind conditions, that protective measures have been instituted, and that work may safely be done from the scaffold.

# C. Compliance Issues for Competent Persons.

- A CSHO's determination of the employer's compliance with requirements involving a competent person will involve judgments on complex issues. The compliance officer must evaluate all the factors associated with competent person requirements.
- 2. The duties of the competent person may be shared among several individuals.
  - a. However, each must possess the qualifications related to his or her area of responsibility, and each must have the ability and authority to take corrective action.
    - (1) For example, an individual designated as the competent person for the erecting of the scaffold might not be the same individual who inspects the scaffold before each work shift.
    - (2) Also, different individuals may be designated competent persons depending on the type of scaffold used. b. An individual who has competent person responsibilities for supported scaffolds would not need to have knowledge of requirements related to suspended scaffolds on the work site, if another individual were assigned those responsibilities.
- 3. The employer may rely on the expertise of persons who are not employees, such as consultants and scaffold systems representatives, to design, erect and dismantle scaffolds.

- a. This may be acceptable if that individual actually supervises the work being done and has authority to correct hazards. Additionally, contractors on a multi-employer site may rely on employees of the general contractor or another subcontractor to fulfill competent person responsibilities, if all the qualification criteria are met.
- b. The compliance officer would need to determine whether, for the specific site and operation in question, the employer has effectively complied by designating another employer's employee as the competent person.
- 4. When more than one employer erects and uses a scaffold, the compliance officer will need to determine who the controlling and exposing employers are and document factors related to OSHA's multi-employer citation policy.
  - a. The compliance officer must exercise professional judgment in these situations and a variety of case-by-case factors will need to be considered.
  - b. Information contained in the general contractor's and the subcontractors' safety programs and contract requirements, as well as copies of safety meeting minutes, written correspondence between contractors, and employer and employee interviews will be helpful in determining responsibility for violations.

#### D. Qualified Person.

A. **Definition** A "qualified" person means "one who, by possession of a recognized degree, certificate, or professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project". 29 CFR 1926.450(b).

#### **B.** Duties

- 1. Section 29 CFR 1926.451(a)(6) requires that scaffolds be designed by a qualified person. Non-mandatory Appendix A contains examples of criteria to guide an employer in designing scaffold systems. With certain exceptions carried over from the previous rule, the qualified person designing the scaffold need not be an engineer. Those exceptions are found in the following provisions:
  - a. 1926.451(d)(3)(i). Scaffold connections for masons' adjustable multi-point suspension scaffolds must be designed by an engineer "experienced in such scaffold design."
  - b. 1926.452(a)(10), (b)(10), (i)(8). Pole scaffolds over 60', tube and coupler scaffolds over 125', and outrigger scaffolds must be designed by a "registered professional engineer" and constructed and loaded in accordance with that design. Appendix A of the standard contains examples of criteria that will enable the employer to comply with the design and loading requirements.
  - c. 1926.452(c)(6). Fabricated frame scaffolds over 125 feet in height above their base plate must be designed by a "registered professional engineer" and constructed and loaded in

accordance with that design. In addition, brackets used to support cantilevered loads on such scaffolds shall be used only to support personnel unless the scaffold has been designed for other loads by a "qualified engineer" and is built to withstand the tipping forces generated by such loads. See 29 CFR 1926.452(c)(5)(iii).

- 2. Other designs required by a qualified person include the following:
  - . 29 CFR 1926.452(o)(2)(i) requires the supporting rope on single-point adjustable suspension scaffolds be kept vertical unless, among other requirements, the rigging has been designed by a qualified person.
  - a. 29 CFR 1926.452(p)(1) requires that platforms on two-point adjustable suspension scaffolds (swing stages) shall not be more than 36 inches wide unless designed by a "qualified" person to prevent unstable conditions. NOTE: Paragraph (p)(1) does not apply to two-point adjustable suspension scaffolds used as masons' or stone setters' scaffolds. See 29 CFR 1926.452(q).
  - b. 29 CFR 1926.454(a) requires the employer to have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards.

Joseph A. Dear Assistant Secretary

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