

**VOSH PROGRAM DIRECTIVE: 12-254E**

**ISSUED: January 9, 2020**

**Subject**

**Cranes and Derricks in Construction, §§ 1926.1400 through 1926.1442**

**Purpose**

**CHANGE VII:** This change updates the standard for cranes and derricks in construction by clarifying each employer's duty to ensure the competency of crane operators through training, certification or licensing and evaluation. This change also alters a provision that required different levels of certification based on the rated lifting capacity of equipment.

**CHANGE VI:** This change extends for an additional year the employer duty to ensure crane operator competency for construction work and the date for requiring crane operator certification in §1926.1427(k).

**CHANGE V:** This change extends for an additional three years the employer duty to ensure crane operator competency for construction work and the date for crane operator certification to November 10, 2017.

**CHANGE IV:** This change transmits the revised exemption for digger derricks in the Cranes and Derricks in Construction Standard.

**CHANGE III:** This change clarifies employer obligations by applying a single Cranes and Derricks Standard to all construction work, including demolition and underground construction projects.

**CHANGE II:** This change brings all crane and derrick use in construction work under new Subpart CC of Part 1926 and corrects errors in the final rule that substantively altered the demolition and underground construction provisions, and restores subparagraphs §1926.800(t)(1) through (4).

**CHANGE I:** This Directive transmits to field personnel federal OSHA's revised final rule on Cranes and Derricks in Construction, and other related standards.

*This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program.*

**Certification**

This Program Directive is considered to meet the definition of "guidance document" contained in a §2.2-4101 of the Code of Virginia: "any document developed by a state agency or staff that provides information or guidance of general applicability to the staff or public to interpret or implement statutes or the agency's rules or regulations, excluding agency minutes or documents that pertain only to the internal management of agencies."

Notwithstanding the issuance date of this Program Directive, and in accordance with §2.2-4002.1.B of the Code of Virginia, this Program Directive has been or will be subject to a 30-day public comment period, to include public comment through the Virginia Regulatory Town Hall website, after publication in the Virginia Register of Regulations and prior to its

effective date.

Notwithstanding the issuance date of this Program Directive, and in accordance with §2.2-4002.1.C of the Code of Virginia, if a written comment is received during a public comment period asserting that the guidance document is contrary to state law or regulation, or that the document should not be exempted from the provisions of this chapter, the effective date of the guidance document by the agency shall be delayed for an additional 30-day period. During this additional period, the agency shall respond to any such comments in writing by certified mail to the commenter or by posting the response electronically in a manner consistent with the provisions for publication of comments on regulations provided in this chapter. Any person who remains aggrieved after the effective date of the final guidance document may avail himself of the remedies articulated in Article 5 (§ 2.2-4025 et seq.).

**Scope**

This directive applies to all VOSH personnel.

**Cancellation**

CHANGE VII: VOSH Program Directive 12-254D (1 May 2018);  
CHANGE VI: VOSH Program Directive 12-254C (15 January 2015);  
CHANGE V: VOSH Program Directive 12-254B (01 November 2013);  
CHANGE IV: VOSH Program Directive 12-232A (01 March 1994);  
CHANGE III: VOSH Program Directive 12-254A (01 February 2013);  
CHANGE II: VOSH Program Directive 12-254 (01 April 2011)

**References**

CHANGE VII: 83 FR 56198 (9 November 2018)  
CHANGE VI: 82 FR 51986 (9 November 2017)  
CHANGE V: 79 FR 57785 (26 September 2014)  
CHANGE IV: 78 FR 32116 (29 May 2013)  
CHANGE III: 78 FR 23837 (23 April 2013)  
CHANGE II: 77 FR 49722 (17 August 2012)  
CHANGE I: 75 FR 47906 (09 August 2010)

**Effective Dates**

CHANGE VII: 9 January 2020  
CHANGE VI: 15 February 2018  
CHANGE V: 15 February 2015  
CHANGE IV: 01 November 2013  
CHANGE III: 01 November 2013  
CHANGE II: 01 January 2013  
CHANGE I: 01 April 2011

**Action**

Directors and Managers shall ensure that VOSH field personnel understand and enforce the revised standard transmitted by this Directive.

**Expiration Date**

Not Applicable – remains in effect until cancelled or superseded.

*C. Ray Davenport*  
Commissioner

Distribution: Commissioner of Labor and Industry  
Assistant Commissioner  
VOSH Directors and Managers  
Legal Support & OIS Staffs

Cooperative Programs Manager  
VOSH Compliance & Cooperative Programs Staff  
OSHA Region III & Norfolk Area Offices

Attachments: **CHANGE VII:** 83 FR 56198 (9 November 2018)  
<https://www.osha.gov/sites/default/files/laws-regs/federalregister/2018-11-09.pdf>

CHANGE VI: 82 FR 51986 (9 November 2017)  
<https://www.osha.gov/sites/default/files/laws-regs/federalregister/2017-11-09.pdf>

CHANGE V: 79 FR 57785 (September 26, 2014):  
<https://www.federalregister.gov/articles/2014/09/26/2014-22816/cranes-and-derricks-in-construction-operator-certification>

CHANGE IV: None. 78 FR 32116 (May 29, 2013)  
[http://www.osha.gov/FedReg\\_osea\\_pdf/FED20130529.pdf](http://www.osha.gov/FedReg_osea_pdf/FED20130529.pdf)

CHANGE III: None. 78 FR 23837 (April 23, 2013)  
[http://www.osha.gov/FedReg\\_osea\\_pdf/FED20130529.pdf](http://www.osha.gov/FedReg_osea_pdf/FED20130529.pdf)

CHANGE II: None. 77 FR 49722 (August 17, 2012)  
[http://www.osha.gov/FedReg\\_osea\\_pdf/FED20120817A.pdf](http://www.osha.gov/FedReg_osea_pdf/FED20120817A.pdf)

CHANGE I: None. 75 FR 47906 (09 August 2010)  
[http://www.osha.gov/FedReg\\_osea\\_pdf/FED20100809.pdf](http://www.osha.gov/FedReg_osea_pdf/FED20100809.pdf)

## I. **Background**

**CHANGE VII:** In 1979, OSHA published 29 CFR 1926.550, which specified requirements for crane and derrick operation that were adopted from existing consensus standards. However, crane incidents continued to be a significant cause of injuries and fatalities in the construction industry over the next few decades.

In 2003, OSHA commenced rulemaking by establishing a federal advisory committee, the Cranes and Derricks Negotiated Rulemaking Advisory Committee (C-DAC), to develop a proposal through consensus (see OSHA-S030-2006-0663-0639). C-DAC met eleven times between July 30, 2003, and July 9, 2004, and produced a consensus document that OSHA proposed for comment. OSHA's proposal included a requirement for operator certification by "type and capacity" of the equipment in lieu of the previous general requirement that employers ensure their operators were competent to operate the machinery.

OSHA published its proposal on October 9, 2008 (73 FR 59714). On November 8, 2010, the final rule, including requirements for crane operator certification, became effective. The original date by which all operators were to be certified was November 10, 2014, but OSHA subsequently extended that date to November 10, 2017 (79 FR 57785 (September 26, 2014)) and then further extended it to November 10, 2018 (82 FR 51986 (November 9, 2017)). Prior to the amendments to the standard contained in this current final rule, the separate employer duty to evaluate operators was to cease on the date when operator certification was required.

On March 19, 2019, the Safety and Health Codes Board adopted federal OSHA's Code of Federal Regulations (CFR) Amendments to Operator training, certification, and evaluation, §1926.1427 and Training, §1926.1430 of the Final Rule for Cranes and Derricks in Construction, with an effective date of May 15, 2019.

**CHANGE VI:** A majority of commenters have supported OSHA’s proposed extension of the deadline for crane operators to be certified. Most agreed that an extension was necessary to give OSHA time to address the issues regarding crane operation raised after publication of the crane standard: whether to remove capacity from the crane standard’s certification requirements and the preservation of the employer’s role in assessing operators for safe crane operation. Some commenters asked OSHA to delay the compliance date of the certification requirements in order to alleviate confusion that exists in the industry regarding the crane operator certification requirements. Granting this one-year extension will allow OSHA to continue its work with impacted parties to ensure compliance is met and clarity is achieved.

On November 30, 2017, the Safety and Health Codes Board adopted this deadline extension for an additional year for requiring Operator Certification in paragraph (k) of §1926.1427, with an effective date of February 15, 2018.

**CHANGE V:** When OSHA finalized its revision of the final rule for Cranes and Derricks in Construction (*29 CFR Subpart CC, referred to as “the crane standard” hereafter*) in 2010, it had developed the crane standard through a negotiated rulemaking process. OSHA established a Federal advisory committee, the Cranes and Derricks Negotiated Rulemaking Advisory Committee (C–DAC), to develop a draft proposed rule. C–DAC met in 2003 and 2004 and developed a draft proposed rule that it provided to OSHA. The rule that OSHA subsequently proposed closely followed C–DAC’s draft proposal (*73 FR 59718*). OSHA also had initiated a Small Business Advocacy Review Panel in 2006. OSHA published the proposed rule for cranes in construction in 2008, received public comment on the proposal, and conducted a public hearing. The 2010 federal final rule adopted the four-option scheme C–DAC recommended with minor changes. This was subsequently adopted by the Board in 2011.

After OSHA’s enactment of this initial final rule in 2010, several entities informed OSHA that crane operator certification was insufficient for determining whether an operator could operate their equipment safely on a construction site. After hosting several public meetings addressing this issue, OSHA determined that this extension was necessary in order to allow OSHA to examine and determine how to address this issue of crane operator certification systematically. OSHA amended the 2010 final rule to extend for three years the employer duty to ensure crane operator competency for construction work, from November 10, 2014, to November 10, 2017. OSHA also extended the enforcement date for crane operator certification for three years from November 10, 2014, to November 10, 2017.

On December 11, 2014, the Safety and Health Codes Board adopted OSHA’s Amendment to the standard on Cranes and Derricks in Construction: Operator Certification, and OSHA’s three year extensions to November 10, 2017. Virginia’s effective date for this amendment was February 15, 2015.

**CHANGE IV:** On October 6, 2010, Edison Electrical Institute (EEI) petitioned the U.S. Court of Appeals for review of the Cranes and Derricks in Construction Standard. In subsequent discussions with OSHA, EEI provided new information regarding the use of digger derricks in the electric-utility industry, and the impact on utilities’ operations of the current digger-derrick exemption in Subpart CC of Part 1926. According to EEI, the exemption from Subpart CC of Part 1926 covers roughly 95 percent of work conducted by digger derricks in the electric-utility industry. The majority of the work under the remaining 5 percent is work closely related to the exempted work.

At its meeting on January 20, 2011, the Safety and Health Codes Board adopted the revised Final Rule for Cranes and Derricks in Construction, §§1926.1400 through 1926.1442, and Other Related Standards, with an effective date of April 15, 2011.

Subsequently, on November 9, 2012, federal OSHA published both a Direct Final Rule (DFR) [77 FR 67270] and a companion proposed rule [77 FR 67313] in case the DFR received an adverse comment and did not go

into effect. This amendment broadens the exemption for digger derricks in Subpart CC of Part 1926 of its standard for Cranes and Derricks to exempt the placement of padmount transformers. OSHA, however, did receive a significant adverse comment on the Direct Final Rule during its comment period, and withdrew the Direct Final Rule on February 7, 2013 [78 FR 8985] before the Board had a chance to act upon this DFR.

After considering the significant adverse comment, OSHA eventually issued this current final rule based on the November 9, 2012 companion notice of proposed rulemaking.

At its meeting on July 18, 2013, the Safety and Health Codes Board adopted federal OSHA's Revision of the Exemption for Digger Derricks in the Cranes and Derricks in Construction Standard, with an effective date of November 1, 2013.

**CHANGE III:** On August 17, 2012, OSHA published both a Direct Final Rule (DFR) and a substantively identical companion notice of proposed rulemaking to amend OSHA's construction standards in Subpart S (Underground Construction, Caissons, Cofferdams, and Compressed Air) and Subpart T (Demolition) of OSHA's construction standards at 29 CFR Part 1926 (77 FR 49722; 77 FR 49741). The identical amendments apply Subpart CC (Cranes and Derricks in Construction) of Part 1926, which contains requirements for cranes and derricks used in construction, to underground construction work, and demolition work, involving equipment covered by Subpart CC of Part 1926. Additionally, the dual rulemaking corrected inadvertent errors made to the underground construction and demolition standards in the 2010 rulemaking.

On September 12, 2012, the Safety and Health Codes Board adopted OSHA's Direct Final Rule on Cranes and Derricks in Construction; Demolition and Underground Construction, with an effective date of January 1, 2013. This action was based on the assumption that the DFR would become effective for federal OSHA. The federal DFR was scheduled to take effect on November 15, 2012, however, OSHA received what it considered a significant adverse comment to the DFR and its companion proposed rule within the specified comment period which ended on September 17, 2012. As a result of the adverse comment, the federal DFR did not become effective, and OSHA proceeded with the companion notice becoming this final rule.

This significant adverse comment that stopped the enactment of the DFR raised a concern about potential ambiguity in the introductory language of federal OSHA's proposed demolition standard, §1926.800 (t) of Subpart S of Part 1926. OSHA intends for Subpart CC of Part 1926 to apply as a comprehensive regulatory scheme. It emphasized the importance of applying *all* of Subpart CC of Part 1926 to demolition work (emphasis added). Federal OSHA also explained that this was its intent all along, and that by doing so would ensure that the significant benefits of Subpart CC of Part 1926 extend to demolition and underground construction, and that construction workers in those sectors receive the same safety protections from new Subpart CC of Part 1926 as other construction workers.

At its meeting on July 18, 2013, the Safety and Health Codes Board adopted the revised Final Rule for Cranes and Derricks in Construction: Underground Construction and Demolition, 16VAC25-150, §§1926.856 and 1926.858, with an effective date of November 1, 2013.

**CHANGE II:** On August 9, 2010, federal OSHA issued new requirements for Cranes and Derricks in Construction under Subpart CC of Part 1926. For most construction work, the new Cranes and Derricks in Construction Standard replaced the prior Cranes and Derricks Standard, §1926.550, which had been in place for over 40 years. For demolition and underground construction work, however, the protective requirements of §1926.550 were no longer covered in federal OSHA's construction regulations. As a result, federal OSHA had to reestablish the substance of the demolition and underground construction provisions in a new Subpart DD to Part 1926, which was in the updated Cranes and Derricks in Construction Standard.

A second error was made, however. In the rulemaking process for the final rule for Cranes and Derricks in Construction, federal OSHA inadvertently deleted the requirements addressing material, personnel, overhead

hoists, and elevators in demolition and underground construction work by requiring employers to follow the requirements of Subpart DD of Part 1926 for demolition and underground construction work. At its meeting on September 12, 2012, the Safety and Health Codes Board, anticipating the federal Direct Final Rule would go forward and become effective, adopted federal OSHA's Direct Final Rule for Cranes and Derricks in Construction, Demolition and Underground Construction, with an effective date of January 1, 2013.

**However, this federal DFR never became effective and, as a result, there was no basis to go forward with the adoption of this federal DFR by the Board.**

**CHANGE I:** In 1998, federal OSHA's expert Advisory Committee for Construction Safety and Health (ACCSH) established a workgroup to develop recommended changes to the standard for cranes and derricks. In December 1999, ACCSH recommended that federal OSHA consider using a negotiated rulemaking process as the mechanism to update Subpart N of Part 1926. On July 16, 2002, federal OSHA published a Notice of Intent to Establish a Cranes and Derricks Negotiated Rulemaking Advisory Committee ("C-DAC") (see 67 FR 46612). [75 FR 47907]

C-DAC, consisting of 23 experienced Cranes and Derricks Advisory Committee members representing manufacturers' trade associations, was convened in July 2003 and reached consensus on its draft document in July 2004. In 2006, ACCSH recommended that OSHA use the C-DAC consensus document as a basis for federal OSHA's proposed rule, which was published on October 9, 2008 (73 FR 59713). Public hearings were held in March 2009, and the public comment period on those proceedings closed in June 2009. [75 FR 47907]

On January 20, 2011, the Safety and Health Codes Board adopted the Final Rule for Cranes and Derricks in Construction, §§1926.1400 through 1926.1442, with an effective date of April 15, 2011.

## II. **Summary**

**CHANGE VII:** OSHA promulgated a new standard for cranes and derricks in construction, referred to as the "2010 crane standard," on November 10, 2010 (75 FR 47905). It was based on a proposal drafted as the result of negotiated rulemaking and issued on October 9, 2008 (73 FR 59714). Under this cranes standard, except for employees of the U.S. military and the operation of some specified equipment, employers were required to allow only certified operators to operate equipment after November 10, 2014.

In lieu of certification, the rule also allowed operators to operate cranes if licensed by state or local governments whose programs met certain minimum requirements. The standard included a four year, phased-in effective date for the certification requirements. That phase in period was intended to provide time for existing accredited testing organizations to develop programs that complied with the standard's requirements; for operators and employers to prepare for certification testing; and for more testing organizations to become accredited to make certifications available for the operation of the wide variety of cranes used in construction. During the phase in period, employers were required to continue complying with two broad provisions: to ensure that crane operators were competent to operate the equipment safely and, if necessary, to train and evaluate employees who did not have the required knowledge or ability to operate the equipment safely (§ 1926.1427(k)(2)(i) and (ii)) ("employer duties").

### **Highlights of the Change VII Amendment**

#### **A. Paragraph (a)—Duty to Train, Certify or License and Evaluate Operators**

Paragraph (a) sets out the employer's responsibility to ensure that each operator completes three steps before the employer permits the operator to operate equipment covered by subpart CC without continuous supervision. In the regulatory text, OSHA refers to this entire three-step process as "qualification." Each operator must be trained to do the crane activities that will be performed, be certified/licensed in accordance with subpart CC, and be evaluated on his or her competence to safely operate the equipment that will be used.

The new approach provides a clearer structure than the previous format of the standard, which was not designed to accommodate both certification and evaluation. In addition, the final rule makes clear that post-certification training is required. The new final rule contemplates operators still needing additional training after they are certified, such as training to operate a new type of crane, perform new tasks, or handle new controls in a crane that differs from previous models they have operated. The current certification/licensing requirement, which is the centerpiece of the previous operator requirements, remains largely unchanged under the revised standard, with the exception that different certifications for different capacities of cranes would no longer be required.

In the final rule, OSHA is permanently retaining an employer assessment duty but has re-located it to paragraph (a) to increase comprehension of the standard's requirements.

**i. Paragraphs (a)(1) to (a)(3)**

Paragraphs (a)(1) to (3) provide limited exceptions to the general requirement in paragraph (a) that operators must be trained, certified, and evaluated before operating equipment. Paragraph (a)(1) permits an employee to operate equipment as an "operator-in training" prior to being certified and evaluated, provided that he or she is supervised and operates the equipment in accordance with the training requirements in paragraph (b). This is the only means by which an individual may operate equipment prior to being trained, certified, and evaluated as competent to do so. The revised standard also permits certified/licensed operators to operate equipment as operators-in-training before successfully completing an evaluation.

**B. Paragraph (b)—Operator Training**

Paragraph (b) now sets forth minimum requirements for training, specifies requirements for trainers, and establishes limitations on the scope of activities for operators-in-training. The training requirements of revised paragraph (b) are largely the same as the previous rule but also clarify that employers must continue to address operator training needs after the operator has been certified and demonstrated competency through employer evaluation on specific equipment. Paragraph (b) further clarifies that the employer's training duty is both **equipment-specific** and **task-specific**, and extends until the employer has satisfactorily evaluated the operator-in-training in accordance with paragraph (f)—evaluation, or if any retraining or subsequent training is required to perform the assigned tasks.

**i. Paragraph (b)(1)**

Paragraph (b)(1) requires the employer to provide the operator-in-training with instruction on the subjects in paragraph (j). Under the revised standard, even after the operator-in-training is determined competent by employer evaluation, the employer's training duty can continue when the operator operates new equipment or performs tasks that require new skills or knowledge.

**ii. Paragraph (b)(2)**

Paragraph (b)(2) requires the employer to ensure that a trainer continuously monitors operators-in-training during all crane operations. This requirement is identical to the previous requirement for continuous monitoring under previous paragraph (f)(3).

**iii. Paragraph (b)(3)**

Paragraph (b)(3) requires the employer to assign the operator-in-training only tasks that are within his or her ability. This requirement is substantively identical to the requirement under previous paragraph (f)(2). Also, paragraph (b)(3) retains a revised version of the limitations specified in previous paragraph (f)(5), which precluded operators-in-training from operating equipment next to energized power lines; from hoisting personnel; or from performing multiple-equipment lifts, multi-lift rigging operations, or lifts over shafts, cofferdams or in a tank farm.

**iv. Paragraph (b)(4)**

Paragraph (b)(4) prescribes minimum requirements for monitored training of operators-in-training and trainers who monitor operators-in-training. Paragraph (b)(4)(i)(A) requires that the trainer must be an employee or agent of the operator-in-training's employer. Paragraph (b)(4)(i)(B) requires that the trainer must "have the knowledge, training, and experience necessary to direct the operator-in-training on the equipment in use."

**v. Paragraph (b)(5)**

Paragraph (b)(5) requires the employer to provide retraining when, based on the performance of the operator or an assessment of the operator's knowledge, there is an indication that retraining is necessary. This language is identical to the requirement in previous § 1926.1430(g)(2) but is included in paragraph (b) to consolidate all substantive training requirements to the extent practical for operators covered under § 1926.1427.

**C. Paragraph (c)—Operator Certification and Licensing**

Paragraph (c) retains the certification and licensing structure of the 2010 crane standard with only a few minor modifications intended to improve comprehension of certification/ licensing requirements. First, OSHA moved the military qualification provisions of previous § 1926.1427(e)(4) to the exception in paragraph (a), as noted earlier. Second, OSHA removed the reference to an "option" with respect to mandatory compliance with previous state and local licensing requirements.

When a state or local government issues operator licenses for equipment covered under subpart CC, and that government licensing program meets the requirements specified in the standard, then employers must ensure that equipment operators are properly licensed when working in the state or local jurisdiction, even if the operator is also certified by a nationally accredited certification organization. However, the state or local license would satisfy OSHA's certification requirement: OSHA will not require an operator who obtains such a state or local license to also obtain a separate certification from a nationally accredited certification organization or an employer-audited program. The content of revised paragraph (c)(1) is virtually identical to provisions in § 1926.1427(e)(2) of the 2010 crane rule, with one exception: Revised (c)(1)(v).

**i. Paragraph (c)(1)(v)**

As in the 2010 crane standard, this final rule includes minimum "federal floor" criteria for state and local crane operator licensing. If a license does not meet the minimum "federal floor" criteria specified in OSHA's crane standard (see revised § 1427(c)(1) and (j)), then the state or locality could still enforce its own licensing requirements, but employers operating cranes for construction within that jurisdiction could not rely on that license to satisfy OSHA's operator certification requirement. The employer must then comply with one of the other options for certification/qualification specified by this final rule.

**ii. Paragraph (c)(2)**

Paragraph (c)(2) specifies the certification requirements for two remaining situations: The construction occurs in a state or local jurisdiction that does not require licensing of equipment operators, or the construction occurs in a state or local jurisdiction where the licensing program does not meet the "federal floor" of requirements established in this standard. In each of those situations, the operator would have to be certified in accordance with paragraph (d) (third-party certification) or (e) (audited employer program) of this section.

**iii. Paragraph (c)(3)**

Paragraph (c)(3) requires employers to provide at no cost to employees the certification or licensing required by § 1926.1427. This revised requirement is almost identical to that of § 1926.1427(a)(4) of the previous rule, except that it has been revised to clarify that it applies to all operators certified or licensed after the effective date of the new standard, not just those operators who were "employed by the employer on November 8, 2010," as previous §



1926.1427(a)(4) stated.

**iv. Paragraph (c)(4)**

Paragraph (c)(4) retains, without change, the content of previous § 1926.1427(g), which states that a testing entity is permitted to provide training as well as testing services as long as the criteria of the applicable accrediting agency (in the option selected) for an organization providing both services are met.

**D. Paragraph (d)—Certification by an Accredited Crane Operator Testing Organization**

Compliance with the requirements of paragraph (d) is the option that OSHA expects the vast majority of employers to use. Paragraph (d) retains, with some non-substantive language clarification and two exceptions discussed below, the requirements of previous paragraph § 1926.1427(b) and is unchanged from the proposal. First, the most significant change is that paragraph (d)(1)(ii)(B) replaces the references to certification by “type and capacity” that appeared in previous paragraph (b)(1)(ii)(B) with “type, or type and capacity.” Second, the revision does not include the reference in previous § 1926.1427(b)(2) to an employee being “deemed qualified” to operate equipment under certain conditions if no accredited testing organization offers certification examinations for a specific type of equipment. Instead the revision replaces “deemed certified” with “deemed to have complied with the certification requirements of this section.” This change is intended to avoid the misconception that an operator could be considered competent to safely operate equipment without also being evaluated and determined competent by the operator’s employer.

**E. Paragraph (e)—Audited Employer Program**

The substantive content of paragraph (e) is the same as previous § 1926.1427(c). It sets out the parameters for a non-portable certification program administered by the employer and audited by a third party.

**F. Paragraph (f)—Evaluation**

Paragraph (f) sets out specific requirements that employers must follow to conduct an operator evaluation, including evaluation criteria, minimum qualifications for the person conducting the evaluation, documentation, and re-evaluation requirements.

**i. Paragraph (f)(1)**

Paragraph (f)(1) requires employers to evaluate their operators and specifies the two goals of the evaluation: Ensure that the operator has (1) the ability to safely perform the assigned work, and (2) the necessary skills, knowledge, and ability to recognize and avert risks in order to safely operate the actual equipment that will be used. In paragraph (f)(1)(i), OSHA provides a list of performance-based criteria to ensure that the evaluation encompasses various aspects of the equipment, such as safety devices, operational aids, software, and the size and configuration of the equipment. Paragraph (f)(1)(ii) focuses on the importance of the operator’s ability to perform specific tasks, such as blind lifts, personnel hoisting, and multi-crane lifts.

**ii. Paragraph (f)(2)**

For operators already employed by an employer, paragraph (f)(2) allows that employer to rely on its “previous assessments of the operator in lieu of conducting a new evaluation” of that operator. OSHA’s final rule does not require employers to make each existing operator re-sit for formal re-evaluations on all applicable equipment and perform different tasks when the employer has already previously assessed that operator prior to the effective date of the rule and determined that he or she is qualified to safely operate such equipment for certain tasks.

**iii. Paragraph (f)(4)**

Paragraph (f)(4) establishes minimum criteria for the person who performs the required evaluation of an operator-in-training. The evaluation must be conducted by an individual who possesses the

knowledge, training, and experience necessary to assess operators. Such knowledge, training, and experience is not necessarily the same as the knowledge, training, and experience to perform the particular construction operations or processes oneself.

**iv. Paragraph (f)(5)**

Paragraph (f)(5) permits the employer to allow an operator to operate equipment other than the specific equipment on which the operator was evaluated, as long as the employer can demonstrate that the new equipment does not require substantially different skills, knowledge, or abilities to operate. An additional evaluation would be required before an operator would be allowed to operate equipment that requires substantially different skills, knowledge, or abilities to operate.

**v. Paragraph (f)(6)**

Paragraph (f)(6) requires the employer to document the evaluation of each operator and to ensure that the documentation is available at the worksite.

**vi. Paragraph (f)(7)**

Paragraph (f)(7) requires the employer to re-evaluate an operator whenever the employer is required to retrain the operator under § 1926.1427(b)(5). Section 1926.1427(b)(5) requires retraining if the operator's performance or an evaluation of the operator's knowledge indicate that retraining is necessary.

This might include a wide variety of feedback, such as (but not limited to) information from an onsite supervisor or safety manager, contractor, or other person that the operator was operating equipment unsafely, OSHA citations, a crane near miss, or other incidents that indicate unsafe operation of the crane. The reevaluation must target the deficiency in skills, knowledge, or ability to recognize and avert risk that triggered the retraining, but need not include a reevaluation of other previously evaluated skills, knowledge, or ability. Reevaluations would need to be conducted by a person who meets the requirements of paragraph (f)(4).

**G. Paragraph (g)—Reserved**

This paragraph is reserved because the text at previous § 1926.1427(g) was moved to revised paragraph § 1926.1427(c)(4). The provision was moved to improve clarity of certification program requirements.

**H. Paragraph (h)—Language and Literacy Requirements**

Previous paragraph § 1926.1427(h) allowed operators to be certified in a language other than English, provided that the operator understands that language. Revised paragraph (h) is nearly identical to previous paragraph (h) with one exception. The last sentence of paragraph (h)(2) has been reworded to clarify that an operator is permitted to operate equipment only when he or she is furnished materials that are necessary for safe operation of the equipment and required by subpart CC, such as operations manuals and load charts, in the language of the operator's certification.

**I. Paragraph (i)—Reserved**

**J. Paragraph (j)—Certification Criteria**

Paragraph (j) specifies criteria that must be met by an accredited testing organization under revised paragraph (d) and an audited employer program under revised paragraph (e). The criteria specified by revised paragraph (j) of this section are the same as those specified under previous § 1926.1427(j). However, the introductory regulatory text in the previous version of § 1926.1427(j) states that "qualification and certifications" must be based, at a minimum, on several criteria for the written and practical tests found in § 1926.1427(j)(1) and (2). Revised paragraph (j) deletes the words "qualification and" because they are no longer necessary: Under the revised rule, a certification issued by an audited employer program is intended to be equivalent to that of an accredited testing program for purposes of complying with OSHA's rule.

**K. Paragraph (k)—Effective Date**

The effective date of this final rule applies to the certification requirements and all but one of the amendments. OSHA decided to allow 90 days after the publication of the final rule for employers to conform their practices for evaluating their operators, including documenting the evaluations, to the requirements of OSHA's standard.

**L. Section 1926.1430(c)—Conforming Changes to Operator Training**

OSHA amended only paragraph (c) of the training requirements in § 1926.1430 by replacing the substantive operator training requirements with a reference to § 1926.1427(a) and (b).

**M. Sections 1926.1436(q)—Derricks, 1926.1440(a)—Sideboom Cranes, and 1926.1441(a) Equipment with a Rated Hoisting/Lifting Capacity of 2000 pounds or Less**

OSHA had proposed making the employer evaluation requirements to the following group of equipment otherwise exempt from the requirements of § 1926.1427: Derricks, sideboom cranes, and equipment with a rated hoisting/ lifting capacity of 2,000 pounds or less. OSHA still requires employers to train operators of this equipment in accordance with the requirements of this standard.

**CHANGE VI:** OSHA adopted this delay to further extend by one year the employer duty to ensure the competency of crane operators involved in construction work. Previously, this duty was scheduled to terminate for federal OSHA and VOSH on November 10, 2017, but now continues for an additional year until November 10, 2018.

OSHA is also further delaying the deadline for crane operator certification for one year from November 10, 2017, to November 10, 2018.

At its meeting on December 11, 2014, the Board decided to adopt federal OSHA's enactment dates for these competency and certification requirements. VOSH continues to believe that there is benefit to employers who may operate in multiple states or jurisdictions to having federal identical enforcement dates for this competency and certification.

**CHANGE V:** OSHA published this final rule amendment to extend for an additional three years the employer duty to ensure crane operator competency for construction work, from November 10, 2014, to November 10, 2017, as well as the enforcement date for crane operator certification for three years from November 10, 2014, to November 10, 2017 for a total federal extension of seven years.

VOSH also extended this deadline to November 10, 2017. The Board originally adopted its own unique initial delayed enactment dates for these competency and certification requirements at its meeting on January 20, 2011, for OSHA's original August 9, 2010 overall revision of the standard in order to account for the time interval between OSHA's adoption and VOSH's subsequent adoption.

With this second federal delay, now a total of seven (7) years from the 2010 federal adoption, VOSH believes that the benefit to employers who may operate in multiple states or jurisdictions to having federal identical enforcement dates for this competency and certification outweighs any loss by the shortfall of approximately three months by not continuing with a VOSH unique effective date for the full additional three years. Adoption of the federal deadline this time results in 2.75 years of additional extension in Virginia for a total of 6.75 years.

**CHANGE IV:** Federal OSHA expanded the digger-derrick exemption in the Cranes and Derricks in Construction Standard to include all digger derricks used in construction work subject to Part 1926 Subpart V. A digger derrick is a specialized type of equipment designed to install utility poles. It typically comes equipped with augers to drill holes for the poles, and with a hydraulic boom to lift the poles and set them in the holes. Employers also use the booms to lift objects other than poles; accordingly, electric utilities,

telecommunication companies, and their contractors use booms both to place objects on utility poles and for general lifting purposes at worksites.

#### **Highlights of the Change IV Amendment**

- **§1926.1400**

Exemption in existing §1926.1400 (c)(4) was revised to include within the exemption the phrase “any other work subject to Subpart V of “29 CFR part 1926” as proposed. This revision expands the exemption to remove from coverage under Subpart CC of Part 1926 the types of non-pole, digger-derrick work described by Edison Electrical Institute (EEI). OSHA has also made several minor clarifications to the text of the exemption.

- First, OSHA has replaced “and” with “or” in the phrase “poles carrying electric or telecommunication lines” (emphasis added). This revision will ensure that the regulated community does not misconstrue the exemption as limited to poles that carry both electric and telecommunications lines.
- Second, OSHA has added the phrase “to be eligible for this exclusion” at the beginning of the sentence requiring compliance with Subpart V of Part 1926 and §1910.268. This revision limits the exemption to the use of digger derricks that comply with the requirements in Subpart V of Part 1926 or §1910.268, then the work is not exempt and the employer must comply with all of the requirements of Subpart CC of Part 1926.
- Third, in §1926.1400 (c)(4) of this final rule, OSHA has replaced the reference to §1910.269 with a reference to Subpart V of Part 1926. By replacing the reference to §1910.269 in the §1926.1400 (c)(4) exemption with a reference to Subpart V of Part 1926, OSHA has removed any implication that these electric-utility employers having activities that fall within the digger-derrick exemption need only comply with §1910.269 and not with all Subpart V of Part 1926 requirements, including Subpart O of Part 1926 requirements for motorized vehicles.

- **§1926.952**

OSHA revised §1926.952 (c)(2) to require digger derricks to comply with §1926.269. This revision continues to mirror the updated terminology in the digger-derrick exemption at §1926.1400 (c)(4). As part of the revision to §1926.952(c)(2), OSHA clarified that the requirement to comply with §1910.269 is in addition to, not in place of, the general requirement in §1926.952 (c) that all equipment (including digger derricks) must comply with Subpart O of Part 1926.

**CHANGE III:** This amendment enacts what was attempted to be enacted by the 2012 Direct Final Rule (DFR) (CHANGE II of this Directive) which did not become effective. The new federal final rule applies the same crane rules to underground construction and demolition that were already being used by other construction sectors and streamlines OSHA’s standards by eliminating the separate cranes and derricks standards currently used for underground and demolition work. The rule also corrects errors made to the underground construction and demolition standards in the 2010 rulemaking. The amendments in this final rule will result in more stringent requirements for cranes and derricks used in underground construction or demolition work.

#### **Highlights of the Change III Amendment**

- Amended the demolition standard by adding subparagraph headings and replacing the “equipment used must” language in both subsection (c) of §1926.856, Removal of Walls, Floors, and Material with Equipment, and subsection (b) of §1926.858, Removal of Steel Construction, with a reference to the employer’s duty to comply with *all* Subpart CC of Part 1926 requirements (emphasis added) to avoid the ambiguity;
- Reinserted into §1926.858 the requirement to comply with Subpart N of Part 1926, in addition to Subpart CC of Part 1926 to clarify application of the provisions;
- Corrected §1926.800 (t) by restoring the clause “Except as modified by this paragraph (t)” to the beginning of the introductory paragraph; and
- Restored §1926.800 (t)(1) through (t)(4) the provision allowing employers to use cranes to hoist personnel for routine access to the underground worksites via a shaft without requiring them to demonstrate that conventional means of access are more hazardous or impossible for this purpose.

**CHANGE II:** On August 17, 2012, federal OSHA issued a Direct Final Rule, along with a companion notice of proposed rulemaking [77 FR 49741], that applies the requirements of the August 2010 Final Rule for Cranes and Derricks in Construction to demolition work and underground construction.

This Direct Final Rule, *which did not become effective*, applied the same crane rules to underground construction and demolition that were already being used by other construction sectors, and streamlined federal OSHA’s standards by eliminating the separate Cranes and Derricks Standard currently used for underground and demolition work.

**CHANGE I.**

**A. Overview of Standard**

The revised standard will require employers to perform crane inspections, utilize qualified or certified crane operators, address ground conditions, maintain safe distances from power lines using the encroachment prevention precautions, and to fulfill other obligations under the standards. Federal OSHA has revised the Cranes and Derricks Standard and other related sections of the Construction Standards to update and specify industry work practices necessary to protect employees during the use of cranes and derricks in construction. This revision also addresses advances in the designs of cranes and derricks, related hazards, and the qualifications of employees needed to operate them safely.

Changes under this revised final rule include requirements that employers:

- determine whether the ground is sufficient to support the anticipated weight of hoisting equipment and associated loads;
- assess hazards within the work zone that would affect the safe operation of hoisting equipment, such as those of power lines and objects or personnel that would be within the work zone or swing radius of the hoisting equipment;
- ensure that the equipment is in safe operating condition through required inspections; and
- train employees in the work zone to recognize hazards associated with the use of the equipment and any related duties that they are assigned to perform.

According to federal OSHA, the new rule is designed to prevent the leading causes of fatalities, including electrocution, crushed-by/struck-by hazards during assembly/disassembly, collapse and overturn. It also sets requirements for ground conditions and crane operator assessment. In addition, the revised final rule addresses tower crane hazards and the use of synthetic slings for assembly/disassembly work, and clarifies the scope of the regulation by providing both a functional description and a list of examples for the equipment that is covered. The revised standard will also be more protective than the current standards is in assembly/disassembly operations, which along with power line contact, are leading causes of fatalities in crane work. [75 FR 48094]

The revised final rule addresses both the work practices used as well as other requirements for performing construction work involving cranes and derricks. Employers are required to keep specified records associated with inspections and operator certification/qualification. [75 FR 48127]

Other sections in Part 1926 amended as a result of the revised Cranes and Derricks final rule include the following:

- **[Subpart A]**, added §1926.6, Incorporation by reference;
- **[Subpart C – General Safety and Health Provisions]** – §1926.31, [Reserved], was removed and reserved;
- **[Subpart L – Scaffolds]** – §1926.450, Scope, application, and definitions applicable to this subpart, was amended by revising paragraph (a) to reference application to all scaffolds used in workplaces covered by this part, and that it does not apply to crane or derrick suspended personnel platforms;
- **[Subpart M – Fall Protection] – §1926.500, Scope, application, and definitions applicable to this subpart of Part 1926**, was amended by revising paragraph (a)(2)(ii), adding paragraph (a)(3)(v), and revising paragraph (a)(4) to reference subpart CC of Part 1926;
- **[Subpart DD – Cranes and Derricks Used in Demolition and Underground Construction]** – added §1926.1500, Scope;
- **[Subpart N – Helicopters, Hoists, Elevators, and Conveyors] – amended the heading to subpart N to read: “Subpart N – Cranes, Derricks, Hoists, Elevators, and Conveyors;”**
  - **§1926.550** [Reserved and former §1926.550 redesignated as §1926.1501];
  - **§1926.553**, Base-mounted drum hoists, was amended by adding paragraph (c), which states that this section does not apply to base-mount drum hoists used in conjunction with derricks, and which requires conformity with §1926.1436.
- **[Subpart O – Motorized Vehicles, Mechanical Equipment, and Marine Operations]** – §1926.600, Equipment, was amended by revising paragraph (a)(6);
- **[Subpart R – Steel Erection]** – §1926.753, Hoisting and rigging, was amended by revising paragraphs (a) and (c)(4) to reference §1926.1431;
- **[Subpart S – Underground Construction, Caissons, Cofferdams, and Compressed Air]** – §1926.800, Underground Construction, was amended by revising paragraph (t) to reference §1926.1501(g) of 1926 subpart DD of Part 1926;

- **[Subpart T– Demolition]** – §§1926.856 and 1926.858, Removal of walls, floors, and material with equipment, were amended by revising paragraph (b) to reference §1926.1501 of 1926.subpart DD of Part 1926;
- **[Subpart V – Power Transmission and Distribution]** – §1926.952, Mechanical equipment, was amended by adding a new paragraph (c), which is now entitled “Cranes and other lifting equipment” to conform with language in §1926.1400 (c)(4), and to ensure that comparable safety requirements exist for digger derricks performing electrical pole work;
- **[Subpart X – Stairways and Ladders]** – §1926.1050, Scope, application, and definitions applicable to this subpart, was amended by revising paragraph (a) to explain that subpart X does not apply to integral components of equipment covered by subpart CC, and to further explain that only subpart CC establishes the circumstances when ladders and stairways must be provided on equipment covered by subpart CC DD of Part 1926;
- **Appendix A to Part 1926** – Designations for General Industry Standards Incorporated into Body of Construction Standards – was amended by removing the row containing “1926.550(a)(19)” and “1910.184(c)(9)” from the table “1926 DESIGNATIONS FOR APPLICABLE 1910 STANDARDS;” and
- **Subparts AA and BB** – were reserved and **Subpart CC – Cranes and Derricks in Construction**, §§1926.1400 - 1926.1442, was added.

**B. Types of Cranes Included Under the Revised Standard:**

The revised federal standard applies to virtually all power-operated equipment, when used in construction, that can hoist, lower and horizontally move a suspended load, including, but not limited to the following (see §1926.1400 (a)):

- Articulating cranes (i.e., knuckle-boom cranes);
- crawler cranes;
- floating cranes;
- cranes on barges;
- locomotive cranes;
- mobile cranes (i.e., wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boom truck cranes);
- multi-purpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load;
- industrial cranes (i.e., carry-deck cranes);
- dedicated pile drivers;
- service/mechanic trucks with a hoisting device;
- a crane on a monorail;
- tower cranes (i.e., fixed jib, i.e., “hammerhead boom”), luffing boom and self-erecting);
- pedestal cranes;
- portal cranes;
- overhead and gantry cranes;
- straddle cranes;
- sideboom cranes;
- derricks; and

- variations of such equipment.

**C. Exclusions from Subpart CC of Part 1926 – Cranes and Derricks in Construction:**

Under §1926.1400 (c) of the revised standard, federal OSHA excluded many lifting devices, including machinery that has been converted to a non-hoisting/lifting use, as well as aerial lifts, forklifts, except when they are configured to hoist and lower by means of a winch or hook and horizontally move a suspended load. Other exclusions from Subpart CC of Part 1926 include:

- excavators (track hoe/backhoe);
- concrete pump trucks w/boom;
- digger derricks;
- power shovels;
- wheel loaders;
- automotive wreckers and tow trucks;
- vehicle mounted work platforms;
- self-propelled elevating work platforms;
- stacker cranes;
- telescopic/hydraulic gantry systems;
- mechanic's trucks with hoisting devices;
- come-a-longs and chain falls;
- gin poles for communication tower work;
- tree trimming and tree removal work;
- anchor handling with a vessel or barge using an affixed A-frame; and
- roustabout lifts;
- helicopter cranes; and
- material delivery

**III. Implementation Schedule.**

**CHANGE VI:** Operator Certification, §1926.1427 (k), Phase-in. There is an additional one (1) year extension of the enforcement date for employer duty to ensure crane operator competency and certification requirements. Virginia employers must be in compliance by November 10, 2018.

**CHANGE V:** Operator Certification, §1926.1427 (k), Phase-in. There is an additional three (3) year extension on the enforcement date for employer duty to ensure crane operator competency and certification requirements. Virginia employers must be in compliance by November 10, 2017.

**CHANGE I:** All provisions are effective on April 15, 2011, except for:

§1926.1427 (k), Phase-in. There is a four-year compliance period for the crane operator certification/qualification requirement, i.e., Virginia employers must be in compliance by April 15, 2015.



**Cranes and Derricks in Construction:  
Amendments to §1926.1427 and §1926.1430**

As Adopted by the  
Safety and Health Codes Board

Date: March 19, 2019



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: May 15, 2019

16VAC25-175-1926.1427, Operator Training, Certification and Evaluation  
16 VAC-175-1926.1430, Training

When the regulations, as set forth in the Operator Training, Certification and Evaluation, §1926.1427 and §1926.1430, of the Final Rule for Cranes and Derricks in Construction, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

November 9, 2018

May 15, 2019

impose additional or more stringent requirements than an existing standard, State Plans do not have to amend their standards, although OSHA may encourage them to do so. The 28 OSHA-approved State Plans are: Alaska, Arizona, California, Connecticut, Hawaii, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Michigan, Minnesota, Nevada, New Mexico, New Jersey, New York, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virginia, Virgin Islands, Washington, and Wyoming. Connecticut, Illinois, New Jersey, New York, Maine, and the Virgin Islands have OSHA-approved State Plans that apply to State and local government employees only.

The amendments to OSHA's cranes standard in this final rule require employers to permanently implement evaluations of crane operators, whereas the previous evaluation duty had been temporary with a fixed end date. These evaluations must be documented and include more specificity than the previous temporary employer duty to assess and train operators under § 1926.1427(k)(2). Accordingly, State Plans are required to adopt an "at least as effective" change to their standard.

OSHA is also removing the previous requirement for crane operators to be certified by crane capacity as well as crane type. Because this change removes a requirement rather than imposing one, State Plans are not be required to make this change, but may do so if they so choose.

#### F. Unfunded Mandates Reform Act

When OSHA issued the final Cranes and Derricks in Construction rule in 2010 (75 FR 47906), it reviewed the rule according to the Unfunded Mandates Reform Act of 1995 (UMRA; 2 U.S.C. 1501 *et seq.*) and Executive Order 12875 (56 FR 58093). OSHA concluded that the final rule did not meet the definition of a "Federal intergovernmental mandate" under the UMRA because OSHA standards do not apply to State or local governments except in States that voluntarily adopt State Plans. OSHA further noted that the 2010 rule imposed costs of over \$100 million per year on the private sector and, therefore, required review under the UMRA for those costs, but concluded that its 2010 final economic analysis met that requirement.

As discussed above in Section III.A (Final Economic Analysis and Regulatory Flexibility Analysis) of this preamble, this final rule has cost savings of approximately \$1.8 million per year. Therefore, for the purposes of the UMRA, OSHA certifies that this final

rule would not mandate that State, local, or tribal governments adopt new, unfunded regulatory obligations, or increase expenditures by the private sector of more than \$100 million in any year.

#### G. Consultation and Coordination With Indian Tribal Governments

OSHA reviewed this final rule in accordance with Executive Order 13175 (65 FR 67249) and determined that it will not have "tribal implications" as defined in that order. The final rule will not have substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

#### H. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

Consistent with E.O. 13771 (82 FR 9339, January 30, 2017), OSHA has estimated at a 3 percent discount rate, there are net annual cost savings of \$1,752,000, and at a discount rate of 7 percent there is an annual cost savings of \$2,388,000. This rule is an E.O. 13771 deregulatory action. Details on the estimated costs and cost savings estimates for this rule can be found in the final rule's economic analysis.

#### List of Subjects in 29 CFR Part 1926

Certification, Construction industry, Cranes, Derricks, Occupational safety and health, Qualification, Safety, Training.

Signed at Washington, DC, on November 5, 2018.

**Loren Sweatt,**

*Deputy Assistant Secretary of Labor for Occupational Safety and Health.*

For the reasons stated in the preamble of this final rule, OSHA is amending 29 CFR part 1926 as follows:

### PART 1926—SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

#### Subpart CC—Cranes and Derricks in Construction

■ 1. The authority citation for subpart CC continues to read as follows:

**Authority:** 40 U.S.C. 3701 *et seq.*; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 5-2007 (72 FR 31159) or 1-2012 (77 FR 3912), as applicable; and 29 CFR part 1911.

■ 2. Revise § 1926.1427 to read as follows:

#### § 1926.1427 Operator training, certification, and evaluation.

(a) *General requirements for operators.* The employer must ensure that each operator is trained, certified/licensed, and evaluated in accordance with this section before operating any equipment covered under subpart CC, except for the equipment listed in paragraph (a)(2) of this section.

(1) *Operation during training.* An employee who has not been certified/licensed and evaluated to operate assigned equipment in accordance with this section may only operate the equipment as an operator-in-training under supervision in accordance with the requirements of paragraph (b) of this section.

(2) *Exceptions.* Operators of derricks (see § 1926.1436), sideboom cranes (see § 1926.1440), or equipment with a maximum manufacturer-rated hoisting/lifting capacity of 2,000 pounds or less (see § 1926.1441) are not required to comply with § 1926.1427. Note: The training requirements in those other sections continue to apply (for the training requirement for operators of sideboom cranes, follow section 1926.1430(c)).

(3) *Qualification by the U.S. military.*

(i) For purposes of this section, an operator who is an employee of the U.S. military meets the requirements of this section if he/she has a current operator qualification issued by the U.S. military for operation of the equipment. An employee of the U.S. military is a Federal employee of the Department of Defense or Armed Forces and does not include employees of private contractors.

(ii) A qualification under this paragraph is:

(A) Not portable: Such a qualification meets the requirements of paragraph (a) of this section only where the operator is employed by (and operating the equipment for) the employer that issued the qualification.

(B) Valid for the period of time stipulated by the issuing entity.

(b) *Operator training.* The employer must provide each operator-in-training with sufficient training, through a combination of formal and practical instruction, to ensure that the operator-in-training develops the skills, knowledge, and ability to recognize and avert risk necessary to operate the equipment safely for assigned work.

(1) The employer must provide instruction on the knowledge and skills listed in paragraphs (j)(1) and (2) of this section to the operator-in-training.

(2) The operator-in-training must be continuously monitored on site by a trainer while operating equipment.

(3) The employer may only assign tasks within the operator-in-training's ability. However, except as provided in paragraph (b)(3)(v) of this section, the operator-in-training shall not operate the equipment in any of the following circumstances unless certified in accordance with paragraph (c) of this section:

(i) If any part of the equipment, load line, or load (including rigging and lifting accessories), if operated up to the equipment's maximum working radius in the work zone (see § 1926.1408(a)(1)), could get within 20 feet of a power line that is up to 350 kV, or within 50 feet of a power line that is over 350 kV.

(ii) If the equipment is used to hoist personnel.

(iii) In multiple-equipment lifts.

(iv) If the equipment is used over a shaft, cofferdam, or in a tank farm.

(v) In multiple-lift rigging operations, except where the operator's trainer determines that the operator-in-training's skills are sufficient for this high-skill work.

(4) The employer must ensure that an operator-in-training is monitored as follows when operating equipment covered by this subpart:

(i) While operating the equipment, the operator-in-training must be continuously monitored by an individual ("operator's trainer") who meets all of the following requirements:

(A) The operator's trainer is an employee or agent of the operator-in-training's employer.

(B) The operator's trainer has the knowledge, training, and experience necessary to direct the operator-in-training on the equipment in use.

(ii) While monitoring the operator-in-training, the operator's trainer performs no tasks that detract from the trainer's ability to monitor the operator-in-training.

(iii) For equipment other than tower cranes: The operator's trainer and the operator-in-training must be in direct line of sight of each other. In addition, they must communicate verbally or by hand signals. For tower cranes: The operator's trainer and the operator-in-training must be in direct communication with each other.

(iv) The operator-in-training must be monitored by the operator's trainer at all times, except for short breaks where all of the following are met:

(A) The break lasts no longer than 15 minutes and there is no more than one break per hour.

(B) Immediately prior to the break the operator's trainer informs the operator-in-training of the specific tasks that the operator-in-training is to perform and

limitations to which he/she must adhere during the operator trainer's break.

(C) The specific tasks that the operator-in-training will perform during the operator trainer's break are within the operator-in-training's abilities.

(5) *Retraining.* The employer must provide retraining in relevant topics for each operator when, based on the performance of the operator or an evaluation of the operator's knowledge, there is an indication that retraining is necessary.

(c) *Operator certification and licensing.* The employer must ensure that each operator is certified or licensed to operate the equipment as follows:

(1) *Licensing.* When a state or local government issues operator licenses for equipment covered under subpart CC, the equipment operator must be licensed by that government entity for operation of equipment within that entity's jurisdiction if that government licensing program meets the following requirements:

(i) The requirements for obtaining the license include an assessment, by written and practical tests, of the operator applicant regarding, at a minimum, the knowledge and skills listed in paragraphs (j)(1) and (2) of this section.

(ii) The testing meets industry-recognized criteria for written testing materials, practical examinations, test administration, grading, facilities/equipment, and personnel.

(iii) The government authority that oversees the licensing department/office has determined that the requirements in paragraphs (c)(1)(i) and (ii) of this section have been met.

(iv) The licensing department/office has testing procedures for re-licensing designed to ensure that the operator continues to meet the technical knowledge and skills requirements in paragraphs (j)(1) and (2) of this section.

(v) For the purposes of compliance with this section, a license is valid for the period of time stipulated by the licensing department/office, but no longer than 5 years.

(2) *Certification.* When an operator is not required to be licensed under paragraph (c)(1) of this section, the operator must be certified in accordance with paragraph (d) or (e) of this section.

(3) *No cost to employees.* Whenever operator certification/licensure is required under this section, the employer must provide the certification/licensure at no cost to employees.

(4) *Provision of testing and training.* A testing entity is permitted to provide training as well as testing services as long as the criteria of the applicable

governmental or accrediting agency (in the option selected) for an organization providing both services are met.

(d) *Certification by an accredited crane operator testing organization.* (1) For a certification to satisfy the requirements of this section, the crane operator testing organization providing the certification must:

(i) Be accredited by a nationally recognized accrediting agency based on that agency's determination that industry-recognized criteria for written testing materials, practical examinations, test administration, grading, facilities/equipment, and personnel have been met.

(ii) Administer written and practical tests that:

(A) Assess the operator applicant regarding, at a minimum, the knowledge and skills listed in paragraphs (j)(1) and (2) of this section.

(B) Provide certification based on equipment type, or type and capacity.

(iii) Have procedures for operators to re-apply and be re-tested in the event an operator applicant fails a test or is decertified.

(iv) Have testing procedures for re-certification designed to ensure that the operator continues to meet the technical knowledge and skills requirements in paragraphs (j)(1) and (2) of this section.

(v) Have its accreditation reviewed by the nationally recognized accrediting agency at least every 3 years.

(2) If no accredited testing agency offers certification examinations for a particular type of equipment, an operator will be deemed to have complied with the certification requirements of this section for that equipment if the operator has been certified for the type that is most similar to that equipment and for which a certification examination is available. The operator's certificate must state the type of equipment for which the operator is certified.

(3) A certification issued under this option is portable among employers who are required to have operators certified under this option.

(4) A certification issued under this paragraph is valid for 5 years.

(e) *Audited employer program.* The employer's certification of its employee must meet the following requirements:

(1) *Testing.* The written and practical tests must be either:

(i) Developed by an accredited crane operator testing organization (see paragraph (d) of this section); or

(ii) Approved by an auditor in accordance with the following requirements:

(A) The auditor is certified to evaluate such tests by an accredited crane

operator testing organization (see paragraph (d) of this section).

(B) The auditor is not an employee of the employer.

(C) The approval must be based on the auditor's determination that the written and practical tests meet nationally recognized test development criteria and are valid and reliable in assessing the operator applicants regarding, at a minimum, the knowledge and skills listed in paragraphs (j)(1) and (2) of this section.

(D) The audit must be conducted in accordance with nationally recognized auditing standards.

(2) *Administration of tests.* (i) The written and practical tests must be administered under circumstances approved by the auditor as meeting nationally recognized test administration standards.

(ii) The auditor must be certified to evaluate the administration of the written and practical tests by an accredited crane operator testing organization (see paragraph (d) of this section).

(iii) The auditor must not be an employee of the employer.

(iv) The audit must be conducted in accordance with nationally recognized auditing standards.

(3) *Timing of audit.* The employer program must be audited within 3 months of the beginning of the program and at least every 3 years thereafter.

(4) *Requalification.* The employer program must have testing procedures for re-qualification designed to ensure that the operator continues to meet the technical knowledge and skills requirements in paragraphs (j)(1) and (2) of this section. The re-qualification procedures must be audited in accordance with paragraphs (e)(1) and (2) of this section.

(5) *Deficiencies.* If the auditor determines that there is a significant deficiency ("deficiency") in the program, the employer must ensure that:

(i) No operator is qualified until the auditor confirms that the deficiency has been corrected.

(ii) The program is audited again within 180 days of the confirmation that the deficiency was corrected.

(iii) The auditor files a documented report of the deficiency to the appropriate Regional Office of the Occupational Safety and Health Administration within 15 days of the auditor's determination that there is a deficiency.

(iv) Records of the audits of the employer's program are maintained by the auditor for 3 years and are made available by the auditor to the Secretary

of Labor or the Secretary's designated representative upon request.

(6) *Audited-program certificates.* A certification under this paragraph is:

(i) Not portable: Such a certification meets the requirements of paragraph (c) of this section only where the operator is employed by (and operating the equipment for) the employer that issued the certification.

(ii) Valid for 5 years.

(f) *Evaluation.* (1) Through an evaluation, the employer must ensure that each operator is qualified by a demonstration of:

(i) The skills and knowledge, as well as the ability to recognize and avert risk, necessary to operate the equipment safely, including those specific to the safety devices, operational aids, software, and the size and configuration of the equipment. Size and configuration includes, but is not limited to, lifting capacity, boom length, attachments, luffing jib, and counterweight set-up.

(ii) The ability to perform the hoisting activities required for assigned work, including, if applicable, blind lifts, personnel hoisting, and multi-crane lifts.

(2) For operators employed prior to December 10, 2018, the employer may rely on its previous assessments of the operator in lieu of conducting a new evaluation of that operator's existing knowledge and skills.

(3) The definition of "qualified" in § 1926.32 does not apply to paragraph (f)(1) of this section: Possession of a certificate or degree cannot, by itself, cause a person to be qualified for purposes of paragraph (f)(1).

(4) The evaluation required under paragraph (f)(1) of this section must be conducted by an individual who has the knowledge, training, and experience necessary to assess equipment operators.

(5) The evaluator must be an employee or agent of the employer. Employers that assign evaluations to an agent retain the duty to ensure that the requirements in paragraph (f) are satisfied. Once the evaluation is completed successfully, the employer may allow the operator to operate other equipment that the employer can demonstrate does not require substantially different skills, knowledge, or ability to recognize and avert risk to operate.

(6) The employer must document the completion of the evaluation. This document must provide: The operator's name; the evaluator's name and signature; the date; and the make, model, and configuration of equipment used in the evaluation. The employer

must make the document available at the worksite while the operator is employed by the employer. For operators assessed per paragraph (f)(2) of this section, the documentation must reflect the date of the employer's determination of the operator's abilities and the make, model and configuration of equipment on which the operator has previously demonstrated competency.

(7) When an employer is required to provide an operator with retraining under paragraph (b)(5) of this section, the employer must re-evaluate the operator with respect to the subject of the retraining.

(g) [Reserved].

(h) *Language and literacy requirements.* (1) Tests under this section may be administered verbally, with answers given verbally, where the operator candidate:

(i) Passes a written demonstration of literacy relevant to the work.

(ii) Demonstrates the ability to use the type of written manufacturer procedures applicable to the class/type of equipment for which the candidate is seeking certification.

(2) Tests under this section may be administered in any language the operator candidate understands, and the operator's certification documentation must note the language in which the test was given. The operator is only permitted to operate equipment that is furnished with materials required by this subpart, such as operations manuals and load charts, that are written in the language of the certification.

(i) [Reserved].

(j) *Certification criteria.* Certifications must be based on the following:

(1) A determination through a written test that:

(i) The individual knows the information necessary for safe operation of the specific type of equipment the individual will operate, including all of the following:

(A) The controls and operational/performance characteristics.

(B) Use of, and the ability to calculate (manually or with a calculator), load/capacity information on a variety of configurations of the equipment.

(C) Procedures for preventing and responding to power line contact.

(D) Technical knowledge of the subject matter criteria listed in appendix C of this subpart applicable to the specific type of equipment the individual will operate. Use of the appendix C criteria meets the requirements of this provision.

(E) Technical knowledge applicable to the suitability of the supporting ground and surface to handle expected loads, site hazards, and site access.

(F) This subpart, including applicable incorporated materials.

(ii) The individual is able to read and locate relevant information in the equipment manual and other materials containing information referred to in paragraph (j)(1)(i) of this section.

(2) A determination through a practical test that the individual has the skills necessary for safe operation of the equipment, including the following:

(i) Ability to recognize, from visual and auditory observation, the items listed in § 1926.1412(d) (shift inspection).

(ii) Operational and maneuvering skills.

(iii) Application of load chart information.

(iv) Application of safe shut-down and securing procedures.

(k) *Effective dates.* (1) Apart from the evaluation and documentation requirements in paragraphs (a) and (f), this section is effective on December 10, 2018.

(2) The evaluation and documentation requirements in paragraphs (a) and (f) are effective on February 7, 2019.

■ 3. Amend § 1926.1430 by:

■ a. Revising paragraphs (c)(1) and (2);

■ b. Removing paragraph (c)(3); and

■ c. Redesignating paragraph (c)(4) as paragraph (c)(3).

The revisions read as follows:

**§ 1926.1430 Training.**

\* \* \* \* \*

(c) \* \* \*

(1) The employer must train each operator in accordance with § 1926.1427(a) and (b), on the safe operation of the equipment the operator will be using.

(2) The employer must train each operator covered under the exception of § 1926.1427(a)(2) on the safe operation of the equipment the operator will be using.

\* \* \* \* \*

[FR Doc. 2018-24481 Filed 11-7-18; 4:15 pm]

BILLING CODE 4510-26-P

**Cranes and Derricks in Construction:  
Extension of Operator Certification, §1926.1427(k); Final Rule**

As Adopted by the  
Safety and Health Codes Board

Date: 09 November 2017



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: 15 February 2018

16VAC25-175-1926.1427, Operator Certification, §1926.1427(k)

When the regulations, as set forth in the Operator Certification Extension, §1926.1427 (k), of the Final Rule for Cranes and Derricks in Construction, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

29 CFR

Assistant Secretary

Agency

November 10, 2017

VOSH Equivalent

VOSH Standard

Commissioner of Labor and Industry

Department

February 15, 2018



**§ 1926.1427 Operator qualification and certification.**

\* \* \* \* \*

(k) *Phase-in.* (1) The provisions of this section became applicable on November 8, 2010, except for paragraphs (a)(2) and (f) of this section, which are applicable November 10, 2018.

(2) When paragraph (a)(1) of this section is not applicable, all of the requirements in paragraphs (k)(2)(i) and (ii) of this section apply until November 10, 2018.

(i) The employer must ensure that operators of equipment covered by this standard are competent to operate the equipment safely.

(ii) When an employee assigned to operate machinery does not have the required knowledge or ability to operate the equipment safely, the employer must train that employee prior to operating the equipment. The employer must ensure that each operator is evaluated to confirm that he/she understands the information provided in the training.

[FR Doc. 2017-24349 Filed 11-8-17; 8:45 am]

**BILLING CODE 4510-26-P**

**Cranes and Derricks in Construction: Operator Certification, §1926.1427(k); Amendment**

As Adopted by the  
Safety and Health Codes Board

Date: December 11, 2014



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: 15 February 2015

When the regulations, as set forth in the Amendment to the standard on Cranes and Derricks in Construction, Operator Certification, §1926.1427 (k), are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

November 10, 2014

February 15, 2015

**PART 1926—[AMENDED]**

**Subpart CC—Cranes and Derricks in Construction**

- 2. Amend § 1926.1427 by revising paragraph (k) to read as follows:

**§ 1926.1427 Operator qualification and certification.**

\* \* \* \* \*

(k) *Phase-in.* (1) The provisions of this section became applicable on November 8, 2010, except for paragraphs (a)(2) and (f), which are applicable November 10, 2017.

(2) When § 1926.1427(a)(1) is not applicable, all of the requirements in paragraphs (k)(2)(i) and (ii) of this section apply until November 10, 2017.

(i) The employer must ensure that operators of equipment covered by this standard are competent to operate the equipment safely.

(ii) When an employee assigned to operate machinery does not have the required knowledge or ability to operate the equipment safely, the employer must train that employee prior to operating the equipment. The employer must ensure that each operator is evaluated to confirm that he/she understands the information provided in the training.

[FR Doc. 2014-22816 Filed 9-25-14; 8:45 am]

BILLING CODE 4510-26-P

**Cranes and Derricks in Construction: Revising the Exemption for Digger Derricks,  
§§1926.952 and 1926.1400; Final Rule**

As Adopted by the  
Safety and Health Codes Board

Date: 18 July 2013



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: 01 November 2013

16VAC25-175-1926.952, Mechanical Equipment, §1926.952  
16VAC25-175-1926.1400, Scope, §1926.1400

When the regulations, as set forth in the Final Rule for Cranes and Derricks in Construction: Revising the Exemption for Digger Derricks, §§1926.952 and 1926.1400, respectively, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

June 28, 2013

November 1, 2013

**Cranes and Derricks in Construction:**

**16VAC25-175-1926.856, Removal of Walls, Floors, and Material with Equipment, §1926.856, and  
16VAC25-175-1926.858, Removal of Steel Construction, §1926.858;  
Final Rule**

As Adopted by the  
Safety and Health Codes Board

Date: July 18, 2013



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: November 1, 2013

16VAC25-175-1926.856, Removal of Walls, Floors, and Material with Equipment, §1926.856  
16VAC25-175-1926.858, Removal of Steel Construction, §1926.858

When the regulations, as set forth in this Final Rule and related standards, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

May 23, 2013

November 1, 2013



**CHAPTER 150**  
**UNDERGROUND CONSTRUCTION, CONSTRUCTION INDUSTRY**

16VAC25-150-10. Underground construction; in general (29 CFR 1926.800).

Note: The following standard is unique for the enforcement of occupational safety and health within the Commonwealth of Virginia under the jurisdiction of the VOSH Program. The existing federal OSHA standard does not apply; it does not carry the force of law and is not printed in this volume.

...

**1926.800(t)**

*Hoisting unique to underground construction.* Except as modified by this paragraph (t), employers must: Comply with the requirements of subpart CC of this part, except that the limitation in Sec. 1926.1431(a) does not apply to the routine access of employees to an underground worksite via a shaft; ensure that material hoists comply with Sec. 1926.552(a) and (b) of this part; and ensure that personnel hoists comply with the personnel hoists requirements of Sec. 1926.552(a) and (c) of this part and the elevator requirements of Sec. 1926.552(a) and (d) of this part.

**1926.800(t)(1)**

*General requirements for cranes and hoists*

**1926.800(t)(1)(i)**

Materials, tools, and supplies being raised or lowered, whether within a cage or otherwise, shall be secured or stacked in a manner to prevent the load from shifting, snagging or falling into the shaft.

**1926.800(t)(1)(ii)**

A warning light suitably located to warn employees at the shaft bottom and subsurface shaft entrances shall flash whenever a load is above the shaft bottom or subsurface entrances, or the load is being moved in the shaft. This paragraph does not apply to fully enclosed hoistways.

**1926.800(t)(1)(iii)**

Whenever a hoistway is not fully enclosed and employees are at the shaft bottom, conveyances or equipment shall be stopped at least 15 feet (4.57 m) above the bottom of the shaft and held there until the signalman at the bottom of the shaft directs the operator to continue lowering the load, except that the load may be lowered without stopping if the load or conveyance is within full view of a bottom signalman who is in constant voice communication with the operator.

~~1926.800(t)(1)(iv)~~

-

~~1926.800(t)(1)(iv)(A)~~

Before maintenance, repairs, or other work is commenced in the shaft served by a cage, skip, or bucket, the operator and other employees in the area shall be informed and given suitable instructions.

~~1926.800(t)(1)(iv)(B)~~

A sign warning that work is being done in the shaft shall be installed at the shaft collar, at the operator's station, and at each underground landing.

~~1926.800(t)(1)(v)~~

Any connection between the hoisting rope and the cage or skip shall be compatible with the type of wire rope used for hoisting.

~~1926.800(t)(1)(vi)~~

Spin type connections, where used, shall be maintained in a clean condition and protected from foreign matter that could affect their operation.

~~1926.800(t)(1)(vii)~~

Cage, skip, and load connections to the hoist rope shall be made so that the force of the hoist pull, vibration, misalignment, release of lift force, or impact will not disengage the connection. Moused or latched openthroat hooks do not meet this requirement.

~~1926.800(t)(1)(viii)~~

When using wire rope wedge sockets, means shall be provided to prevent wedge escapement and to ensure that the wedge is properly seated.

~~1926.800(t)(2)~~

*Additional requirements for cranes.* Cranes shall be equipped with a limit switch to prevent overtravel at the boom tip. Limit switches are to be used only to limit travel of loads when operational controls malfunction and shall not be used as a substitute for other operational controls.

~~1926.800(t)(3)~~

*Additional requirements for hoists.*

~~1926.800(t)(3)(i)~~

Hoists shall be designed so that the load hoist drum is powered in both directions of rotation, and so that brakes are automatically applied upon power release or failure.

~~1926.800(t)(3)(ii)~~

Control levers shall be of the "deadman type" which return automatically to their center (neutral) position upon release.

**~~1926.800(t)(3)(iii)~~**

When a hoist is used for both personnel hoisting and material hoisting, load and speed ratings for personnel and for materials shall be assigned to the equipment.

**~~1926.800(t)(3)(iv)~~**

Material hoisting may be performed at speeds higher than the rated speed for personnel hoisting if the hoist and components have been designed for such higher speeds and if shaft conditions permit.

**~~1926.800(t)(3)(v)~~**

Employees shall not ride on top of any cage, skip or bucket except when necessary to perform inspection or maintenance of the hoisting system, in which case they shall be protected by a body belt/harness system to prevent falling.

**~~1926.800(t)(3)(vi)~~**

Personnel and materials (other than small tools and supplies secured in a manner that will not create a hazard to employees) shall not be hoisted together in the same conveyance. However, if the operator is protected from the shifting of materials, then the operator may ride with materials in cages or skips which are designed to be controlled by an operator within the cage or skip.

**~~1926.800(t)(3)(vii)~~**

Line speed shall not exceed the design limitations of the systems.

**~~1926.800(t)(3)(viii)~~**

Hoists shall be equipped with landing level indicators at the operator's station. Marking the hoist rope does not satisfy this requirement.

**~~1926.800(t)(3)(ix)~~**

Whenever glazing is used in the hoist house, it shall be safety glass, or its equivalent, and be free of distortions and obstructions.

**~~1926.800(t)(3)(x)~~**

A fire extinguisher that is rated at least 2A:10B:C (multi-purpose, dry chemical) shall be mounted in each hoist house.

**~~1926.800(t)(3)(xi)~~**

Hoist controls shall be arranged so that the operator can perform all operating cycle functions and reach the emergency power cutoff without having to reach beyond the operator's normal operating position.

**~~1926.800(t)(3)(xiii)~~**

Hoists shall be equipped with limit switches to prevent overtravel at the top and bottom of the hoistway.

**~~1926.800(t)(3)(xiii)~~**

~~Limit switches are to be used only to limit travel of loads when operational controls malfunction and shall not be used as a substitute for other operational controls.~~

**~~1926.800(t)(3)(xiv)~~**

~~Hoist operators shall be provided with a closed circuit voice communication system to each landing station, with speaker microphones so located that the operator can communicate with individual landing stations during hoist use.~~

**~~1926.800(t)(3)(xv)~~**

~~When sinking shafts 75 feet (22.86 m) or less in depth, cages, skips, and buckets that may swing, bump, or snag against shaft sides or other structural protrusions shall be guided by fenders, rails, ropes, or a combination of those means.~~

**~~1926.800(t)(3)(xvi)~~**

~~When sinking shafts more than 75 feet (22.86 m) in depth, all cages, skips, and buckets shall be rope or rail guided to within a rail length from the sinking operation.~~

**~~1926.800(t)(3)(xvii)~~**

~~Cages, skips, and buckets in all completed shafts, or in all shafts being used as completed shafts, shall be rope or rail-guided for the full length of their travel.~~

**~~1926.800(t)(3)(xviii)~~**

~~Wire rope used in load lines of material hoists shall be capable of supporting, without failure, at least five times the maximum intended load or the factor recommended by the rope manufacturer, whichever is greater. Refer to Sec. § 1926.552(c)(14)(iii) of this part for design factors for wire rope used in personnel hoists. The design factor shall be calculated by dividing the breaking strength of wire rope, as reported in the manufacturer's rating tables, by the total static load, including the weight of the wire rope in the shaft when fully extended.~~

**~~1926.800(t)(3)(xix)~~**

~~A competent person shall visually check all hoisting machinery, equipment, anchorages, and hoisting rope at the beginning of each shift and during hoist use, as necessary.~~

**~~1926.800(t)(3)(xx)~~**

~~Each safety device shall be checked by a competent person at least weekly during hoist use to ensure suitable operation and safe condition.~~

**~~1926.800(t)(3)(xxi)~~**

~~In order to ensure suitable operation and safe condition of all functions and safety devices, each hoist assembly shall be inspected and load tested to 100 percent of its rated capacity: at the time of installation; after any repairs or alterations affecting its structural integrity; after the operation of any safety device; and annually when in use. The employer shall prepare a certification record which includes the date each inspection and load test was performed; the signature of the person who performed the inspection and test; and a serial number or other identifier for the hoist that was inspected and tested. The most recent certification record shall be maintained on file until completion of the project.~~

**~~1926.800(t)(3)(xxii)~~**

~~Before hoisting personnel or material, the operator shall perform a test run of any cage or skip whenever it has been out of service for one complete shift, and whenever the assembly or components have been repaired or adjusted.~~

**~~1926.800(t)(3)(xxiii)~~**

~~Unsafe conditions shall be corrected before using the equipment.~~

**~~1926.800(t)(4)~~**

~~*Additional requirements for personnel hoists.*~~

**~~1926.800(t)(4)(i)~~**

~~Hoist drum systems shall be equipped with at least two means of stopping the load, each of which shall be capable of stopping and holding 150 percent of the hoist's rated line pull. A broken-rope safety, safety catch, or arrestment device is not a permissible means of stopping under this paragraph (t).~~

**~~1926.800(t)(4)(ii)~~**

~~The operator shall remain within sight and sound of the signals at the operator's station.~~

**~~1926.800(t)(4)(iii)~~**

~~All sides of personnel cages shall be enclosed by one-half inch (12.70 mm) wire mesh (not less than No. 14 gauge or equivalent) to a height of not less than 6 feet (1.83 m). However, when the cage or skip is being used as a work platform, its sides may be reduced in height to 42 inches (1.07 m) when the conveyance is not in motion.~~

**~~1926.800(t)(4)(iv)~~**

~~All personnel cages shall be provided with a positive locking door that does not open outward.~~

**~~1926.800(t)(4)(v)~~**

~~All personnel cages shall be provided with a protective canopy. The canopy shall be made of steel plate, at least 3/16-inch (4.763 mm) in thickness, or material of equivalent strength and impact resistance. The canopy shall be sloped to the outside, and so designed that a section may be readily pushed upward to afford emergency egress. The canopy shall cover the top in such a manner as to protect those inside from objects falling in the shaft.~~

**~~1926.800(t)(4)(vi)~~**

~~Personnel platforms operating on guide rails or guide ropes shall be equipped with broken-rope safety devices, safety catches or arrestment devices that will stop and hold 150 percent of the weight of the personnel platform and its maximum rated load.~~

**~~1926.800(t)(4)(vii)~~**

~~During sinking operations in shafts where guides and safeties are not yet used, the travel speed of the personnel platform shall not exceed 200 feet (60.96 m) per minute. Governor controls set for 200 feet (60.96 m) per minute shall be installed in the control system and shall be used during personnel hoisting.~~

**~~1926.800(t)(4)(viii)~~**

The personnel platform may travel over the controlled length of the hoistway at rated speeds up to 600 feet (182.88 m) per minute during sinking operations in shafts where guides and safeties are used.

**~~1926.800(t)(4)(ix)~~**

The personnel platform may travel at rated speeds greater than 600 feet (182.88 m) per minute in completed shafts.

Also for federal OSHA identical revisions to Change III, refer to 78 FR 23837 (April 23, 2013) at link, below:

[http://www.osha.gov/FedReg\\_osha\\_pdf/FED20130529.pdf](http://www.osha.gov/FedReg_osha_pdf/FED20130529.pdf)

**CRANES AND DERRICKS IN CONSTRUCTION; Direct Final Rule (DFR),  
Demolition and Underground Construction**

As adopted by the

Safety and Health Codes Board

Date: September 12, 2012



NOT GOING INTO EFFECT

**NOT IN EFFECT BECAUSE OF FEDERAL  
DFR NOT GOING INTO EFFECT**

VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective date: January 1, 2013

16VAC25-175-1926.856, Removal of Walls, Floors and Material with Equipment, §1926.856

16VAC25-175-1926.858, Removal of Steel Construction, §1926.858

16VAC25-150, Underground Construction, Construction Industry (§1926.800)

When the regulations, as set forth in the Direct Final Rule to Cranes and Derricks in Construction: Demolition and Underground Construction, 16VAC25-150, Underground Construction, Construction Industry (§1926.800) and §§1926.856, 1926.858, respectively, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

November 15, 2012

January 1, 2013



When the regulations, as set forth in this Final Rule for Cranes and Derricks and related standards, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

May 23, 2013

November 1, 2013

**Cranes and Derricks in Construction, §§ 1926.1400 through 1926.1442, and Other Related Standards;  
Final Rule**

As Adopted by the  
Safety and Health Codes Board

Date: January 20, 2011



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: April 15, 2011

16 VAC 25-175-1926.6	16 VAC 25-175-1926.800
16 VAC 25-175-1926.31	16 VAC 25-175-1926.856
16 VAC 25-175-1926.450	16 VAC 25-175-1926.858
16 VAC 25-175-1926.500	16 VAC 25-175-1926.952
16 VAC 25-175-1926.1500	16 VAC 25-175-1926.1050
16 VAC 25-175-1926.550	16 VAC 25-175-1926.1400 through
16 VAC 25-175-1926.553	16 VAC 175-1926.1442
16 VAC 25-175-1926.600	Subparts AA and BB
16 VAC 25-175-1926.753	

When the regulations, as set forth in the federal OSHA's Final Rule to Cranes and Derricks in Construction, §§ 1926.1400 through 1926.1442, and other related standards, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

November 8, 2010

April 15, 2011