

This document is scheduled to be published in the Federal Register on 02/18/2020 and available online at **https://federalregister.gov/d/2020-00207**, and on **govinfo.gov**

BILLING CODE: 4510-26-P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1904, 1910, 1915, 1918 and 1926

[Docket No. OSHA-2015-0012]

RIN: 1218-AD12

OSHA Standards and Regulations; Corrections

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Final rule; correcting amendments.

SUMMARY: In this rule OSHA is correcting typographical errors, including extraneous or omitted materials and inaccurate graphics, in 27 OSHA standards and regulations. These revisions do not affect the substantive requirements or coverage of the standards, do not modify or revoke existing rights or obligations, and do not establish new rights or obligations. The purpose of these correcting amendments is to reduce regulatory burdens by correcting the inaccuracies in regulatory text and graphics. This rule revises standards in recordkeeping, construction, general industry, shipyard employment, and longshoring.

DATES: Effective [INSERT DATE OF PUBLICATION IN FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT:

General information and press inquiries: Mr. Frank Meilinger, OSHA Office of Communications, telephone: (202) 693-1999; email: *meilinger.francis2@dol.gov*.

Technical information: Mr. Garvin Branch, Directorate of Construction; telephone: (202) 693-2020; fax: (202) 693-1689; email: *branch.garvin@dol.gov*.

ADDRESSES: Copies of this Federal Register document and news releases: Electronic copies

of these documents are available at OSHA's webpage at *http://www.osha.gov*.

SUPPLEMENTARY INFORMATION:

Table of Contents

- I. Executive Summary
- II. Background
- **III.** Summary and Explanation
- IV. Agency Determinations
 - A. Economic Analysis and Regulatory Flexibility Analysis
 - B. Legal Considerations
 - C. Paperwork Reduction Act
 - D. Federalism
 - E. State Plans
 - F. Unfunded Mandates Reform Act of 1995
- V. Authority and Signature

I. Executive Summary

This rule corrects certain minor errors in 27 OSHA standards and regulations in 29 CFR Parts 1904, 1910, 1915, 1918, and 1926. The corrections concern the following regulations and standards: (a) Recording and Reporting Injuries and Illnesses Regulations – including: partial exemptions; annual summary of work-related injuries and illnesses; and definitions; (b) Occupational Safety and Health Standards for General Industry – including: applicability of standards to employments in territories; definition and requirements for nationally recognized testing laboratories; electrical generation, transmission, and distribution; lead; and cadmium; (c) Occupational Safety and Health Standards for Shipyard Employment – eye and face protection against welding radiation; (d) Safety and Health Regulations for Longshoring – recommended Specific Program Elements for first aid training; and (e) Safety and Health Regulations for Construction – including: general safety and health provisions concerning applicability to employments in territories; lead; hazardous waste operations and emergency response; electrical use of flexible cords and cables; scaffolds; fall protection-roof width determinations; helicoptershoists-elevators-and-conveyors-personnel hoists; excavation-Appendix A; steel erection-joists tables; metal decking and shear connectors; fall hazard training; underground construction; electric power transmission and distribution definitions; asbestos; cadmium; and cranes and derricks - routine access to underground construction. The corrections revise typographical errors, including extraneous or omitted materials and inaccurate graphics, in the listed standards.

II. Background

From time to time OSHA receives inquiries from inside and outside the agency concerning minor misprinted, technically inaccurate materials. OSHA researches the inaccuracies and potential revisions. Where necessary, the agency undertakes rulemaking to correct the issues. Where revisions are limited to minor corrections and technical amendments, OSHA publishes a document in the Federal Register directing the required revisions be made to the codified version of the regulations. This rule details the errors, the revisions, and directs the needed revisions to be made. Revisions are to be made to both electronic and printed versions of the Code of Federal Regulations (CFR). The agency has researched the changes necessary to correct minor misprints in the following five parts of Title 29: Recording and reporting occupational injuries and illnesses (part 1904), Occupational safety and health standards for shipyard employment (part 1915), Longshoring safety and health (part 1918), and Construction safety and health (part 1926). The revisions in this rule serve to correct certain minor errors in the 27 OSHA standards and

regulations. This rule is not an EO 13771 regulatory action because this rule is not significant under EO 12866.

III. Summary and Explanation

This rule corrects certain minor errors in 27 OSHA standards and regulations, as summarized in the Executive Summary. These corrections revise typographical errors, including extraneous or omitted materials and inaccurate graphics, in the listed standards. A more detailed discussion of each revision follows.

A. Revisions in Recording and Reporting Occupational Injuries and Illnesses (29 CFR Part 1904)

1. Subpart B of 1904 - Scope, Partial exemption in 29 CFR 1904.1.

The agency is correcting omissions in the recordkeeping and reporting scope provision, § 1904.1(a)(1). This section refers to the requirement of § 1904.39 that even partially exempt employers must report certain injuries to OSHA. Existing section § 1904.1(a)(1) mirrors prior § 1904.39(a) reporting requirements for all employers. The prior requirement was to report each fatality and each hospitalization of three or more employees. OSHA revised those reporting requirements in the *Federal Register* (79 FR 56130, September 18, 2014), and the revisions became effective January 1, 2015. The revisions to § 1904.39(a) require all employers, even those partially exempted from recording by the § 1904.1 size exemption, to report a fatality, a hospitalization of one or more employees, an employee amputation, or an employee loss of an eye. This correction will place the corresponding language in § 1904.1(a)(1) so that it mirrors the current requirement. The change in this paragraph is not substantive and does not impose new obligations.

2. Subpart D of 1904 — Other OSHA Injury and Illness Recordkeeping Requirements, Annual summary of work-related injuries and illnesses in 29 CFR 1904.32.

OSHA is also correcting a typographical error in the recordkeeping annual summary provision (\$ 1904.32(b)(2)(iii)). The error is a faulty reference to \$ 1904.6(b)(4) describing equivalent forms allowed for recording annual injury/illness summary data. There is no \$ 1904.6(b)(4). The correct reference is to \$ 1904.29(b)(4) "What is an equivalent form?" 3. Subpart G of 1904 — Definitions, in 29 CFR 1904.46.

OSHA is also updating § 1904.46 Definitions to correct a typographic omission. The agency revised a longstanding reference to the outdated 1987 Standard Industry Classification (SIC code) manual in 29 CFR 1904.2(b) (79 FR 56130, 56186 (September 18, 2014)). The document replaced the SIC code with the modern North American Industry Classification System-2007 code (NAICS). However, the corresponding replacement of SIC code with NAICS code in the § 1904.46 definition of Establishment at paragraph (1)(iii) did not occur. This rule makes that correction.

B. Revisions in Occupational Safety and Health Standards (29 CFR Part 1910)

1. Subpart A – General, Applicability of standards in 29 CFR 1910.5.

In § 1910.5, OSHA is correcting obsolete regulatory text, which, in addition to any State, the District of Columbia, and U.S. territories, applies OSHA standards to two territories that no longer exist: Trust Territory of the Pacific Islands and the Canal Zone. Section 29 CFR 1910.5(a) corrections will replace the reference to the Trust Territory of the Pacific Island with the Commonwealth of the Northern Mariana Islands and remove the reference to the Canal Zone. *2. Subpart A – General, Definition and requirements for a Nationally Recognized Testing Laboratory in 29 CFR 1910.7.*

In Appendix A to § 1910.7 OSHA is correcting a typographical error for the Recognition Process for Nationally Recognized Testing Laboratories (NRTLs). Appendix A, section "*I. Procedures for Initial OSHA Recognition*" currently includes sections "A. Applications," "B. Review and Decision Process; Issuance or Renewal," and "c. *Terms and Conditions of Recognition*." In order to eliminate confusion, the existing c title must conform to those of "A." and "B." As it exists, section "c. *Terms and Conditions of Recognition*" follows a similarly formatted paragraph B(7)(e),"*Review of final decision*," which is the last paragraph of "B. Review and Decision Process; Issuance or Renewal." Existing paragraph "c" introduces its own topic, "Terms and Conditions of Recognition," which is corrected to the same format as the A and B titles. Due to the change in the heading, OSHA is also renumbering current c. (1), (2), (3), and (4) to (1)(a), (b), (c), and (d). OSHA is also removing the outdated current paragraph c.(5), *Temporary Recognition of Certain NRTLs*, as the period of temporary recognition ended in 1993 and the two NRTLs listed in the paragraph now have regular NRTL recognition.

3. Subpart R- Special Industries, Electric power generation, transmission, and distribution in 29 CFR 1910.269.

In § 1910.269(x), this rule corrects an outdated reference in the fifth definition of Hazardous Atmosphere to "Material Safety Data Sheets." Due to the global harmonization of Hazard Communications standards, OSHA changed "Material Safety Data Sheets" (MSDS) to "Safety Data Sheet" (SDS) at 77 FR 17574, 17577 (March 26, 2012).

4. Subpart Z – Toxic and Hazardous Substances, Lead in 29 CFR 1910.1025.

OSHA is also correcting a misprinted reference to § 1910.1025(e)(6) in § 1910.1025(e)(3)(ii)(G). In 1995, OSHA removed § 1910.1025(e)(4) and renumbered paragraph (e)(5) as (e)(4) and paragraph (e)(6) as (e)(5) (60 FR 52856, 52858, October 11, 1995). At that

time, the reference to paragraph (e)(6) in § 1910.1025(e)(3)(ii)(G) should have been changed to (e)(5) but was not changed. This final rule is correcting the reference in § 1910.1025(e)(3)(ii)(G) to paragraph (e)(5).

5. Subpart Z – Toxic and Hazardous Substances, Cadmium in 29 CFR 1910.1027.

OSHA is removing § 1910.1027(n)(6), which requires medical records to be transferred to the National Institute for Occupational Safety and Health (NIOSH) if the employer goes out of business and does not have a successor employer or other organization designated to receive the records. In the Standards Improvement Project Phase III (SIP-III) rulemaking, OSHA explained that NIOSH found these records were not valuable for research and that the cost of storing the records could not be justified. OSHA then removed the transfer of records requirement from 18 health standards in 29 CFR parts 1910, 1915 and 1926, and in § 1910.1020 itself, but the cadmium standard was inadvertently overlooked (76 FR 33590, 33598, June 8, 2011). OSHA is now making that update in the general industry cadmium standard.

C. Revisions for Occupational Safety and Health Standards for Shipyard Employment (29 CFR 1915)

Subpart I – Personal Protective Equipment (PPE), Eye and face protection in 29 CFR 1915.153.

In § 1915.153, this rule corrects format errors in Table I-1—Filter Lenses for Protection Against Radiant Energy by reformatting the table so that the values for "Operations," "Electrode size," "Arc current," and "Minimum protective shade" correspond with each other correctly.

D. Revisions to Safety and Health Regulations for Longshoring (29 CFR Part 1918)

Appendix V to Part 1918 -- Basic Elements of a First Aid Training Program (Non-mandatory), Specific Program Elements (A)(3) Poisoning. In Non-mandatory Appendix V, Basic Elements of a First Aid Training Program, to 29 CFR 1918, Specific Program Elements paragraph (A)(3), OSHA is updating "Materials Safety Data Sheet (MSDS)" to the current terminology "Safety Data Sheet (SDS)."

E. Revisions to Safety and Health Regulations for Construction (29 CFR Part 1926)

1. Subpart C – General Safety and Health Provisions, General safety and health provisions in 29 CFR 1926.20.

At § 1926.20(c), General safety and health provisions for construction, this rule corrects the list of territories to which OSHA construction standards apply. The territories are the same as the ones listed in § 1910.5(a) above, as modified by this rule.

2. Subpart D – Occupational Health and Environmental Conditions, Lead in 29 CFR 1926.62.

In § 1926.62, the lead standard for construction, OSHA is correcting paragraphs 1926.62(d)(2)(iii) and (iv) by replacing the existing outdated references to "Table 1 of this section" with the correct references to "paragraph (f) of this section." Table 1 no longer exists (71 FR 50122, 50191 (August 24, 2006)). Respirator selection must be conducted in accordance with 29 CFR 1910.134(d)(3)(i)(A), as required by § 1926.62(f)(3).

In § 1926.62(d)(3)(iii) and (d)(4)(ii), OSHA is replacing existing misprints referencing "(d)(10) of this section" with correct references to "(d)(9) of this section," which addresses the accuracy of measurement required by paragraphs (d)(3)(iii) and (d)(4)(ii). There is no paragraph (d)(10).

In § 1926.62, Appendix B, Section IV - Paragraph (F), OSHA is replacing the outdated reference to Table 1 with the correct reference to § 1926.62(f)(3) of this section for selecting respirators as explained above regarding § 1926.62(d)(2)(iii) and (iv).

3. Subpart D – Occupational Health and Environmental Conditions, Hazardous waste operations and emergency response in 29 CFR 1926.65.

In § 1926.65(a)(2)(i) of Hazardous waste operations and emergency response, OSHA is correcting a misprinted reference to § 1926.20(e)(1). There is no § 1926.20(e)(1); the correct reference, § 1926.20(e), was added in 1993 (58 FR 35076, 35078 (June 30, 1993)).

In § 1926.65(g)(2), OSHA is correcting the outdated acronym "MSDS" and term "Material Safety Data Sheet." Due to the global harmonization of Hazard Communications standards OSHA changed these terms to "SDS" and "Safety Data Sheet" (77 FR 17574, 17577 (March 26, 2012)).

In § 1926.65(1)(3)(vi) and (p)(8)(iv)(E), OSHA is removing misprinted references to § 1926.159. OSHA had imported regulatory text for §§ 1926.97, 1926.98, and 1926.156-1926.159 in error from part 1910 fire protection standards. The 1910 standards, however, were expressly limited in scope and did not cover construction. OSHA corrected the improper incorporation by removing the sections from part 1926, including § 1926.159, in 1996 (61 FR 31427, 31429, 31432 (June 20, 1996)).

In § 1926.65(q)(3)(iii), OSHA is removing a misprinted reference to § 1926.97, for the reason explained in the prior paragraph. The particular text in former § 1926.97 concerned protective clothing for fire brigades. After § 1926.97 was removed (61 FR 31427, 31432 (June 20, 1996)), OSHA later revived § 1926.97 as an unrelated electrical personal protective equipment standard (79 FR 20316, 20693 (April 11, 2014)).

In paragraph 5.1 of Section B in Appendix A to 29 CFR 1926.65, OSHA is correcting an outdated reference of MSDS to SDS and Safety Data Sheet as explained above regarding § 1926.65(g)(2).

4. Subpart K – Electrical, Wiring methods, components, and equipment for general use in 29 CFR 1926.405.

In § 1926.405(g)(1)(iii)(C), OSHA is correcting a misprinted reference to a nonexistent § 1926.405(a)(2)(ii)(1). The correct reference is to § 1926.405(a)(2)(ii)(I), which allows the use of flexible cords and cables through pinch points during construction work if protection is provided to avoid damage.

5. Subpart L – Scaffolds, Additional requirements applicable to specific types of scaffolds in 29 CFR 1926.452.

In § 1926.452(a)(3), in the Scaffolds standards, OSHA is correcting a pole scaffold metric conversion by replacing the inaccurate conversion of 50 pounds to 222 kilograms. The accurate rounded conversion number is 22.7 kilograms.

In § 1926.452(w)(6)(ii), OSHA is correcting a mobile scaffold reference by replacing the existing misprinted reference to paragraph (x) (Repair bracket scaffolds) of 29 CFR part 1926 subpart L appendix A. The correct reference is to paragraph 2.(w) (Mobile scaffolds) of the same appendix.

Also in § 1926.452(w)(6)(ii), OSHA is removing the misprinted parenthetical phrase "(ANSI/SIA A92.5 and A92.6)". The A92.5 standard applies to boom-supported elevating work platforms, and A92.6 applies to self-propelled elevating work platforms.

6. Subpart L – Scaffolds, Appendix E to Subpart L, Drawings and Illustrations.

In (Non-mandatory) appendix E of 29 CFR subpart L, OSHA is correcting text and graphic pages, which show maximum vertical tie spacing for scaffolds. The graphics being corrected are titled "Maximum Vertical Tie Spacing Wider Than 3'-0'' Bases" and "Maximum Vertical Tie Spacing 3'-0'' And Narrower Bases." Both corrections depict guys, ties, and braces

instead of just ties, and the revisions correct captions for attachment points, which must be closest to the required height dimension, whether above or below the exact measurement. Also the revisions correctly depict that connections must be where horizontal scaffold frame members connect inner and outer scaffold legs whether at or closest to the exact height measurement. 7. Subpart M – Fall Protection, Appendix A to Subpart M, Determining Roof Widths.

In appendix A to 29 CFR 1926 subpart M, paragraph (1), OSHA is correcting "Nonmandatory Guidelines for Complying with § 1926.501(b)(10)" by replacing the misprinted reference to § 1910.501(b)(10) with the correct reference to § 1926.501(b)(10).

Also in appendix A to 29 CFR part 1926 subpart M, OSHA is correcting Example C. Irregularly Shaped Roofs With Rectangular Shaped Sections and Example E. Roofs With Penthouses, Open Courtyards, Additional Floors, Etc., by replacing misprinted references to § 1926.502(b)(10) with the correct reference to § 1926.501(b)(10).

Additionally in subpart M, appendix A, Example C and Example E, OSHA is correcting these titles by centering and conforming the titles with the format used for titles in Examples A, B, D, and F of the appendix. OSHA is also correcting notations in Examples C and E to show that a W symbol means a correct measurement and that a circled "w" symbol means an incorrect measurement. The corrections explain a symbol included on the graphics but not included in the explanatory text. The corrections clarify the graphics.

8. Subpart N - Helicopters, Hoists, Elevators, and Conveyors in 29 CFR 1926.552.

At § 1926.552(c)(17)(iv), OSHA is replacing misprinted lower case parenthetical italicized paragraph letters (a) through (e) in Personnel hoists with capital parenthetical letters. Preexisting § 1926.552(c)(17)(iv) includes paragraphs (a), (b), (c), (d), and (e). Paragraph 1926.552(c)(17)(iv)(e) is immediately followed by § 1926.552(d) Permanent elevators. This

sequence causes confusion. The Federal Register Document Drafting Handbook at Table 2-4 requires paragraphs at the (c)(17)(iv) level to be listed with capital parenthetical letters, i.e., (A), (B), (C), (D), and (E). This capitalization would correctly distinguish requirements for material or personnel hoists used only for construction activities from permanent elevators used during construction activities.

9. Subpart P – Excavations, Appendix A to Subpart P, Soil Classification.

In paragraph (b) of appendix A to 29 CFR part 1926, subpart P, Excavations, OSHA corrects criteria for *Type C* soil case (*v*). The *Definition* for case (*v*) contains a misprinted, "or", which confuses how layered soil systems are interpreted to dip into excavations. The correction, which is consistent with Soil Types A, B, and C in the proposed rule at 52 FR 12288, 12329-30 (April 15, 1987) as well as with Type A and Type B in the Final Rule at 54 FR 45894, 45963 (October 31, 1989), will use "on." "On" accurately describes how a layered soil system dips into the excavation. The language is being corrected to explain that a layered system dips into the excavation "on a slope of four horizontal to one vertical (4H:1V) or steeper." OSHA is also correcting an unrelated misspelling of "minimum" in paragraph (d)(2)(iii)-*Thumb Penetration* of appendix A.

10. Subpart R – Steel Erection, Structural steel assembly in 29 CFR 1926.754.

In § 1926.754(c)(2), OSHA is correcting the Steel Erection standard by replacing the current misprinted reference to nonexistent § 1926.760(c)(8) with the correct reference to § 1926.760(c)(7).

11. Subpart R – Steel Erection, Open web steel joists in 29 CFR 1926.757.

Additionally, OSHA is correcting Steel Erection joist Tables A and B in § 1926.757(c) (66 FR 5196, 5270 (January 18, 2001)) by revising a typographical footnote error that incorrectly limits an exemption from erection bridging requirements. The footnotes in both Table A, Erection Bridging For Short Span Joists, and Table B, Erection Bridging For Long Span Joists read "NM=diagonal bolted bridging not mandatory for joists under 40 feet." This incorrectly limits the exemption by joist length. The agency discovered the misprinted footnote after it was published and addressed the inaccuracy through question 36(a) in compliance directive CPL 02-01-034 (originally CPL 2-1.34) (March 22, 2002). There is no length limitation for the NM notation. It means not mandatory regardless of joist length.

12. Subpart R – Steel Erection, Training in 29 CFR 1926.761.

In § 1926.761(b) *Fall hazard training*, OSHA is correcting misprinted fall protection training requirements. The December 12, 2008 *Federal Register* at page 75589 instructed that § 1926.761(b) be revised. An inadvertent misprint replaced § 1926.761(b) and the subparagraphs with just the regulatory text for paragraph (b) alone, leaving out the subparagraphs (66 FR 5196, 5273 (Jan. 18, 2001)); as amended at (73 FR 75568, 75589 (Dec. 12, 2008)). The correction replaces the inadvertently removed paragraphs (b)(1) through (5). The correction includes the original regulatory text concerning: (1) hazard recognition, (2) use of fall protection systems, (3) correct procedures for erecting, maintaining fall protection systems, (4) fall prevention procedures, and (5) the fall protection requirements of subpart R.

13. Subpart V – Power Transmission and Distribution, Definitions in 29 CFR 1926.968.

In § 1926.968, the definition of *Hazardous atmosphere* includes five examples. The Note to example five contains the outdated term "Material Safety Data Sheet." Due to the global harmonization of Hazard Communications standards, OSHA changed the term to "Safety Data Sheet (SDS)," as explained above in the revision to § 1926.65(g)(2)).

14. Subpart Z – Toxic and Hazardous Substances, Asbestos in 29 CFR 1926.1101.

At § 1926.1101(e)(4), OSHA is correcting a typographical error in the Asbestos standard by replacing a reference to "(h)(2) of this section" with "(h)(3) of this section." For entrance into a regulated area § 1926.1101(e)(4) requires that employees wear respirators selected in accordance with the referenced paragraph. Paragraph (h)(2) requires the employer to implement a respiratory protection program. Paragraph (h)(3) details the criteria that employers must use to select and provide each employee an appropriate respirator for protection against asbestos exposure.

In § 1926.1101(f)(3)(iii), OSHA is removing the redundant use of the word "respirator".

At § 1926.1101(g)(7), OSHA is correcting a typographical error by correctly italicizing the section title, *Work Practices and Engineering Controls for Class II work*.

In § 1926.1101(g)(8)(v), OSHA is replacing a misprinted reference to § 1926.1101(g)(8)(iv)(A) through (D) with the correct reference to "§ 1926.1101(g)(8)(i) through (iv)" of this section.

In § 1926.1101(n)(2)(iii) and (n)(3)(i) and (iii), OSHA is replacing misprinted references to §1910.33 with correct references to § 1910.1020.

At § 1926.1101(p)(1), OSHA is also correcting the Asbestos standard by deleting the reference to appendix C of 29 CFR 1926.1101 because the appendix no longer exists. OSHA removed and reserved the appendix when it consolidated respiratory protection requirements for general industry, construction, shipyard, longshoring, and marine terminal workplaces in 29 CFR 1910.134 (see 63 FR 1152, 1298 (January 8, 1998)).

In appendix K to § 1926.1101 paragraph (e) to paragraph 3.1, OSHA is correcting an outdated reference to MSDS with reference to SDS and Safety Data Sheet as discussed above in the similar correction to § 1926.65(g)(2).

15. Subpart Z – Toxic and Hazardous Substances, Cadmium in 29 CFR 1926.1127.

In paragraph (d)(1)(i) to § 1926.1127, OSHA is correcting an outdated reference to MSDS with reference to SDS and Safety Data Sheet as discussed above in the similar correction to § 1926.65(g)(2).

In paragraphs (n)(1)(iii) and (n)(3)(iii) of § 1926.1127, OSHA is revising the references to § 1926.33 to more directly refer to § 1910.1020. Section 1910.1020 is the *Access to employee exposure and medical records regulation*, and § 1926.33 is currently a cross-reference to § 1910.1020, so the change is simply to make the reference more direct. Recent rulemakings have used this direct reference to the general industry standard in the construction standards. Above, regarding § 1926.1101(n), OSHA corrected misprinted references to § 1910.1020, and OSHA made the same change in other sections of the construction Asbestos standard in the SIP-III rulemaking (76 FR 33590, 33601, June 8, 2011). Existing § 1926.1127(n)(4)(i) also currently refers directly to § 1910.1020.

OSHA is also removing subparagraph (n)(5), which requires medical records to be transferred to NIOSH if the employer goes out of business and does not have a successor employer or other organization designated to receive the records for the reasons described above regarding the cadmium standard for general industry, § 1910.1027(n)(6).

16. Subpart CC – Cranes and Derricks in Construction, Hoisting personnel in 29 CFR 1926.1431.

In § 1926.1431(a), OSHA is adding a particular work activity, routine employee access to an underground construction worksite via a shaft when hoisted by a crane or derrick, to the list of work activities exempt from an employer's infeasibility demonstration requirement before using equipment to hoist employees. The infeasibility requirement for this activity was removed by

changes to § 1926.800(t) *"Hoisting unique to underground construction"* (78 FR 23837 (April 23, 2013)).

IV. Agency Considerations

A. Economic Analysis and Regulatory Flexibility Analysis

The revisions will correct minor misprints, omissions, outdated references, and tabular and graphic inaccuracies. This will make the standards easier for employers and workers to understand and follow, as well as improve compliance assistance and enforcement. In addition, the corrections reduce confusion, save time, and thus may save costs.

The corrections and revisions are minor. None of them expand employer obligations or impose new costs. The corrections do not have significant impact on any small employer. Therefore, OSHA has determined that this rulemaking is not a significant rule with respect to Executive Order 12866 and complies with Executive Order 13563. OSHA certifies that this rulemaking will not have a significant economic impact on a substantial number of small entities.

B. Legal Considerations: Exemption from Notice and Comment Procedures

OSHA determined that this rulemaking is not subject to the procedures for public notice and comment specified in Section 4 of the Administrative Procedure Act (5 USC 553) or Section 6(b) of the Occupational Safety and Health Act of 1970 (29 USC 655(b)). This rulemaking does not affect or change any existing rights or obligations, and no stakeholder is likely to object to them. Therefore, the agency finds good cause, in accordance with 29 CFR 1911.5, that public notice and comment are unnecessary within the meaning of 5 USC 553(b)(3)(B) and 29 USC 655(b).

C. Paperwork Reduction Act

After reviewing the rule and associated information collections, OSHA has determined that none of the correcting amendments would create new or revise existing information collections. Table A lists the collections of information affected by the correcting amendments.

OMB Control Number	Collection of Information
1218-0176	Recordkeeping and Reporting Injuries and Illnesses (29 CFR 1904)
1218-0092	Lead in General Industry Standard (29 CFR 1910.1025)
1218-0185	Cadmium in General Industry Standard (29
1218-0134	CFR 1910.1027) Asbestos in Construction Standard (29 CFR 1926.1101)

 Table A – Affected Collections of Information

OSHA notes that a Federal agency cannot conduct or sponsor a collection of information unless OMB approves it under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.), and the agency displays a currently valid OMB control number. The public need not respond to a collection of information requirement unless the agency displays a currently valid OMB control number, and, notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information requirement if the requirement does not display a currently valid OMB control number.

D. Federalism

OSHA reviewed the included minor revisions in accordance with the Executive Order on Federalism (Executive Order 13132, 64 FR 43255, August 10, 1999), which requires that Federal agencies, to the extent possible, refrain from limiting State policy options, consult with States prior to taking any actions that would restrict State policy options, and take such actions only when clear constitutional authority exists and the problem is national in scope. Executive Order

13132 provides for preemption of State law only with the expressed consent of Congress. Agencies must limit any such preemption to the extent possible.

Under Section 18 of the OSH Act, Congress expressly provides that States may adopt, with Federal approval, a plan for the development and enforcement of occupational safety and health standards; States that obtain Federal approval for such a plan are referred to as "State Plan States." (29 U.S.C. 667.) Occupational safety and health standards developed by State Plan States must be at least as effective in providing safe and healthful employment and places of employment as the Federal standards.

While OSHA drafted these minor revisions to clarify existing employee protections in every State, Section 18(c)(2) of the OSH Act permits State Plan States and Territories to develop and enforce their own standards, provided the requirements in these standards are at least as safe and healthful as the requirements specified in these corrections to existing standards.

In summary, as described above in Section IV(B) Legal Considerations, OSHA determined that this rule does not affect or change any existing rights or obligations, and no stakeholder is likely to object to them; therefore, in States with OSHA-approved State Plans, this rulemaking would not significantly limit State policy options.

E. State Plans

When Federal OSHA promulgates a new standard or a more stringent amendment to an existing standard, the 28 States and U.S. Territories with their own OSHA-approved occupational safety and health plans (State Plans) must amend their standards to reflect the new standard or amendment. Optionally they may show OSHA why such action is unnecessary (e.g., because an existing State standard covering this area is already "at least as effective" as the new Federal standard or amendment (29 CFR 1953.5(a)). Since this rule publishes minor corrections

to existing standards, it is unlikely that any State Plan needs to draft a new standard or amendment to an existing standard. When OSHA promulgates technical amendments or minor corrections that do not impose additional or more stringent requirements than the existing standards, State Plans are not required to amend or correct their standards, although OSHA may encourage them to do so.

The 28 States and territories with 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. Of those Connecticut, Illinois, Maine, New Jersey, New York, and the Virgin Islands have OSHA-approved State Plans that apply to State and local government employees only.

OSHA concludes that these minor corrections and technical amendments will clarify existing protections afforded employees while reducing the compliance burden and confusion for employers. Therefore, OSHA urges States and Territories with approved State Plans to make appropriate revisions to their standards.

F. Unfunded Mandates Reform Act of 1995

OSHA reviewed the included minor corrections in accordance with the Unfunded Mandates Reform Act of 1995 (UMRA; 2 U.S.C. 1501 et seq.) and Executive Order 12875 (56 FR 58093). As noted under section IV(E) ("State Plans") of this rule, the agency's standards do not apply to State and local governments except in States that elect voluntarily to adopt a State Plan approved by the agency. Consequently, these corrections and technical amendments, in addition to being minor and not changing substantive protections, do not meet the definition of a "Federal intergovernmental mandate" (see Section 421(5) of the UMRA (2 U.S.C. 658(5)).

Therefore, for the purposes of the UMRA, the agency certifies that these minor corrections and technical amendments do 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.

V. Authority and Signature

Loren Sweatt, Principal Deputy Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, authorized the preparation of this rule pursuant to Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657), 29 CFR part 1911, and Secretary's Order 1-2012 (77 FR 3912).

Signed at Washington, DC.

Loren Sweatt,

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

Corrections to Standards

For the reasons stated in the preamble of this final rule, the Occupational Safety and Health Administration amends 29 CFR parts 1904, 1910, 1915, 1918, and 1926 as follows: **PART 1904—RECORDING AND REPORTING OCCUPATIONAL INJURIES AND**

PART 1904—RECORDING AND REPORTING OCCUPATIONAL INJURIES AT

ILLNESSES

1. The authority citation for part 1904 continues to read as follows:

Authority: 29 U.S.C. 657, 658, 660, 666, 669, 673, Secretary of Labor's Order 1–2012

(77 FR 3912, Jan. 25, 2012).

Subpart B—Scope

2. In § 1904.1, revise paragraph (a)(1) to read as follows:

§ 1904.1 Partial exemption for employers with 10 or fewer employees.

(a) * * *

(1) If your company had 10 or fewer employees at all times during the last calendar year, you do not need to keep OSHA injury and illness records unless OSHA or the Bureau of Labor Statistics informs you in writing that you must keep records under § 1904.41 or § 1904.42. However, as required by § 1904.39, all employers covered by the OSH Act must report to OSHA any work-related incident that results in a fatality, the in-patient hospitalization of one or more employees, an employee amputation, or an employee loss of an eye.

* * * * *

Subpart D—Other OSHA Injury and Illness Recordkeeping Requirements

3. In § 1904.32, revise paragraph (b)(2)(iii) to read as follows:

§ 1904.32 Annual summary.

* * * * * * (b) * * *

*

(2) * *

(iii) If you are using an equivalent form other than the OSHA 300-A summary form, as permitted under § 1904.29(b)(4), the summary you use must also include the employee access and employer penalty statements found on the OSHA 300-A Summary form.

* * * * *

Subpart G—Definitions

4. In § 1904.46, revise paragraph (1)(iii) in the definition of "Establishment" to read as follows:§ 1904.46 Definitions.

* * * * *

Establishment. * * *

(1) * * *

(iii) No one industry description in the North American Industry Classification System (2007) codes applies to the joint activities of the establishments; and

* * * * *

PART 1910—OCCUPATIONAL SAFETY AND HEALTH STANDARDS

Subpart A—General

5. The authority citation for subpart A continues to read as follows:

Authority: 29 U.S.C. 653, 655, 657; Secretary of Labor's Order Numbers 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31159), 4-2010 (75 FR 55355), or 1-2012 (77 FR 3912), as applicable.

Sections 1910.6, 1910.7, 1910.8 and 1910.9 also issued under 29 CFR 1911. Section 1910.7(f) also issued under 31 U.S.C. 9701, 29 U.S.C. 9a, 5 U.S.C. 553; Public Law 106-113 (113 Stat. 1501A-222); Pub. L. 11-8 and 111-317; and OMB Circular A-25 (dated July 8, 1993) (58 FR 38142, July 15, 1993).

6. In § 1910.5, revise paragraph (a) to read as follows:

§ 1910.5 Applicability of standards.

(a) Except as provided in paragraph (b) of this section, the standards contained in this Part shall apply with respect to employments performed in a workplace in a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, the

Commonwealth of the Northern Mariana Islands, Wake Island, Outer Continental Shelf lands defined in the Outer Continental Shelf Lands Act, and Johnston Island.

* * * * *

7. In § 1910.7, in appendix A, revise section I.c to read as follows:

§ 1910.7 Definition and requirements for a nationally recognized testing laboratory.

* * * * *

APPENDIX A TO § 1910.7—OSHA RECOGNITION PROCESS FOR NATIONALLY RECOGNIZED

TESTING LABORATORIES

* * * * *

I. Procedures for Initial OSHA Recognition

* * * * *

C. Terms and Conditions of Recognition.

1. The following terms and conditions shall be part of every recognition:

a. *Letter of recognition*. The recognition by OSHA of any NRTL will be evidenced by a letter of recognition from OSHA. The letter will provide the specific details of the scope of the OSHA recognition, including the specific equipment or materials for which OSHA recognition has been granted, as well as any specific conditions imposed by OSHA.

b. *Period of recognition*. The recognition by OSHA of each NRTL will be valid for five years, unless terminated before the expiration of the period. The dates of the period of recognition will be stated in the recognition letter.

c. *Constancy in operations*. The recognized NRTL shall continue to satisfy all the requirements or limitations in the letter of recognition during the period of recognition.

d. *Accurate publicity*. The OSHA-recognized NRTL shall not engage in or permit others to engage in misrepresentation of the scope or conditions of its recognition.

2. [Reserved]

* * * * *

Subpart R—Special Industries

8. The authority citation for subpart R continues to read as follows:

Authority: 29 U.S.C. 653, 655, 657; Secretary of Labor's Order Nos. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 5-2007 (72 FR 31159), 4-2010 (75 FR 55355), or 1-2012 (77 FR 3912), as applicable; and 29 CFR Part 1911.

9. In § 1910.269, in paragraph (x), revise the note following paragraph (5) of the definition of "hazardous atmosphere" to read as follows:

§ 1910.269 Electric power generation, transmission, and distribution.

Hazardous atmosphere. * * *

NOTE TO THE DEFINITION OF "HAZARDOUS ATMOSPHERE" (5): For air contaminants for which the Occupational Safety and Health Administration has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets (SDS) that comply with the Hazard Communication Standard, §1910.1200, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

* * * * *

Subpart Z-Toxic and Hazardous Substances

10. The authority citation for subpart Z continues to read as follows:

Authority: 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 12-71 (36 FR

8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000

(65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31160), 4-2010 (75 FR 55355), or 1-2012

(77 FR 3912), 29 CFR part 1911; and 5 U.S.C. 553, as applicable.

Section 1910.1030 also issued under Pub. L. 106-430, 114 Stat. 1901.

Section 1910.1201 also issued under 49 U.S.C. 5101 et seq.

11. In § 1910.1025, revise paragraph (e)(3)(ii)(G) to read as follows:

§ 1910.1025 Lead.

- * * * * *
- (e) * * *
- (3) * * *
- (ii) * * *

(G) An administrative control schedule required by paragraph (e)(5) of this section, if applicable;

* * * * *

§ 1910.1027 [Amended]

12. In § 1910.1027, remove paragraph (n)(6).

PART 1915—OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR

SHIPYARD EMPLOYMENT

13. The authority citation for part 1915 continues to read:

Authority: 33 U.S.C. 941; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR

111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31160), 4-2010 (75 FR

55355), or 1-2012 (77 FR 3912); 29 CFR part 1911; and 5 U.S.C. 553, as applicable.

Subpart I—Personal Protective Equipment (PPE)

14. In § 1915.153, revise Table I—1 to read as follows:

§ 1915.153 Eye and face protection.

* * * * *

Operations	Electrode Size 1/32 in	Arc Current	Minimum* Protective Shade
Shielded metal arc	Less than 3·····	Less than 60·····	7
welding	3-5	60-160	8
	5-8	160-250	10
	More than 8	250-550	11
Gas metal arc welding		Less than 60·····	7
and flux cored arc		60-160	10
welding		160-250	10
		250-500	10
Gas Tungsten arc welding		Less than 50·····	8
		50-150	8
		150-500	10
Air carbon	(Light) ·····	Less than 500·····	10
Arc cutting	(Heavy) ·····	500-1000	11
Plasma arc welding		Less than 20	6
-		20-100	8
		100-400	10
		400-800	11
Plasma arc cutting	(light)**	Less than 300·····	8
-	(medium)**	300-400	9
	(heavy)**	400-800	10
Torch brazing			3
Torch soldering			2
Carbon arc welding			14

Table I – 1 – FILTER LENSES FOR PROTECTION AGAINST RADIANT ENERGY

**These values apply where the actual arc is clearly seen. Lighter filters may be used when the arc is hidden by the workpiece.

FILTER LENSES FOR PROTECTION AGAINST RADIANT ENERGY

Operations	Plate thickness—inches	Plate thickness—mm	Minimum* Protective
			Shade
Gas Welding:			
Light	Under 1/8	Under 3.2	4
Medium	1/8 to 1/2·····	3.2 to 12.7	5
Heavy	Over 1/2	Over 12.7	6
Oxygen cutting:			
Light	Under 1·····	Under 25	3
Medium	1 to 6	25 to 150	4
Heavy	Over 6·····	Over 150	5

* As a rule of thumb, start with a shade that is too dark to see the weld zone. Then go to a lighter shade which gives sufficient view of the weld zone without going below the minimum. In oxyfuel gas welding or cutting where the torch produces a high yellow light, it is desirable to use a filter lens that absorbs the yellow or sodium line in the visible light of the (spectrum) operation.

* * * * *

PART 1918—SAFETY AND HEALTH REGULATIONS FOR LONGSHORING

15. The authority citation for part 1918 is revised to read as follows:

Authority: 33 U.S.C. 941; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 12-71 (36

FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-

2000 (65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31160), 4-2010 (75 FR 55355), or 1-

2012 (77 FR 3912), as applicable; and 29 CFR 1911.

Section 1918.90 also issued under 5 U.S.C. 553.

Section 1918.100 also issued under 49 U.S.C. 5101 et seq. and 5 U.S.C. 553.

Subpart H—Handling Cargo

16. In appendix V to part 1918 to read as follows:

Appendix V to Part 1918—Basic Elements of a First Aid Training Program (Non-

mandatory)

NOTE: This appendix is non-mandatory and provides guidelines for small businesses and institutions teaching first aid, as well as for the recipients of first aid training.

GENERAL PROGRAM ELEMENTS

A. Teaching Methods

1. Trainees should develop "hands on" skills through the use of manikins and trainee partners during their training.

2. Trainees should be exposed to acute injury and illness settings as well as the appropriate response to those settings through the use of visual aids, such as video tape and slides.

3. Training should include a course workbook which discusses first aid principles and responses to settings that require interventions.

4. Training duration should allow enough time for particular emphasis on situations likely to be encountered in particular workplaces.

5. An emphasis on quick response to first aid situations should be incorporated throughout the program.

B. Principles of Responding to a Health Emergency

The training program should include instruction in:

1. Injury and acute illness as a health problem.

2. Interactions with the local emergency medical services system. Trainees have the responsibility for maintaining a current list of emergency telephone numbers (police, fire, ambulance, poison control) easily accessible to all employees.

3. The principles of triage.

4. The legal aspects of providing first aid services.

C. Methods of Surveying the Scene and the Victim(s)

The training program should include instruction in:

1. The assessment of scenes that require first aid services including:

a. general scene safety.

b. likely event sequence.

c. rapid estimate of the number of persons injured.

d. identification of others able to help at the scene.

2. Performing a primary survey of each victim including airway, breathing, and circulation assessments as well as the presence of any bleeding.

3. The techniques and principles of taking a victim's history at the scene of an emergency.

4. Performing a secondary survey of the victim including assessments of vital signs, skin appearance, head and neck, eye, chest, abdomen, back, extremities, and medical alert symbols.

D. Basic Adult Cardiopulmonary Resuscitation (CPR)

Basic adult CPR training should be included in the program. Retesting should occur every year. The training program should include instruction in:

- 1. Establishing and maintaining adult airway patency.
- 2. Performing adult breathing resuscitation.
- 3. Performing adult circulatory resuscitation.
- 4. Performing choking assessments and appropriate first aid interventions.
- 5. Resuscitating the drowning victim.

E. Basic First Aid Intervention

Trainees should receive instruction in the principles and performance of:

1. Bandaging of the head, chest, shoulder, arm, leg, wrist, elbow, foot, ankle, fingers, toes, and knee.

2. Splinting of the arm, elbow, clavicle, fingers, hand, forearm, ribs, hip, femur, lower leg, ankle, knee, foot, and toes.

3. Moving and rescuing victims including one and two person lifts, ankle and shoulder pulls, and the blanket pull.

F. Universal Precautions

Trainees should be provided with adequate instruction on the need for and use of universal precautions. This should include:

1. The meaning of universal precautions, which body fluids are considered potentially infectious, and which are regarded as hazardous.

2. The value of universal precautions for infectious diseases such as AIDS and hepatitis B.

3. A copy of OSHA's standard for occupational exposure to bloodborne pathogens or information on how to obtain a copy.

4. The necessity for keeping gloves and other protective equipment readily available and the appropriate use of them.

5. The appropriate tagging and disposal of any sharp item or instrument requiring special disposal measures such as blood soaked material.

6. The appropriate management of blood spills.

G. First Aid Supplies

The first aid provider should be responsible for the type, amount, and maintenance of first aid supplies needed for their particular worksite(s). These supplies need to be stored in a convenient area available for emergency access.

H. Trainee Assessments

Assessment of successful completion of the first aid training program should include instructor observation of acquired skills and written performance assessments. First aid skills and knowledge should be reviewed every three years.

I. Program Update

The training program should be periodically reviewed with current first aid techniques and knowledge. Outdated material should be replaced or removed.

SPECIFIC PROGRAM ELEMENTS

A. Type of Injury Training

1. Shock

Instruction in the principles and first aid intervention in:

a. shock due to injury.

b. shock due to allergic reactions.

c. the appropriate assessment and first aid treatment of a victim who has fainted.

2. Bleeding

a. the types of bleeding including arterial, venous, capillary, external, and internal.

b. the principles and performance of bleeding control interventions including direct pressure, pressure points, elevation, and pressure bandaging.

c. the assessment and approach to wounds including abrasions, incisions, lacerations, punctures, avulsions, amputations, and crush injuries.

d. the principles of wound care including infection precautions, wounds requiring medical attention, and the need for tetanus prophylaxis.

3. Poisoning

Instruction in the principles and first aid intervention of:

a. alkali, acid and systemic poisons. In addition, all trainees should know how and when to contact the local Poison Control Center.

b. inhaled poisons including carbon monoxide, carbon dioxide, smoke, and chemical fumes, vapors and gases as well as the importance of assessing the toxic potential of the environment to the rescuer and the need for respirators.

Trainees should be instructed in the acute effect of chemicals utilized in their plants, the location of chemical inventories, Safety Data Sheets (SDS), chemical emergency information, and antidote supplies.

c. topical poisons including poison ivy, poison sumac, poison oak, and insecticides.

d. drugs of abuse including alcohol, narcotics such as heroin and cocaine, tranquilizers, and amphetamines.

4. Burns

Instruction in the principles and first aid intervention of:

a. assessing the severity of the burn including first degree, second degree, and third degree burns.

b. differentiating between the types of third degree burns (thermal, electrical, and chemical) and their specific interventions. Particular attention should be focused upon chemical burns, and the use of specific chemicals in the workplace which may cause them.

5. Temperature Extremes

Instruction in the principles and first aid intervention of:

a. exposure to cold including frostbite and hypothermia.

b. exposure to heat including heat cramps, heat exhaustion, and heat stroke.

6. Musculoskeletal Injuries

The training program should include instruction in the principles and first aid intervention in:

a. open fractures, closed fractures, and splinting.

b. dislocations, especially the methods of joint dislocations of the upper extremity. The importance of differentiating dislocations from fractures.

c. joint sprains.

d. muscle strains, contusions, and cramps.

e. head, neck, back, and spinal injuries.

7. Bites and Stings

Instruction in the principles and first aid intervention in:

a. human and animal (especially dog and snake) bites.

b. bites and stings from insects (spiders, ticks, scorpions, hornets and wasps). Interventions should include responses to anaphylactic shock; other allergic manifestations; and rabies and tetanus prophylaxis.

8. Medical Emergencies

Instruction in the principles and first aid intervention of:

a. heart attacks

b. strokes

c. asthma attacks

d. diabetic emergencies including diabetic coma, insulin shock, hyperglycemia, and hypoglycemia.

e. seizures including tonic-clonic and absence seizures. Importance of not putting gags in mouth.

f. pregnancy including the appropriate care of any abdominal injury or vaginal bleeding.

9. Confined Spaces

a. the danger of entering a confined space to administer first aid without having the appropriate respiratory protection.

b. if first aid personnel will be required to assist evacuations from confined spaces, additional training will be needed.

B. Site of Injury Training

Instruction in the principles and first aid intervention of injuries to the following sites:

1. Head and Neck

a. including skull fractures, concussions, and mental status assessments with particular attention to temporary loss of consciousness and the need for referral to a physician.

b. including the appropriate approach to the management of the individual who has suffered a potential neck injury or fracture.

2. Eye

a. foreign bodies, corneal abrasions and lacerations.

b. chemical burns and the importance of flushing out the eye.

c. the importance of not applying antibiotics without physician supervision.

3. Nose

a. nose injuries and nose bleeds.

4. Mouth and Teeth

a. oral injuries, lip and tongue injuries, and broken and removed teeth. The importance of preventing inhalation of blood and teeth.

5. Chest

a. rib fractures, flail chest, and penetrating wounds.

6. Abdomen

a. blunt injuries, penetrating injuries, and protruding organs.

7. Hand, Finger, and Foot Injuries

a. finger/toe nail hematoma, lacerations, splinters, finger nail avulsion, ring removal, and foreign bodies.

b. the importance of identifying amputation care hospitals in the area. When an amputation occurs, appropriate handling of amputated fingers, hands, and feet during the immediate transportation of the victim and body part to the hospital.

PART 1926—SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

Subpart C--General Safety and Health Provisions

17. The authority citation for subpart C 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. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 6-96 (62 FR 111), 5-2007 (72 FR 31160), or 1-2012 (77 FR 3912) as applicable; and 29 CFR Part 1911.

18. In § 1926.20, revise paragraph (c) to read as follows:

§ 1926.20 General safety and health provisions.

* * * * *

(c) The standards contained in this part shall apply with respect to employments performed in a workplace in a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Wake Island, Outer Continental Shelf lands defined in the Outer Continental Shelf Lands Act, and Johnston Island.

* * * * *

Subpart D—Occupational Health and Environmental Controls

19. The authority citation for subpart D continues to read as follows:

Authority: 40 U.S.C. 3704; 29 U.S.C. 653, 655, and 657; Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR

111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31159), 4-2010 (75 FR

55355), or 1-2012 (77 FR 3912); 29 CFR Part 1911; and 5 U.S.C. 553, as applicable.

Section 1926.61 also issued under 49 U.S.C. 5101 et seq.

Section 1926.62 also issued under 42 U.S.C. 4853.

Section 1926.65 also issued under 126 of Public Law 99-499, 100 Stat. 1613.

20. In § 1926.62, revise paragraphs (d)(2)(iii) introductory text, (d)(2)(iv), (d)(3)(iii), and (d)(4)(ii) and revise section IV paragraph (F) of appendix B to read as follows:

§ 1926.62 Lead.

- * * * * *
- (d) * * *
- (2) * * *

(iii) With respect to the tasks listed in this paragraph (d)(2)(iii) of this section, where lead is present, until the employer performs an employee exposure assessment as required in this paragraph (d), and documents that the employee performing any of the listed tasks is not exposed in excess of 500 μ g/m³, the employer shall treat the employee as if the employee were exposed to lead in excess of 500 μ g/m³ and shall implement employee protective measures as prescribed in paragraph (d)(2)(v) of this section. Where the employer does establish that the employee is exposed to levels of lead below 500 μ g/m³, the employer may provide the exposed employee with the appropriate respirator prescribed for such use at such lower exposures, in accordance with paragraph (f) of this section. The tasks covered by this requirement are:

* * * * *

(iv) With respect to the tasks listed in this paragraph (d)(2)(iv), where lead is present, until the employer performs an employee exposure assessment as required in this paragraph (d) and documents that the employee performing any of the listed tasks is not exposed to lead in excess of 2,500 μ g/m³ (50×PEL), the employer shall treat the employee as if the employee were exposed to lead in excess of 2,500 μ g/m³ and shall implement employee protective measures as prescribed in paragraph (d)(2)(v) of this section. Where the employer does establish that the employee is exposed to levels of lead below 2,500 μ g/m³, the employer may provide the exposed

employee with the appropriate respirator prescribed for use at such lower exposures, in accordance with paragraph (f) of this section. Interim protection as described in this paragraph is required where lead containing coatings or paint are present on structures when performing:

* * * * *

(iii) Where the employer has previously monitored for lead exposures, and the data were obtained within the past 12 months during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the employer may rely on such earlier monitoring results to satisfy the requirements of paragraphs (d)(3)(i) and (d)(6) of this section if the sampling and analytical methods meet the accuracy and confidence levels of paragraph (d)(9) of this section.

- * * * * *
- (4) * * *

(ii) Where the employer has previously monitored for lead exposure, and the data were obtained within the past 12 months during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the employer may rely on such earlier monitoring results to satisfy the requirements of paragraph (d)(4)(i) of this section if the sampling and analytical methods meet the accuracy and confidence levels of paragraph (d)(9) of this section.

* * * * *

APPENDIX B TO § 1926.62—EMPLOYEE STANDARD SUMMARY

* * * * *

IV. Respiratory Protection—Paragraph (F)

Your employer is required to provide and assure your use of respirators when your exposure to lead is not controlled below the PEL by other means. The employer must pay the cost of the respirator. Whenever you request one, your employer is also required to provide you a respirator even if your air exposure level is not above the PEL. You might desire a respirator when, for example, you have received medical advice that your lead absorption should be decreased. Or, you may intend to have children in the near future, and want to reduce the level of lead in your body to minimize adverse reproductive effects. While respirators are the least satisfactory means of controlling your exposure, they are capable of providing significant protection if properly chosen, fitted, worn, cleaned, maintained, and replaced when they stop providing adequate protection.

Your employer is required to select your respirator according to the requirements of 29 CFR 1926.62(f)(3), including the requirements referenced in 29 CFR 1910.134(d)(3)(i)(A) of this chapter. Any respirator chosen must be approved by NIOSH under the provisions of 42 CFR Part 84. These respirator selection references will enable your employer to choose a type of respirator that will give you a proper amount of protection based on your airborne lead exposure. Your employer may select a type of respirator that provides greater protection than that required by the standard; that is, one recommended for a higher concentration of lead than is present in your workplace. For example, a powered air-purifying respirator (PAPR) is much more protective than a typical negative pressure respirator, and may also be more comfortable to wear. A PAPR has a filter, cartridge, or canister to clean the air, and a power source that continuously blows filtered air into your breathing zone. Your employer might make a PAPR available to you

to ease the burden of having to wear a respirator for long periods of time. The standard provides that you can obtain a PAPR upon request.

Your employer must also start a Respiratory Protection Program. This program must include written procedures for the proper selection, use, cleaning, storage, and maintenance of respirators.

Your employer must ensure that your respirator facepiece fits properly. Proper fit of a respirator facepiece is critical to your protection from airborne lead. Obtaining a proper fit on each employee may require your employer to make available several different types of respirator masks. To ensure that your respirator fits properly and that facepiece leakage is minimal, your employer must give you either a qualitative or quantitative fit test as specified in appendix A of the Respiratory Protection standard located at 29 CFR 1910.134.

You must also receive from your employer proper training in the use of respirators. Your employer is required to teach you how to wear a respirator, to know why it is needed, and to understand its limitations.

The standard provides that if your respirator uses filter elements, you must be given an opportunity to change the filter elements whenever an increase in breathing resistance is detected. You also must be permitted to periodically leave your work area to wash your face and respirator facepiece whenever necessary to prevent skin irritation. If you ever have difficulty in breathing during a fit test or while using a respirator, your employer must make a medical examination available to you to determine whether you can safely wear a respirator. The result of this examination may be to give you a positive pressure respirator (which reduces breathing resistance) or to provide alternative means of protection.

* * * * *

21. In § 1926.65, revise paragraphs (a)(2)(i), (g)(2), (l)(3)(vi), (p)(8)(iv)(E), and (q)(3)(iii) and in appendix A revise paragraph 5.1 in section B to read as follows:

§ 1926.65 Hazardous waste operations and emergency response

(a) * * *

(2) * * *

(i) All requirements of 29 CFR parts 1910 and 1926 apply pursuant to their terms to hazardous waste and emergency response operations whether covered by this section or not. If there is a conflict or overlap, the provision more protective of employee safety and health shall apply without regard to 29 CFR 1926.20(e).

* * * * *

(g) * * *

(2) Engineering controls, work practices, and PPE for substances not regulated either in *§1926.55, elsewhere in subpart D, or in other pertinent sections of this Part.* An appropriate combination of engineering controls, work practices, and personal protective equipment shall be used to reduce and maintain employee exposure to or below published exposure levels for hazardous substances and health hazards not regulated either in §1926.55, elsewhere in subpart D, or in other pertinent sections of this part. The employer may use the published literature and Safety Data Sheets (SDS) as a guide in making the employer's determination as to what level of protection the employer believes is appropriate for hazardous substances and health hazards for which there is no permissible exposure limit or published exposure limit.

- * * * * *
- (1) * * *
- (3) * * *

(vi) An employee alarm system shall be installed to notify employees of an emergency situation; to stop work activities if necessary; to lower background noise in order to speed communication; and to begin emergency procedures.

* * * * * (p) * * * (8) * * * (iv) * * *

*

(E) An employee alarm system shall be installed to notify employees of an emergency situation; to stop work activities if necessary; to lower background noise in order to speed communication; and to begin emergency procedures.

* * * * * * (q) * * * (3) * * *

(iii) Based on the hazardous substances and/or conditions present, the individual in charge of the ICS shall implement appropriate emergency operations, and assure that the personal protective equipment worn is appropriate for the hazards to be encountered.

* * * * *

APPENDIX A TO §1926.65—PERSONAL PROTECTIVE EQUIPMENT TEST METHODS

* * * * *

*

B. Totally-encapsulating chemical protective suit qualitative leak test

5.1 Concentrated aqueous ammonium hydroxide, NH_4 OH, is a corrosive volatile liquid requiring eye, skin, and respiratory protection. The person conducting the test shall review the Safety Data Sheet (SDS) for aqueous ammonia.

* * * * *

Subpart K--Electrical

22. The authority citation for subpart K is revised to read as follows:

Authority: 29 U.S.C. 653, 655, 657; 40 U.S.C. 333; Secretary of Labor's Order No. 9-83 (48 FR 35736), 1-90 (55 FR 9033) or 1-2012 (77 FR 3912), as applicable; 29 CFR part 1911.

23. In § 1926.405, revise paragraph (g)(1)(iii)(C) to read as follows:

§ 1926.405 Wiring methods, components, and equipment for general use.

- * * * * *
- (g) * * *
- (1) * * *
- (iii) * * *

(C) Where run through doorways, windows, or similar openings, except as permitted in

paragraph (a)(2)(ii)(I) of this section;

* * * * *

Subpart L—Scaffolds

24. The authority citation for subpart L continues to read as follows:

Authority: 40 U.S.C. 333; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order Nos. 1-90 (55 FR 9033), 5-2007 (72 FR 31159), or 1-2012 (77 FR 3912); and 29 CFR Part 1911. 25. In § 1926.452, revise paragraphs (a)(3) and (w)(6)(ii) to read as follows:

§ 1926.452 Additional requirements applicable to specific types of scaffolds.

* * * * *

*

(a) * *

(3) Diagonal bracing in both directions shall be installed across the entire inside face of doublepole scaffolds used to support loads equivalent to a uniformly distributed load of 50 pounds (22.7 kg) or more per square foot (929 square cm).

* * * * *

(w) * * *

(ii) The height to base width ratio of the scaffold during movement is two to one or less, unless the scaffold is designed and constructed to meet or exceed nationally recognized stability test requirements such as those listed in paragraph 2.(w) of appendix A to this subpart;

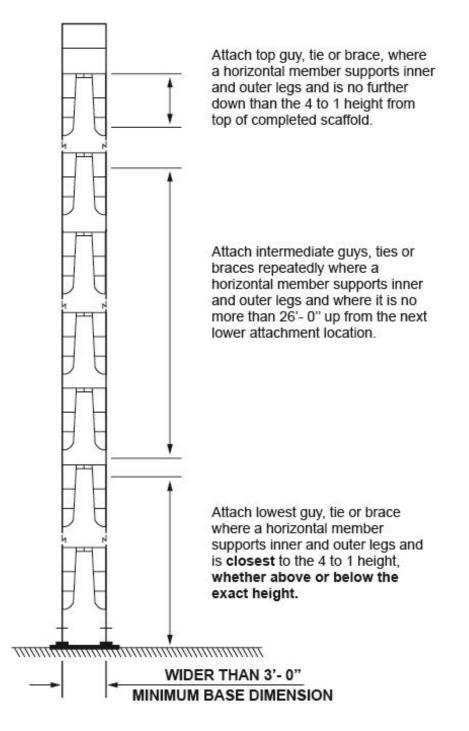
* * * * *

26. In appendix E to subpart L of part 1926 subpart L:

a. Remove the graphic "Maximum Vertical Tie Spacing Wider Than 3'-0" Bases" and add in its place the graphic "Maximum Vertical Guy, Tie or Brace Spacing Wider Than 3'-0" Bases"; and b. Remove the graphic "Maximum Vertical Tie Spacing 3'-0" and Narrower Bases" and add in its place the "Maximum Vertical Guy, Tie or Brace Spacing 3'-0" And Narrower Bases". The additions read as follows:

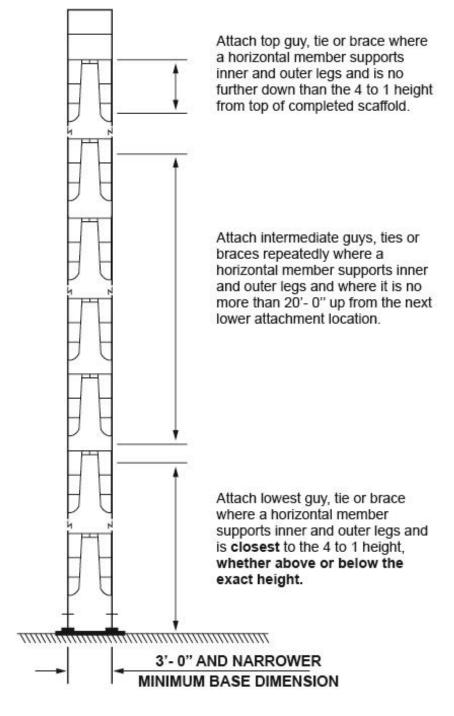
(Non-Mandatory) Appendix E to Subpart L of Part 1926—Drawings and Illustrations

MAXIMUM VERTICAL GUY, TIE OR BRACE SPACING WIDER THAN 3'- 0" BASES



View or download PDF

MAXIMUM VERTICAL GUY, TIE OR BRACE SPACING 3'- 0" AND NARROWER BASES



View or download PDF

* * * * *

Subpart M—Fall Protection

27. The authority citation for subpart M 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. 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2007 (72 FR 31159), or 1-2012 (77 FR 3912), as applicable; and 29 CFR Part 1911.

28. Revise appendix A to subpart M of part 1926 to read as follows:

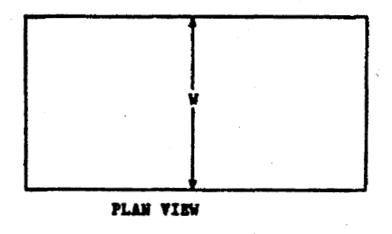
Appendix A to Subpart M of Part 1926—Determining Roof Widths

Non-mandatory Guidelines for Complying with § 1926.501(b)(10)

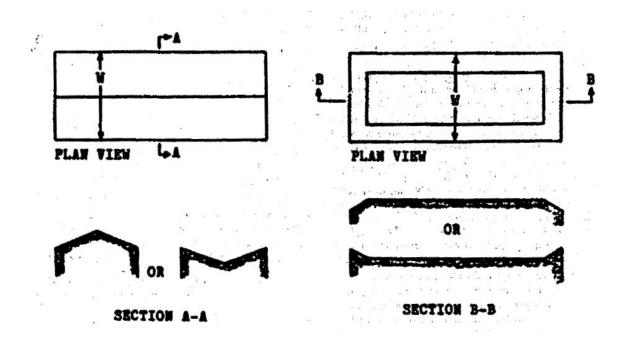
(1) This appendix serves as a guideline to assist employers complying with the requirements of \$1926.501(b)(10). Section 1926.501(b)(10) allows the use of a safety monitoring system alone as a means of providing fall protection during the performance of roofing operations on low-sloped roofs 50 feet (15.25 m) or less in width. Each example in the appendix shows a roof plan or plans and indicates where each roof or roof area is to be measured to determine its width. Section views or elevation views are shown where appropriate. Some examples show "correct" and "incorrect" subdivisions of irregularly shaped roofs divided into smaller, regularly shaped areas. In all examples, the dimension selected to be the width of an area is the lesser of the two primary dimensions of the area, as viewed from above. Example A shows that on a simple rectangular roof, width is the lesser of the two primary overall dimensions. This is also the case with roofs which are sloped toward or away from the roof center, as shown in Example B. (2) Many roofs are not simple rectangles. Such roofs may be broken down into subareas as shown in Example C. The process of dividing a roof area can produce many different configurations. Example C gives the general rule of using dividing lines of minimum length to minimize the size and number of the areas which are potentially less than 50 feet (15.25 m) wide. The intent is to minimize the number of roof areas where safety monitoring systems alone are sufficient protection.

(3) Roofs which are comprised of several separate, non-contiguous roof areas, as in Example D, may be considered as a series of individual roofs. Some roofs have penthouses, additional floors, courtyard openings, or similar architectural features; Example E shows how the rule for dividing roofs into subareas is applied to such configurations. Irregular, non-rectangular roofs must be considered on an individual basis, as shown in Example F.

EXAMPLE A: RECTANGULAR SHAPED ROOFS

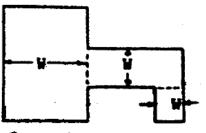


EXAMPLE B: SLOPED RECTANGULAR SHAPED ROOFS

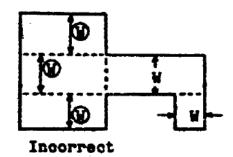


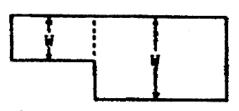
EXAMPLE C: IRREGULARLY SHAPED ROOFS WITH RECTANGULAR SHAPED SECTIONS

Such roofs are to be divided into sub-areas by using dividing lines of minimum length to minimize the size and number of the areas which are potentially less than or equal to 50 feet (15.25 meters) in width, in order to limit the size of roof areas where the safety monitoring system alone can be used [1926.501(b)(10)]. Dotted lines are used in the examples to show the location of dividing lines. W denotes correct measurements and W denotes incorrect measurements of width.



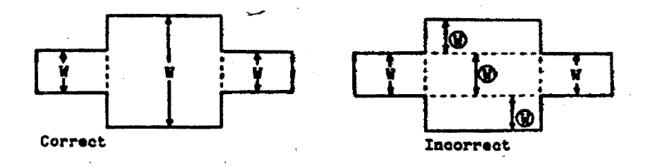




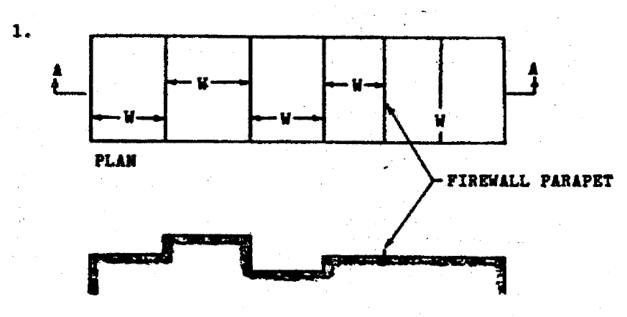


Incorrect

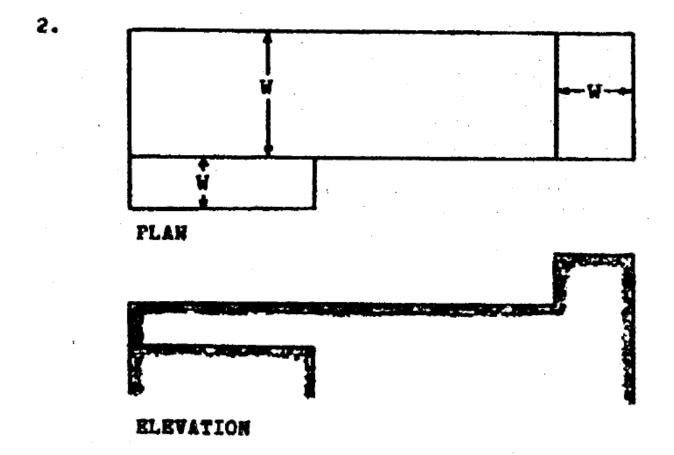
Correct



EXAMPLE D: SEPARATE, NON-CONTIGUOUS ROOF AREAS

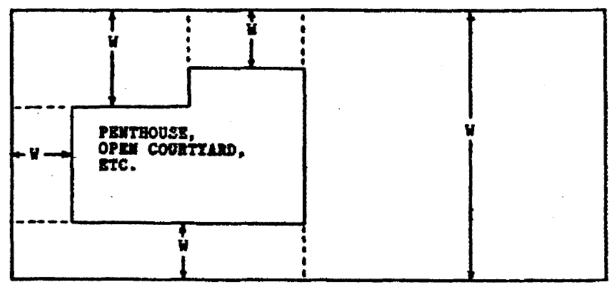




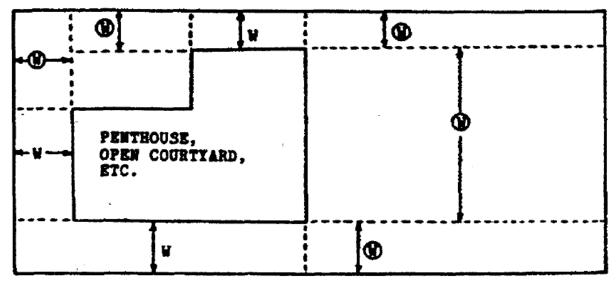




Such roofs are to be divided into sub-areas by using dividing lines of minimum length to minimize the size and number of the areas which are potentially less than or equal to 50 feet (15.25 meters) in width, in order to limit the size of roof areas where the safety monitoring system alone can be used [1926.501(b)(10)]. Dotted lines are used in the examples to show the location of dividing lines. W denotes correct and W denotes incorrect measurements of width.

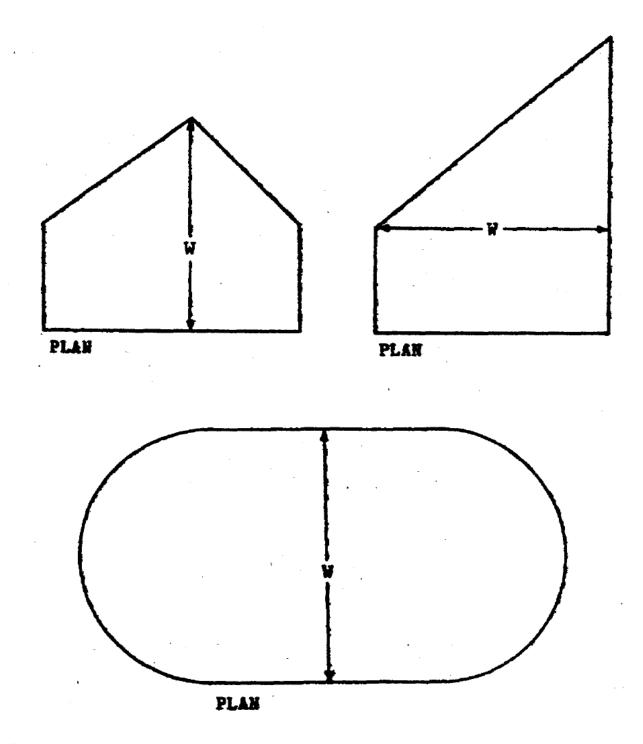


Correct



Incorrect





Subpart N—Helicopters, Hoists, Elevators, and Conveyors

29. The authority citation for subpart N is revised to read as follows:

Authority: 40 U.S.C. 3701; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order Nos. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (49 FR 35736), 5–2007 (72 FR 31159), or 1-2012 (77 FR 3912), as applicable; and 29 CFR 1911.

§ 1926.552 [Amended]

30. In § 1926.552, in paragraph (c)(17)(iv), redesignate paragraphs (*a*) through (*e*) as paragraphs(A) through (E).

Subpart P—Excavations

31. The authority citation for subpart P is revised to read as follows:

Authority: 40 U.S.C. 333; 29 U.S.C. 653, 655, and 657; Secretary of Labor's Order No. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), or 1-2012 (77 FR 3912), as applicable; and 29 CFR Part 1911.

32. Revise appendix A to subpart P of part 1926 to read as follows:

Appendix A to Subpart P of Part 1926 – Soil Classification

(a) *Scope and application*—(1) *Scope*. This appendix describes a method of classifying soil and rock deposits based on site and environmental conditions, and on the structure and composition of the earth deposits. The appendix contains definitions, sets forth requirements, and describes acceptable visual and manual tests for use in classifying soils.

(2) *Application*. This appendix applies when a sloping or benching system is designed in accordance with the requirements set forth in § 1926.652(b)(2) as a method of protection for employees from cave-ins. This appendix also applies when timber shoring for excavations is designed as a method of protection from cave-ins in accordance with appendix C to subpart P of part 1926, and when aluminum hydraulic shoring is designed in accordance with appendix D. This appendix also applies if other protective systems are designed and selected for use from

data prepared in accordance with the requirements set forth in § 1926.652(c), and the use of the data is predicated on the use of the soil classification system set forth in this appendix.

(b) *Definitions*. The definitions and examples given below are based on, in whole or in part, the following: American Society for Testing Materials (ASTM) Standards D653-85 and D2488; The Unified Soils Classification System, the U.S. Department of Agriculture (USDA) Textural Classification Scheme; and The National Bureau of Standards Report BSS-121.

Cemented soil means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.

Cohesive soil means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay. *Dry soil* means soil that does not exhibit visible signs of moisture content.

Fissured means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.

Granular soil means gravel, sand, or silt, (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.

Layered system means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.

Moist soil means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles. *Plastic* means a property of a soil which allows the soil to be deformed or molded without cracking, or appreciable volume change.

Saturated soil means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or sheer vane.

Soil classification system means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the environmental conditions of exposure. *Stable rock* means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

Submerged soil means soil which is underwater or is free seeping.

Type A means cohesive soils with an unconfined compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

(i) The soil is fissured; or

(ii) The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or(iii) The soil has been previously disturbed; or

(iv) The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or

(v) The material is subject to other factors that would require it to be classified as a less stable material.

Type B means:

(i) Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or

(ii) Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.

(iii) Previously disturbed soils except those which would otherwise be classified as Type C soil.

(iv) Soil that meets the unconfined compressive strength or cementation requirements for Type

A, but is fissured or subject to vibration; or

(v) Dry rock that is not stable; or

(vi) Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

Type C means:

(i) Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or

(ii) Granular soils including gravel, sand, and loamy sand; or

(iii) Submerged soil or soil from which water is freely seeping; or

(iv) Submerged rock that is not stable; or

(v) Material in a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or steeper.

Unconfined compressive strength means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.

Wet soil means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet. (c) *Requirements*—(1) *Classification of soil and rock deposits*. Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C in accordance with the definitions set forth in paragraph (b) of this appendix.

(2) *Basis of classification*. The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a competent person using tests described in paragraph (d) below, or in other recognized methods of soil classification and testing such as those adopted by the America Society for Testing Materials, or the U.S. Department of Agriculture textural classification system.

(3) *Visual and manual analyses*. The visual and manual analyses, such as those noted as being acceptable in paragraph (d) of this appendix, shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the deposits.

(4) *Layered systems*. In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

(5) *Reclassification*. If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.

(d) *Acceptable visual and manual tests*—(1) *Visual tests*. Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material.

(i) Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of fine-grained material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.

(ii) Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.

(iii) Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured. Small spalls are evidence of moving ground and are indications of potentially hazardous situations.

(iv) Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures, and to identify previously disturbed soil.

(v) Observe the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope toward the excavation. Estimate the degree of slope of the layers.

(vi) Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.

(vii) Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

(2) *Manual tests*. Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly. (i) *Plasticity*. Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as $\frac{1}{8}$ -inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of $\frac{1}{8}$ -inch thread can be held on one end without tearing, the soil is cohesive.

(ii) *Dry strength.* If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.

(iii) Thumb penetration. The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. (This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard designation D2488—"Standard Recommended Practice for Description of Soils (Visual—Manual Procedure).") Type A soils with an unconfined compressive strength of 1.5 tsf can be readily

indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by light finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences. If the excavation is later exposed to wetting influences (rain, flooding), the classification of the soil must be changed accordingly.

(iv) *Other strength tests*. Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shearvane.

(v) *Drying test.* The basic purpose of the drying test is to differentiate between cohesive material with fissures, unfissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.54 cm) and six inches (15.24 cm) in diameter until it is thoroughly dry:

(A) If the sample develops cracks as it dries, significant fissures are indicated.

(B) Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as an unfissured cohesive material and the unconfined compressive strength should be determined.

(C) If a sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures. If they pulverize easily into very small fragments, the material is granular

Subpart R—Steel Erection

33. The authority citation for subpart R is revised to read as follows:

Authority: 40 U.S.C. 3701; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order Nos. 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31159), or 1-2012 (77 FR 3912), as applicable; and 29 CFR Part 1911.

34. In § 1926.754, revise paragraph (c)(2) to read as follows;

§ 1926.754 Structural steel assembly.

* * * * *

(c) * * *

(2) *Installation of shear connectors on composite floors, roofs and bridge decks.* When shear connectors are used in construction of composite floors, roofs and bridge decks, employees shall lay out and install the shear connectors after the metal decking has been installed, using the metal decking as a working platform. Shear connectors shall not be installed from within a controlled decking zone (CDZ), as specified in § 1926.760(c)(7).

* * * * *

35. In § 1926.757, revise the footnotes to Tables A and B to read as follows:

§ 1926.757 Open web steel joists

* * * * *

TABLE A—ERECTION BRIDGING FOR SHORT SPAN JOISTS

	Joist						Joist	Span		
*	*	*	*	*	*	*				

NM=diagonal bolted bridging not mandatory.

* * * * *

TABLE B—ERECTION BRIDGING FOR LONG SPAN JOISTS

	Joist						Joist	Span
							00.51	span
*	*	*	*	*	*	*		

NM=diagonal bolted bridging not mandatory.

* * * * *

36. In § 1926.761, revise paragraph (b) to read as follows:

§ 1926.761 Training.

* * * * *

(b) *Fall hazard training*. The employer shall train each employee exposed to a fall hazard in accordance with the requirements of this section. The employer shall institute a training program and ensure employee participation in the program. The program shall include training and instruction in the following areas:

(1) The recognition and identification of fall hazards in the work area;

(2) The use and operation of guardrail systems (including perimeter safety cable systems), personal fall arrest systems, positioning device systems, fall restraint systems, safety net systems, and other protection to be used;

(3) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;

(4) The procedures to be followed to prevent falls to lower levels and through or into holes and openings in walking/working surfaces and walls; and

(5) The fall protection requirements of this subpart.

* * * * *

Subpart V—Electric Power Transmission and Distribution

37. The authority citation for subpart V 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. 1-2012 (77 FR 3912); and 29 CFR Part 1911.

38. In § 1926.968, in the definition of "Hazardous atmosphere", revise the note following paragraph (5) to read as follows:

§ 1926.968 Definitions.

* * * * *

Hazardous atmosphere. * * *

(5) * * *

NOTE TO THE DEFINITION OF "HAZARDOUS ATMOSPHERE" (5): For air contaminants for which the Occupational Safety and Health Administration has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets (SDS) that comply with the Hazard Communication Standard, § 1910.1200, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

* * * * *

Subpart Z—Toxic and Hazardous Substances

39. The authority citation for subpart Z continues to read as follows:

AUTHORITY: 40 U.S.C. 3704; 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), 5-2007 (72 FR 31160), 4-2010 (75 FR 55355), or 1-2012 (77 FR 3912) as applicable; 29 CFR part 1911; and 5 U.S.C. 553, as applicable. 40. In § 1926.1101, revise paragraphs (e)(4) and (f)(3)(iii), the paragraph (g)(7) subject heading, paragraphs (g)(8)(v) introductory text, (n)(2)(iii), (n)(3)(i) and (iii), and (p)(1), and in appendix K, in section 3.1, revise paragraph (e) to read as follows:

§ 1926.1101 Asbestos.

* * * * *

(e) * * *

(4) *Respirators*. All persons entering a regulated area where employees are required pursuant to paragraph (h)(1) of this section to wear respirators shall be supplied with a respirator selected in accordance with paragraph (h)(3) of this section.

(f) * * *

(iii) Exception: When all employees required to be monitored daily are equipped with suppliedair respirators operated in the pressure demand mode, or other positive pressure mode, the employer may dispense with the daily monitoring required by this paragraph. However, employees performing Class I work using a control method which is not listed in paragraph (g)(4)(i), (ii), or (iii) of this section or using a modification of a listed control method, shall continue to be monitored daily even if they are equipped with supplied-air respirators.

* * * * *

(g) * * *

(7) Work Practices and Engineering Controls for Class II work. * * *

* * * * *

(8) * * *

(v) When performing any other Class II removal of asbestos containing material for which specific controls have not been listed in paragraph (g)(8)(i) through (iv) of this section, the employer shall ensure that the following work practices are complied with.

* * * * *

(n) * * *

(2) * * *

(iii) The employer shall maintain this record for at least thirty (30) years, in accordance with § 1910.1020 of this chapter

(3) * * *

(i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance by paragraph (m) of this section, in accordance with § 1910.1020 of this chapter.

* * * * *

(iii) The employer shall ensure that this record is maintained for the duration of employment plus thirty (30) years, in accordance with § 1910.1020 of this chapter.

* * * * *

(p) * * *

(1) Appendices A, D, and E to this section are incorporated as part of this section and the contents of these appendices are mandatory.

* * * * *

APPENDIX K TO §1926.1101—POLARIZED LIGHT MICROSCOPY OF ASBESTOS (NON-MANDATORY) * * * * *

3.1. Safety

* * * * *

(e) Some of the solvents used, such as THF (tetrahydrofuran), are toxic and should only be handled in an appropriate fume hood and according to instructions given in the Safety Data Sheet (SDS).

* * * * *

41. In § 1926.1127, revise paragraphs (d)(1)(i), (n)(1)(iii), and (n)(3)(iii) and remove paragraph (n)(5).

The revisions read as follows:

§ 1926.1127 Cadmium.

* * * * * * (d) * * * (1) * * *

(i) Prior to the performance of any construction work where employees may be potentially exposed to cadmium, the employer shall establish the applicability of this standard by determining whether cadmium is present in the workplace and whether there is the possibility that employee exposures will be at or above the action level. The employer shall designate a competent person who shall make this determination. Investigation and material testing techniques shall be used, as appropriate, in the determination. Investigation shall include a review of relevant plans, past reports, Safety Data Sheets (SDS), and other available records, and consultations with the property owner and discussions with appropriate individuals and agencies.

* * * *

*

- (n) * * *
- (1) * * *

(iii) The employer shall maintain this record for at least thirty (30) years, in accordance with § 1910.1020 of this chapter.

* * * * *

(3) * * *

(iii) The employer shall assure that this record is maintained for the duration of employment plus thirty (30) years, in accordance with § 1910.1020 of this chapter.

* * * * *

Subpart CC—Cranes and Derricks in Construction

42. The authority citation for Part 1926 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. 43. In § 1926.1431, revise paragraph (a) to read as follows:

§ 1926.1431 Hoisting personnel.

* * * * *

(a) The use of equipment to hoist employees is prohibited except where the employer demonstrates that the erection, use, and dismantling of conventional means of reaching the work area, such as a personnel hoist, ladder, stairway, aerial lift, elevating work platform, or scaffold, would be more hazardous, or is not possible because of the project's structural design or worksite conditions. This paragraph does not apply to work covered by subpart R (Steel Erection) of this part and also does not apply to routine personnel access to an underground worksite via shaft as covered by § 1926.800 (Underground Construction) of this part.

* * * * *

[FR Doc. 2020-00207 Filed: 2/14/2020 8:45 am; Publication Date: 2/18/2020]