CHAPTER 5205

DEPARTMENT OF LABOR AND INDUSTRY

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Subpart 1. **Title 29.** The Minnesota Department of Labor and Industry Occupational Safety and Health Codes and rules are amended by incorporating and adopting by reference, and thereby making a part thereof, Title 29 of the Code of Federal Regulations as listed in subparts 1a to 7.

Subp. 1a. **Part 1904.** Part 1904: Occupational Safety and Health Standards as published in Volume 66, No. 13 of the Federal Register on January 19, 2001, and amended in Volume 66, No. 128 on July 3, 2001, which incorporates changes, additions, deletions, and corrections made up to July 3, 2001, with the exception of part 1904.2; and subsequent changes as follows:

A. Federal Register, Volume 67:

(1) Federal Register, Vol. 67, No. 126, pages 44037-44048, dated July 1, 2002; "Occupational Injury and Illness Recording and Reporting Requirements; Final Rule."

(2) Federal Register, Vol. 67, No. 242, pages 77165-77170, dated December 17, 2002; "Occupational Injury and Illness Recording and Reporting Requirements; Final Rule."

B. Federal Register, Volume 68, No. 125, pages 38601-38607, dated June 30, 2003; "Occupational Injury and Illness Recording and Reporting Requirements; Final Rule."

C. Federal Register, Volume 79, No. 181, pages 56130-56188, dated September 18, 2014; "Occupational Injury and Illness Recording and Reporting Requirements - NAICS Update and Reporting Revisions; Final Rule," with the exception of part 1904.2.

D. Federal Register, Volume 81, No. 92, pp. 29624-29688, dated May 12, 2016: "Improve Tracking of Workplace Injuries and Illnesses, Final rule," with the inclusion of all NAICS/employers to Appendix A in subpart E of this part.

E. Federal Register, Volume 84, No. 93, pages 21416-21598, dated May 14, 2019; "Standards Improvement Project - Phase IV; Final Rule."

F. Federal Register, Volume 84, No. 17, pp. 380-406, dated January 25, 2019: "Tracking of Workplace Injuries and Illnesses, Final rule," with the inclusion of all NAICS/employers to Appendix A in subpart E of this part.

G. Federal Register, Volume 88, No. 139, pp. 47254-47349, dated July 21, 2023: "Improve Tracking of Workplace Injuries and Illnesses, Final rule," with the inclusion of all NAICS/employers to Appendices A and B in subpart E of this part.

Subp. 2. **Part 1910.** Part 1910: Occupational Safety and Health Standards as published in Volume 43, No. 206 of the Federal Register on October 24, 1978, and corrected in Volume 43, No. 216 on November 7, 1978, which incorporates changes, additions, deletions, and corrections made up to November 7, 1978; and subsequent changes as follows:

A. Federal Register, Volume 43:

(1) Federal Register, Vol. 43, No. 234, dated 12/5/78; "Corrections to 1910.1043; Occupational Exposure to Cotton Dust."

(2) Federal Register, Vol. 43, No. 234, dated 12/5/78; "Corrections to 1910.1046; Occupational Exposure to Cotton Dust in Cotton Gins."

(3) Federal Register, Vol. 43, No. 237, dated 12/8/78; "Corrections to Tables of Exposure Limits for Air Contaminants, 1910.1000."

(4) Federal Register, Vol. 43, No. 220, dated 11/14/78; "Lead Standard, 1910.1025."

B. Federal Register, Volume 44:

(1) Federal Register, Vol. 44, No. 19, dated 1/26/79; "Corrections to Lead Standard, typographical."

(2) Federal Register, Vol. 44, No. 50, dated 3/13/79; "Modifications to Lead Standard, Portions of Standard Stayed."

(3) Federal Register, Vol. 44, No. 168, dated 8/28/79; "Corrections to Lead Standard, Exemption of Construction Industry."

(4) Federal Register, Vol. 44, No. 138, dated 7/17/79; "Occupational Exposure to Chlorine, Lifting of Stay."

(5) Federal Register, Vol. 44, No. 206, dated 10/23/79; "Appendixes to Lead Standard."

(6) Federal Register, Vol. 44, No. 232, dated 11/30/79; "Corrections to Appendixes to Lead Standard."

C. Federal Register, Volume 45:

(1) Federal Register, Vol. 45, No. 20, dated 1/29/80; "Servicing Multipiece Rim Wheels, 1910.177."

(2) Federal Register, Vol. 45, No. 28, dated 2/8/80; "Mechanical Power Presses; Corrections to Final Rule."

(3) Federal Register, Vol. 45, No. 121, dated 6/20/80; "Commercial Diving Operations: Correction to Final Rule."

(4) Federal Register, Vol. 45, No. 179, dated 9/12/80; "Revisions to Subpart L, Fire Protection; Subpart E, Means of Egress; and Subpart H, Hazardous Materials."

D. Federal Register, Volume 46:

(1) Federal Register, Vol. 46, No. 11, dated 1/16/81; "Subpart S, Electrical."

(2) Federal Register, Vol. 46, No. 118, dated 6/19/81; "Deletion of 1910.1046; Occupational Exposure to Cotton Dust in Cotton Gins."

(3) Federal Register, Vol. 46, No. 141, dated 7/23/81; "Occupational Exposure to Lead, New Trigger Levels for Medical Removal Protection; 1910.1025."

(4) Federal Register, Vol. 46, No. 152, dated 8/7/81; "Corrections to Subpart S, Electrical."

(5) Federal Register, Vol. 46, No. 162, dated 8/21/81; "Occupational Noise Exposure, Hearing Conservation Amendment; 1910.95."

(6) Federal Register, Vol. 46, No. 238, dated 12/11/81; "Occupational Exposure to Lead, Final Rule Amended."

E. Federal Register, Volume 47:

(1) Federal Register, Vol. 47, No. 173, dated 9/7/82; "Hazardous Materials; Attendant Exemption and Latch-Open Devices; 1910.106(g)(2) and (g)(3)(vi)."

(2) Federal Register, Vol. 47, No. 219, dated 11/12/82; "Occupational Exposure to Lead: Respirator Fit Testing, 1910.1025(f)(3)."

(3) Federal Register, Vol. 47, No. 228, dated 11/26/82; "Exemption of Educational/Scientific Diving from Subpart T, Part 1910."

(4) Federal Register, Vol. 47, No. 233, dated 12/3/82; "Occupational Exposure to Lead: Administrative Stay of Compliance Plans for Certain Industries; 1910.1025(c)(e)(i)(B) & (E)."

F. Federal Register, Volume 48:

(1) Federal Register, Vol. 48, No. 15, dated 1/21/83; "Occupational Exposure to Coal Tar Pitch Volatiles; Modification of Final Interpretation: 1910.1022."

(2) Federal Register, Vol. 48, No. 25, dated 2/4/83; "Occupational Exposure to Cotton Dust; Stay for Knitting and Hosiery Industry; 1910.1043."

(3) Federal Register, Vol. 48, No. 46, dated 3/8/83; "Occupational Exposure to Lead; Corrections to Respirator Fit Testing Requirements; 1910.1025 and Occupational Noise Exposure, Hearing Conservation Amendment; 1910.95(c)."

(4) Federal Register, Vol. 48, No. 125, dated 6/28/83; "Hearing Conservation Amendment, Corrections to Final Rule."

(5) Federal Register, Vol. 48, No. 228, pages 53282-53348, dated 11/25/83; "Hazard Communication; Final Rule."

G. Federal Register, Volume 49:

(1) Federal Register, Vol. 49, No. 4, dated 1/6/84; "Commercial Diving Operations; Deletion of 1910.411."

(2) Federal Register, Vol. 49, No. 24 dated 2/3/84; "Servicing of Single Piece and Multipiece Rim Wheels; 1910.177."

(3) Federal Register, Vol. 49, No. 29, dated 2/10/84; "Revocation of Advisory and Repetitive Standards."

(4) Federal Register, Vol. 49, No. 37, dated 2/23/84; "Occupational Exposure to Cotton Dust; Partial Administrative Stay of 1910.1043(m)(2)(ii)."

(5) Federal Register, Vol. 49, No. 109, dated 6/5/84; "Occupational Exposure to Lead; Effective Date of Compliance Plan Requirements for Primary and Secondary Smelting and Battery Manufacturing Industries, 1910.1025(e)(3)(ii)(B) and (E)."

(6) Federal Register, Vol. 49, No. 122, dated 6/22/84; "Occupational Exposure to Ethylene Oxide (1910.1047), Final Rule."

H. Federal Register, Volume 50:

(1) Federal Register, Vol. 50, No. 6, dated 1/9/85; "Educational/Scientific Diving: Guidelines for Scientific Diving (Appendix B) Subpart T of Part 1910."

(2) Federal Register, Vol. 50, No. 22, dated 2/1/85; "Power Lawnmowers: Amendments; 1910.243(e)."

(3) Federal Register, Vol. 50, No. 48, dated 3/12/85; "Occupational Exposure to Ethylene Oxide (1910.1047); Amendment of Effective Dates."

(4) Federal Register, Vol. 50, No. 72, dated 4/15/85; "Occupational Exposure to Cotton Dust (1910.1043); Extension of Administrative Stay."

(5) Federal Register, Vol. 50, No. 178, dated 9/13/85; "Coke Oven Emissions (1910.1029); Deletion of Portions of Standard."

(6) Federal Register, Vol. 50, No. 198, dated 10/11/85;"Occupational Exposure to Ethylene Oxide (1910.1047); Labeling Requirements."

(7) Federal Register, Vol. 50, No. 240, dated December 13, 1985; "Occupational Exposure to Cotton Dust; 29 Code of Federal Regulations 1910.1043."

I. Federal Register, Volume 51:

(1) Federal Register, Vol. 51, No. 119, dated June 20, 1986; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1001 and 1926.58); Final Rules."

(2) Federal Register, Vol. 51, No. 128, dated July 3, 1986; "Occupational Exposure to Cotton Dust (1910.1043), Corrections and Information Collection Requirements Approval."

(3) Federal Register, Vol. 51, No. 132, dated July 10, 1986; "Occupational Exposure to Ethylene Oxide (1910.1047), Technical Amendments and Corrections to Final Rule."

(4) Federal Register, Vol. 51, No. 133, dated July 11, 1986; "Electrical Standards for Construction, Part 1926, Subpart K."

(5) Federal Register, Vol. 51, No. 181, dated September 18, 1986; "Commercial Diving Standard (1910.430); Technical Amendments to Final Rule."

(6) Federal Register, Vol. 51, No. 182, dated September 19, 1986; "Accident Prevention Tags (1910.145); Amendment to Final Rule."

(7) Federal Register, Vol. 51, No. 188, dated September 29, 1986; "Record Keeping Requirements for Tests, Inspections, and Maintenance Checks (1910.68, 1910.106, 1910.157, 1910.179, 1910.180, 1910.181, 1910.217, 1910.218, 1910.252, and 1910.440)."

(8) Federal Register, Vol. 51, No. 189, pages 34590-34597, dated September 30, 1986; "Hazard Communication; Definition of Trade Secret and Disclosure of Trade Secrets to Employees, Designated Representatives and Nurses; Final Rule."

(9) Federal Register, Vol. 51, No. 201, dated October 17, 1986; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1101); Partial Administrative Stay of Final Rules and Redesignation and Amendment of Final Rule."

(10) Federal Register, Vol. 51, No. 244, dated December 19, 1986; "Hazardous Waste Operations and Emergency Response (1910.120); Interim Final Rule."

J. Federal Register, Volume 52:

(1) Federal Register, Vol. 52, No. 83, dated April 30, 1987; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Extension of the Partial Stay and Amendment of Final Rule."

(2) Federal Register, Vol. 52, No. 85, dated May 4, 1987; "Hazardous Waste Operations and Emergency Response; Corrections to Interim Final Rule (29 CFR 1910.120)."

(3) Federal Register, Vol. 52, No. 91, dated May 12, 1987; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Corrections and Information Collection Requirements Approval."

(4) Federal Register, Vol. 52, No. 163, pages 31852-31886, dated August 24, 1987; "Occupational Safety and Health Administration; Hazard Communication; Final Rule."

(5) Federal Register, Vol. 52, No. 176, dated September 11, 1987; "Occupational Exposure to Benzene (1910.1028); Final Rule."

(6) Federal Register, Vol 52, No. 187, dated September 28, 1987; "Revision of Telecommunications Training Records (1910.268); Final Rule."

(7) Federal Register, Vol. 52, No. 233, dated December 4, 1987; "Occupational Exposure to Formaldehyde (1910.1048); Final Rule."

(8) Federal Register, Vol. 52, No. 251, dated December 31, 1987; "Grain Handling Facilities (1910.272); Final Rule."

K. Federal Register, Volume 53:

(1) Federal Register, Vol. 53, No. 41, dated March 2, 1988; "Occupational Exposure to Formaldehyde; Approval of Information Collection Requirements, Technical Amendment (1910.1048)."

(2) Federal Register, Vol. 53, No. 49, dated March 14, 1988; "Presence Sensing Device Initiation of Mechanical Power Presses (1910.211, 1910.217); Final Rule."

(3) Federal Register, Vol. 53, No. 66, dated April 6, 1988; "Occupational Exposure to Ethylene Oxide (1910.1047)."

(4) Federal Register, Vol. 53, No. 70, dated April 12, 1988; "Safety Testing or Certification of Certain Workplace Equipment and Materials; Deletion of Specific Testing Laboratory Names; Definition of Nationally Recognized Testing Laboratory; Determination of Eligible Testing Organizations (1910.7)."

(5) Federal Register, Vol. 53, No. 96, dated May 18, 1988; "Grain Handling Facilities; Notice of Approval of Information Collection Requirements by OMB and Corrections to Appendices as published on December 31, 1987 (1910.272)."

(6) Federal Register, Vol. 53, No. 139, dated July 20, 1988; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1001 and 1910.1101); Extension of Partial Stay and Amendment of Final Rule."

(7) Federal Register, Vol. 53, No. 143, dated July 26, 1988; "Occupational Exposure to Ethylene Oxide (1910.1047); Approval of Information Collection Requirements; Amendment of Effective Date of Information Collection Requirements."

(8) Federal Register, Vol. 53, No. 170, dated September 1, 1988; "Occupational Exposure to Formaldehyde (1910.1048); Notice of Deferral of Effective Date for Certain Laboratories."

(9) Federal Register, Vol. 53, No. 174, dated September 8, 1988; "Servicing of Multipiece and Single Piece Rim Wheels (1910.177); Technical Amendments to Final Rule."

(10) Federal Register, Vol. 53, No. 178, dated September 14, 1988; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1001 and 1926.58); Amendment to Final Rule."

(11) Federal Register, Vol. 53, No. 185, dated September 23, 1988; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Corrections to September 14, 1988 Federal Register notice."

(12) Federal Register, Vol. 53, No. 216, dated November 8, 1988; "Occupational Exposure to Formaldehyde (1910.1048); Approval of Information Collection Requirements; Start-up Date; Clarification; Technical Amendment; Request for Comments."

(13) Federal Register, Vol. 53, No. 225, dated November 22, 1988; "Occupational Exposure to Formaldehyde (1910.1048); Extension of Start-up Dates."

L. Federal Register, Volume 54:

(1) Federal Register, Vol. 54, No. 12, dated January 19, 1989; "Air Contaminants (1910.1000) - Final Rule."

(2) Federal Register, Vol. 54, No. 30, pages 6886-6888, dated February 15, 1989; "Hazard Communication; Final Rule; Technical Amendments; Notice Regarding Enforcement."

(3) Federal Register, Vol. 54, No. 42, dated March 6, 1989; "Hazardous Waste Operations and Emergency Response (1910.120) - Final Rule."

(4) Federal Register, Vol. 54, No. 127, dated July 5, 1989: "Air Contaminants (1910.1000); Corrections to Final Rule."

(5) Federal Register, Vol. 54, No. 131, dated July 11, 1989: "Occupational Exposure to Lead (1910.1025); Statement of Reasons-Final Rule."

(6) Federal Register, Vol. 54, No. 133, dated July 13, 1989: "Occupational Exposure to Formaldehyde (1910.1048); Corrections and Technical Amendments to Final Rule."

(7) Federal Register, Vol. 54, No. 133, dated July 13, 1989: "Occupational Exposure to Asbestos (1910.1001); Approval of Collection of Information Requirements."

(8) Federal Register, Vol. 54, No. 139, dated July 21, 1989: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Extension of Partial Stay and Amendment of Final Rule (1910.1001 and 1910.1101)."

(9) Federal Register, Vol. 54, No. 144, dated July 28, 1989: "Powered Platforms for Building Maintenance (1910.66)-Final Rule."

(10) Federal Register, Vol. 54, No. 146, dated August 1, 1989: "Occupational Exposure to Formaldehyde (1910.1048); Correction."

(11) Federal Register, Vol. 54, No. 166, dated August 29, 1989: "Occupational Exposure to Formaldehyde (1910.1048); Extension of Administrative Stay."

(12) Federal Register, Vol. 54, No. 169, dated September 1, 1989: "Control of Hazardous Energy Sources - Lockout/Tagout (1910.147)."

(13) Federal Register, Vol. 54, No. 170, dated September 5, 1989: "Air Contaminants; Final Rule - Grant of Petitions for Reconsideration of Three Exposure Limits and Partial Stays of Effective Dates for Four Substances (1910.1000)."

(14) Federal Register, Vol. 54, No. 174, dated September 11, 1989: "Occupational Exposure to Formaldehyde (1910.1048); Correction."

(15) Federal Register, Vol. 54, No. 193, dated October 6, 1989: "Air Contaminants (1910.1000); Final Rule Partial Stay of Effective Date for Two Substances."

(16) Federal Register, Vol. 54, No. 199, dated October 17, 1989: "Control of Hazardous Energy Sources - Lockout/Tagout (1910.147); Final Rule Approval of Information Collection Requirements."

(17) Federal Register, Vol. 54, No. 213, dated November 6, 1989: "Control of Hazardous Energy Sources - Lockout/Tagout (1910.147); Final Rule Extension of Effective Date."

(18) Federal Register, Vol. 54, No. 219, dated November 15, 1989: "Air Contaminants; Final Rule Corrections."

(19) Federal Register, Vol. 54, No. 233, dated December 6, 1989: "Air Contaminants; Final Rule Partial Stay of Effective Date for Two Substances."

(20) Federal Register, Vol. 54, No. 243, dated December 20, 1989: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1001); Partial Response to Court Remand."

M. Federal Register, Volume 55:

(1) Federal Register, Vol. 55, No. 20, dated January 30, 1990: "Occupational Exposure to Lead (1910.1025); Statement of Reasons."

(2) Federal Register, Vol. 55, No. 21, dated January 31, 1990: "Occupational Exposure to Hazardous Chemicals in Laboratories (1910.1450); Final Rule."

(3) Federal Register, Vol. 55, No. 24, dated February 5, 1990: "Air Contaminants (1910.1000); Partial Stay of Effective Date for Two Substances."

(4) Federal Register, Vol. 55, No. 24, dated February 5, 1990: "Occupational Exposure to Asbestos (1910.1001); Partial Response to Court Remand."

(5) Federal Register, Vol. 55, No. 30, dated February 13, 1990: "Occupational Exposure to Lead; Corrections to Final Rule Statement of Reasons and Amendment to Appendix B."

(6) Federal Register, Vol. 55, No. 44, dated March 6, 1990: "Occupational Exposures to Hazardous Chemicals in Laboratories (1910.1450); Corrections."

(7) Federal Register, Vol. 55, No. 67, dated April 6, 1990: "Air Contaminants; Partial Stay of Effective Date for Two Substances."

(8) Federal Register, Vol. 55, No. 70, dated April 11, 1990: "Safety and Health Standards: Welding, Cutting and Brazing; Redesignation and Other Nonsubstantive Revisions."

(9) Federal Register, Vol. 55, No. 72, dated April 13, 1990: "Hazardous Waste Operations and Emergency Response (1910.120); Corrections to Final Rule."

(10) Federal Register, Vol. 55, No. 90, dated May 9, 1990: "Air Contaminants (1910.1000), Final Rule; Grant of Petition for Reconsideration and Stays for Two Substances."

(11) Federal Register, Vol. 55, No. 111, dated June 8, 1990: "Air Contaminants (1910.1000), Correction to Final Rule."

(12) Federal Register, Vol. 55, No. 114, dated June 13, 1990: "Occupational Exposure to Formaldehyde (1910.1048); Extension of Administrative Stay."

(13) Federal Register, Vol. 55, No. 119, dated June 20, 1990: "Welding, Cutting and Brazing; Technical Amendments to 1910.110, 1910.272, and Appendix A to 1910.272."

(14) Federal Register, Vol. 55, No. 151, dated August 6, 1990: "Electrical Safety-Related Work Practices (Subpart S, 1910.331 to 1910.335); Final Rule and Amendments to References in Other OSHA Standards."

(15) Federal Register, Vol. 55, No. 155, dated August 10, 1990: "Occupational Exposure to Formaldehyde (1910.1048); Extension of Administrative Stay."

(16) Federal Register, Vol. 55, No. 165, dated August 24, 1990: "Occupational Exposure to Asbestos (1910.1001); Approval of Collection of Information Requirements."

(17) Federal Register, Vol. 55, No. 183, dated September 20, 1990: "Control of Hazardous Energy Sources (Lockout/Tagout) - (1910.147); Corrections and Technical Amendments to Final Rule."

(18) Federal Register, Vol. 55, No. 212, dated November 1, 1990: "Electrical Safety-Related Work Practices (Subpart S, 1910.331 to 1910.335); Corrections to Final Rule."

(19) Federal Register, Vol. 55, No. 237, dated December 10, 1990: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1001); Extension of Partial Stay and Amendment of Final Rule."

(20) Federal Register, Vol. 55, No. 242, dated December 17, 1990: "Occupational Exposure to Formaldehyde (1910.1048); Extension of Administrative Stay."

(21) Federal Register, Vol. 55, No. 217, dated November 8, 1990: "Air Contaminants; Grant of Partial Stay for Nitroglycerin."

(22) Federal Register, Vol. 55, No. 247, dated December 24, 1990: "Air Contaminants; Final Rule Interpretation for Grain Handling Industry."

N. Federal Register, Volume 56:

(1) Federal Register, Vol. 56, No. 48, dated March 12, 1991: "Occupational Exposure to Formaldehyde; Extension of Administrative Stay."

(2) Federal Register, Vol. 56, No. 75, dated April 18, 1991: "Hazardous Waste Operations and Emergency Response; Corrections to Final Rule."

(3) Federal Register, Vol. 56, No. 105, dated May 31, 1991: "Occupational Exposure to Lead; Corrections to Final Rule."

(4) Federal Register, Vol. 56, No. 113, dated June 12, 1991: "Occupational Exposure to Formaldehyde, Extension of Administrative Stay."

(5) Federal Register, Vol. 56, No. 153, dated August 8, 1991: "Occupational Exposure to Formaldehyde, Extension of Administrative Stay."

(6) Federal Register, Vol. 56, No. 171, dated September 4, 1991: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Extension of Partial Stay and Amendment of Final Rule."

(7) Federal Register, Vol. 56, No. 219, dated November 13, 1991: "Occupational Exposure to Formaldehyde; Extension of Administrative Stay."

(8) Federal Register, Vol. 56, No. 235, dated December 6, 1991: "Occupational Exposure to Bloodborne Pathogens; Final Rule."

O. Federal Register, Volume 57:

(1) Federal Register, Vol. 57, No. 15, dated January 23, 1992: "Occupational Exposure to Formaldehyde; Extension of Administrative Stay."

(2) Federal Register, Vol. 57, No. 36, dated February 24, 1992: "Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents; Final Rule."

(3) Federal Register, Vol. 57, No. 43, dated March 4, 1992: "Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents; Corrections to Final Rule."

(4) Federal Register, Vol. 57, No. 44, dated March 5, 1992: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Extension of Partial Stay and Amendment of Final Rule."

(5) Federal Register, Vol. 57, No. 71, dated April 13, 1992: "Occupational Exposure to Bloodborne Pathogens; Approval of Information Collection Requirements."

(6) Federal Register, Vol. 57, No. 87, dated May 5, 1992: "Occupational Exposure to Formaldehyde; Extension of Administrative Stay."

(7) Federal Register, Vol. 57, No. 102, dated May 27, 1992: "Occupational Exposure to Formaldehyde (1910.1048); Response to Court Remand."

(8) Federal Register, Vol. 57, No. 105, dated June 1, 1992: "Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents (1910.119); Administrative Stay and Request for Comments."

(9) Federal Register, Vol. 57, No. 110, dated June 8, 1992: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite (1910.1001); Final Rule."

(10) Federal Register, Vol. 57, No. 112, dated June 10, 1992: "Occupational Exposure to Formaldehyde (1910.1048); Correction."

(11) Federal Register, Vol. 57, No. 118, dated June 18, 1992: "Occupational Exposure to Formaldehyde (1910.1048); Corrections."

(12) Federal Register, Vol. 57, No. 126, dated June 30, 1992: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite (1910.1001); Correction."

(13) Federal Register, Vol. 57, No. 127, dated July 1, 1992: "Occupational Exposure to Bloodborne Pathogens (1910.1030); Correction."

(14) Federal Register, Vol. 57, No. 127, dated July 1, 1992: "Air Contaminants (1910.1000); Corrections."

(15) Federal Register, Vol. 57, No. 127, dated July 1, 1992: "Update of Addresses for Obtaining Technical Manuals (1910.1450 and 1910.1500); Corrections."

(16) Federal Register, Vol. 57, No. 154, dated August 10, 1992: "Occupational Exposure to 4,4' Methylenedianiline (MDA) (1910.1050); Final Rule."

(17) Federal Register, Vol. 57, No. 166, dated August 26, 1992: "Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents; Final Rule; Petition for Administrative Stay; Effective Date of Stayed Provisions."

(18) Federal Register, Vol. 57, No. 178, dated September 14, 1992: "Occupational Exposure to Cadmium (1910.1027); Final Rule."

(19) Federal Register, Vol. 57, No. 211, dated October 30, 1992: "Occupational Exposure to Cadmium (1910.1027); Approval of Information Collection Requirements."

(20) Federal Register, Vol. 57, No. 213, dated November 3, 1992, "Occupational Exposure to 4,4' Methylenedianiline (MDA); Approval of Information Collection Requirements."

P. Federal Register, Volume 58:

(1) Federal Register, Vol. 58, No. 9, dated January 14, 1993: "Permit-Required Confined Spaces; Final Rule."

(2) Federal Register, Vol. 58, No. 59, dated March 30, 1993, "Control of Hazardous Energy Sources (Lockout/Tagout); Supplemental Statement of Reasons."

(3) Federal Register, Vol. 58, No. 77, dated April 23, 1993, "Occupational Exposure to Cadmium; Corrections and Amendments to Final Rule."

(4) Federal Register, Vol. 58, No. 123, dated June 29, 1993: "Permit-Required Confined Spaces; Final Rule; Corrections."

(5) Federal Register, Vol. 58, No. 124, dated June 30, 1993, "Safety Standards for General Industry and Construction; Technical Amendments."

Q. Federal Register, Volume 59:

(1) Federal Register, Vol. 59, No. 20, dated January 31, 1994, "Electric Power Generation, Transmission and Distribution; Electrical Protective Equipment."

(2) Federal Register, Vol. 59, No. 27, pages 6126-6184, dated February 9, 1994; "Hazard Communication; Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

(3) Federal Register, Vol. 59, No. 63, dated April 1, 1994, "Grain Handling Facilities; Final Decision Statement."

(4) Federal Register, Vol. 59, No. 66, dated April 6, 1994, "Personal Protective Equipment for General Industry; Final Rule."

(5) Federal Register, Vol. 59, No. 96, dated May 19, 1994: "Permit-Required Confined Spaces; Final Rule; Technical Amendment."

(6) Federal Register, Vol. 59, No. 125, dated June 30, 1994, "Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment; Final Rule--Stay of Enforcement of Certain Provisions and Correction."

(7) Federal Register, Vol. 59, No. 126, dated July 1, 1994, "Personal Protective Equipment for General Industry; Final Rule; Corrections."

(8) Federal Register, Vol. 59, No. 128, dated July 6, 1994, "Personal Protective Equipment for General Industry; Final Rule; Administrative Stay."

(9) Federal Register, Vol. 59, No. 137, dated July 19, 1994, "Retention of DOT Markings, Placards, and Labels (1910.1201); Final Rule."

(10) Federal Register, Vol. 59, No. 152, dated August 9, 1994, "Safety Standards for Fall Protection in the Construction Industry; Final Rule and Amended Reference in 1910.269(g)(2)(i)."

(11) Federal Register, Vol. 59, No. 153, dated August 10, 1994, "Occupational Exposure to Asbestos (1910.1001); Final Rule."

(12) Federal Register, Vol. 59, No. 161, dated August 22, 1994, "Hazardous Waste Operations and Emergency Response (1910.120 and 1926.65); Amendments to Final Rule."

(13) Federal Register, Vol. 59, No. 196, dated October 12, 1994, "Logging Operations, Final Rule (1910.266) and Amendment to 1910.269(r)(5)."

(14) Federal Register, Vol. 59, No. 213, dated November 4, 1994: "Permit-Required Confined Spaces; Final Rule; Technical Amendment to Preamble."

(15) Federal Register, Vol. 59, No. 245, pages 65947-65948, dated December 22, 1994; "Hazard Communication; Correction."

R. Federal Register, Volume 60:

(1) Federal Register, Vol. 60, No. 26, dated February 8, 1995: "Logging Operations, Final Rule; Partial Stay of Enforcement."

(2) Federal Register, Vol. 60, No. 34, dated February 21, 1995: "Occupational Exposure to Asbestos (1910.1001), Final Rule; Extension of Start-up Dates for Compliance."

(3) Federal Register, Vol. 60, No. 40, dated March 1, 1995: "Occupational Exposure to Asbestos (1910.1001), Correction."

(4) Federal Register, Vol. 60, No. 124, dated June 28, 1995: "Occupational Exposure to Asbestos (1910.1001), Final Rule; Extension of Start-up Dates for Compliance."

(5) Federal Register, Vol. 60, No. 125, dated June 29, 1995: "Occupational Exposure to Asbestos (1910.1001); Corrections to Final Rule."

(6) Federal Register, Vol. 60, No. 134, dated July 13, 1995: "Occupational Exposure to Asbestos (1910.1001); Corrections to Final Rule."

(7) Federal Register, Vol. 60, No. 153, dated August 9, 1995: "Logging Operations (1910.266), Final Rule; Extension of Partial Stay."

(8) Federal Register, Vol. 60, No. 174, dated September 8, 1995: "Logging Operations (1910.266), Final Rule; Corrections and Technical Amendments."

(9) Federal Register, Vol. 60. No. 196, page 52856, dated October 11, 1995: "Occupational Exposure to Lead; Amendments to Final Rule, (1910.1025)."

S. Federal Register, Volume 61:

(1) Federal Register, Vol. 61, No. 46, page 9228, dated March 7, 1996: "Miscellaneous Minor and Technical Amendments; Final Rule; Corrections and Technical Amendments."

(2) Federal Register, Vol. 61, No. 47, page 9578, dated March 8, 1996: "Grain Handling Facilities; Final Rule; Technical Amendment, (1910.272)."

(3) Federal Register, Vol. 61, No. 86, page 19547, dated May 2, 1996: "Personal Protective Equipment for General Industry; Final Rule; Technical Amendment."

(4) Federal Register, Vol. 61, No. 91, page 21228, dated May 9, 1996: "Personal Protective Equipment for General Industry; Correction."

(5) Federal Register, Vol. 61, No. 120, page 31427, dated June 20, 1996: "Consolidation of Repetitive Provisions; Technical Amendments; Final Rule; Technical Amendments and Recodifications."

(6) Federal Register, Vol. 61, No. 165, page 43454, dated August 23, 1996: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite; Final Rule: corrections."

(7) Federal Register, Vol. 61, No. 214, page 56746, dated November 4, 1996; "Occupational Exposure to 1,3-Butadiene; Final Rule."

T. Federal Register, Volume 62:

(1) Federal Register, Vol. 62, No. 7, page 1494, dated January 10, 1997: "Occupational Exposure to Methylene Chloride; Final Rule."

(2) Federal Register, Vol. 62, No. 105, page 29668, dated June 2, 1997: "Office of Management and Budget Control Numbers under Paperwork Reduction Act; Final Rule."

(3) Federal Register, Vol. 62, No. 143, page 40142, dated July 25, 1997: "Longshoring and Marine Terminals; Final Rule."

(4) Federal Register, Vol. 62, No. 153, page 42666, dated August 8 1997: "Methylene Chloride; Approval of Information Collection Requirements; Extension of Start-up Dates; Final

Rule; Amendment; Announcement of the OMB Approval of Information Collection Requirements; Extension of Start-up Dates for Compliance."

(5) Federal Register, Vol. 62, No. 157, page 43581, dated August 14, 1997: "Methylene Chloride; Approval of Information Collection Requirements; Extension of Start-up Dates; Correction."

(6) Federal Register, Vol. 62, No. 178, page 48175, dated September 15, 1997: "Methylene Chloride; Amendment; Extension of Start-Up Dates for Compliance."

(7) Federal Register, Vol. 62, No. 202, page 54382, dated October 20, 1997: "Methylene Chloride; Amendment; Extension of Start-Up Dates of Compliance."

(8) Federal Register, Vol. 62, No. 230, page 63563, dated December 1, 1997: "Permit-Required Confined Spaces; Notice; Announcement of OMB Approval of Information Collection Requirements."

(9) Federal Register, Vol. 62, No. 243, page 66275, dated December 18, 1997: "Methylene Chloride; Partial Stay; Final Rule; Partial Stay of Start-Up Dates for Compliance."

U. Federal Register, Volume 63:

(1) Federal Register, Vol. 63, No. 5, page 1152, dated January 8, 1998: "Respiratory Protection; Final Rule; Request for Comment on Paperwork Requirements."

(2) Federal Register, Vol. 63, No. 3, page 13338, dated March 19, 1998: "Office of Management and Budget Control Numbers Under Paperwork Reduction Act for Miscellaneous General Industry, Shipyard Employment and Construction Industry Rules and Regulations; Final Rule; Amendments and Announcements of OMB Approval of Information Collection Requirements."

(3) Federal Register, Vol. 63, No. 67, page 17093, dated April 8, 1998: "Office of Management and Budget Control Numbers Under the Paperwork Reduction Act; Final Rule."

(4) Federal Register, Vol. 63, No. 78, page 20098, dated April 23, 1998: "Respiratory Protection; Correction; Final Rule; Correction."

(5) Federal Register, Vol. 63, No. 117, page 33449, dated June 18, 1998: "Standards Improvement (Miscellaneous Changes) for General Industry and Construction Standards; Paperwork Collection for Coke Oven Emissions and Inorganic Arsenic; Final Rule."

(6) Federal Register, Vol. 63, No. 183, page 50711, dated September 22, 1998: "Methylene Chloride; Final Rule."

(7) Federal Register, Vol. 63, No. 191, page 53103, dated October 2, 1998: "Respiratory Protection; Announcement of OMB Approval of Information Collection Requirements; Notice."

(8) Federal Register, Vol. 63, No. 230, page 66018, dated December 1, 1998: "Permit-Required Confined Spaces; Final Rule."

(9) Federal Register, Vol. 63, No. 230, page 66238, dated December 1, 1998: "Powered Industrial Truck Operator Training; Final Rule."

V. Federal Register, Volume 64:

(1) Federal Register, Vol. 64, No. 1, page 204, dated January 4, 1999: "Permit-Required Confined Spaces; Correction."

(2) Federal Register, Vol. 64, No. 55, page 13897, dated March 23, 1999: "Dipping and Coating Operations; Final Rule."

(3) Federal Register, Vol. 64, No. 80, page 22552, dated April 27, 1999: "Powered Industrial Truck Operator Training; Correction to Final Rule."

(4) Federal Register, Vol. 64, No. 204, page 57128, dated October 22, 1999: "Permit-Required Confined Spaces for General Industry; Agency Information Collection Activities; Announcement of Office of Management and Budget's (OMB) Approval of Information Collection Requirements."

W. Federal Register, Volume 65: No. 236, page 76563, dated December 7, 2000: "Occupational Exposure to Cotton Dust; Direct Final Rule; Request for Comments."

X. Federal Register, Volume 66:

(1) Federal Register, Vol. 66, No. 12, page 5318, dated January 18, 2001: "Occupational Exposure to Bloodborne Pathogens; Needlestick and Other Sharps Injuries; Final Rule; Request for Comment on the Information Collection (Paperwork) Requirements."

(2) Federal Register, Vol. 66, No. 67, page 18191, dated April 6, 2001: "Occupational Exposure to Cotton Dust; Direct Final Rule; Confirmation of Effective Date."

Y. Federal Register, Volume 67, No. 216, pages 67950-67965, dated November 7, 2002: "Exit Routes, Emergency Action Plans, and Fire Prevention Plans; final rule."

Z. Federal Register, Volume 68, No. 250, pages 75776-75780, dated December 31, 2003: "Respiratory Protection for M. Tuberculosis; final rule; revocation."

AA. Federal Register, Volume 69:

(1) Federal Register, Vol. 69, No. 31, pages 7351-7366, dated February 17, 2004: "Commercial Diving Operations; final rule."

(2) Federal Register, Vol. 69, No. 110, pages 31880-31882, dated June 8, 2004: "Mechanical Power-Transmission Apparatus; Mechanical Power Presses; Telecommunications; Hydrogen; final rule; technical amendments."

(3) Federal Register, Vol. 69, No. 149, pages 46986-46994, dated August 4, 2004: "Controlled Negative Pressure REDON Fit Testing Protocol; final rule."

BB. Federal Register, Volume 70:

(1) Federal Register, Vol. 70, No. 3, pages 1112-1144, dated January 5, 2005: "Standards Improvement Project - Phase II; final rule."

(2) Federal Register, Vol. 70, No. 176, pages 53925-53929, dated September 13, 2005: "Updating OSHA Standards Based on National Consensus Standards; General, Incorporation by Reference; Hazardous Materials, Flammable and Combustible Liquids; General Environmental Controls, Temporary Labor Camps; Hand and Portable Powered Tools and Other Hand-Held Equipment, Guarding of Portable Powered Tools; Welding, Cutting and Brazing, Arc Welding and Cutting; Special Industries, Sawmills; final rule."

CC. Federal Register, Volume 71:

(1) Federal Register, Vol. 71, No. 39, pages 10110-10385, dated February 28, 2006: "Occupational Exposure to Hexavalent Chromium; final rule."

(2) Federal Register, Vol. 71, No. 164, pages 50122-50192, dated August 24, 2006: "Assigned Protection Factors; Final Rule."

DD. Federal Register, Volume 72:

(1) Federal Register, Vol. 72, No. 30, pages 7136-7221, dated February 14, 2007: "Electrical Standard; final rule."

(2) Federal Register, Vol. 72, No. 240, pages 71061-71070, dated December 14, 2007: "Updating OSHA Standards Based on National Consensus Standards; Direct final rule."

EE. Federal Register, Volume 73:

(1) Federal Register, Vol. 73, No. 51, pages 13753-13754, dated March 14, 2008: "Updating OSHA Standards Based on National Consensus Standards; final rule; confirmation of effective date."

(2) Federal Register, Vol. 73, No. 210, pages 64202-64205, dated October 29, 2008: "Electrical Standard; Clarifications; Corrections."

(3) Federal Register, Vol. 73, No. 240, pages 75568-75589, dated December 12, 2008: "Clarification of Employer Duty to Provide Personal Protective Equipment and Train Each Employee; Final Rule."

FF. Federal Register, Volume 74:

(1) Federal Register, Vol. 74, No. 153, pages 40442-40455, dated August 11, 2009: "Revising Standards Referenced in the Acetylene Standard; Direct Final rule; request for comment."

(2) Federal Register, Vol. 74, No. 173, pages 46350-46361, dated September 9, 2009: "Updating OSHA Standards Based on National Consensus Standards; Personal Protective Equipment; Final rule."

(3) Federal Register, Vol. 74, No. 216, pages 57883-57884, dated November 10, 2009: "Revising Standards Referenced in the Acetylene Standard; Final rule; confirmation of effective date."

GG. Federal Register, Volume 75:

(1) Federal Register, Vol. 75, No. 51, pages 12681-12686, dated March 17, 2010: "Revising the Notification Requirements in the Exposure Determination Provisions of the Hexavalent Chromium Standards; Direct Final rule."

(2) Federal Register, Vol. 75, No. 93, pages 27188-27189, dated May 14, 2010: "Revising the Notification Requirements in the Exposure Determination Provisions of the Hexavalent Chromium Standards; Final rule; confirmation of effective date."

HH. Federal Register, Volume 76:

(1) Federal Register, Vol. 76, No. 84, pages 24576-24711, dated May 2, 2011: "General Working Conditions in Shipyard Employment; Final rule."

(2) Federal Register, Vol. 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

(3) Federal Register, Vol. 76, No. 233, pages 75782-75786, dated December 5, 2011: "Revising Standards Referenced in the Acetylene Standard; Direct Final Rule; request for comment."

II. Federal Register, Volume 77:

(1) Federal Register, Vol. 77, No. 46, pages 13969-13970, dated March 8, 2012: "Revising Standards Referenced in the Acetylene Standard; Final Rule; confirmation of effective date."

(2) Federal Register, Vol. 77, No. 58, pages 17574-17896, dated March 26, 2012: "Hazard Communication: Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

(3) Federal Register, Vol. 77, No. 121, pages 37587-37600, dated June 22, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Direct final rule; request for comments."

(4) Federal Register, Vol. 77, No. 222, pages 68684-68685, dated November 16, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Final rule; confirmation of effective date."

JJ. Federal Register, Volume 79, No. 70, pages 20315-20743, dated April 11, 2014: "Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment; Final Rule."

KK. Federal Register, Volume 81:

(1) Federal Register, Volume 81, No. 58, pages 16286-16890, dated March 25, 2016: "Occupational Exposure to Respirable Crystalline Silica; Final Rule."

(2) Federal Register, Volume 81, No. 223, pages 82494-83006, dated November 18, 2016: "Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems); Final Rule."

LL. Federal Register, Volume 82, No. 5, pp. 2470-2757, dated January 9, 2017: "Occupational Exposure to Beryllium; Final rule."

MM. Federal Register, Volume 84, No. 93, pages 21416-21598, dated May 14, 2019: "Standards Improvement Project - Phase IV; Final Rule."

NN. Federal Register, Volume 84, No. 187, pp. 50739-50756, dated September 26, 2019: "Additional Ambient Aerosol CNC Quantitative Fit Testing Protocols: Respiratory Protection Standard."

OO. Federal Register, Volume 83, No. 128, pages 31045-31046, dated July 3, 2018: "Revising the Beryllium Standard for General Industry."

PP. Federal Register, Volume 85, No. 135, pages. 42582-42628, dated July 14, 2020: "Revising the Beryllium Standard for General Industry."

QQ. Federal Register, Volume 86, No. 116, pages 32376-32628, dated June 21, 2021; "Occupational Exposure to COVID-19; Emergency Temporary Standard."

RR. Federal Register, Volume 86, No. 212, pages 61402-61555, dated November 5, 2021: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

SS. Federal Register, Volume 87, No. 17, pages 3928-3929, dated January 26, 2022: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

TT. Federal Register, Volume 86, No. 116, pages 32376-32628, dated June 21, 2021: "Occupational Exposure to COVID-19; Emergency Temporary Standard," with the exception of 1910.502 (c) to (p) and (s), 1910.504, 1910.505, and 1910.509.

UU. Federal Register, Volume 89, No. 98, pages 44144-44461, dated May 20, 2024: "Hazard Communication Standard."

VV. Federal Register, Volume 89, No. 196, pages 81829-81836, dated October 9, 2024: "Hazard Communication Standard."

WW. Federal Register, Volume 91, No. 5, pages 562-598, dated January 8, 2026: "Hazard Communication Standard; Corrections."

XX. Federal Register, Volume 91, No. 30, page 6760, dated February 13, 2026: "Hazard Communication Standard; Corrections."

Subp. 3. **Part 1915.** Part 1915: Occupational Safety and Health Standards for Shipyard Employment as published in Volume 47, No. 76 of the Federal Register on April 20, 1982; all changes made prior to December 31, 1986, which consolidated Part 1915 and Part 1916; technical amendments and redesignations published in Volume 58, No. 125, of the Federal Register on July 1, 1993; and additional changes as follows:

A. Federal Register, Volume 51, No. 188, dated September 29, 1986; "Record Keeping Requirements for Tests, Inspections, and Maintenance Checks (1915.113 and 1915.172); Final Rule."

B. Federal Register, Volume 52, No. 163, pages 31852-31886, dated August 24, 1987; "Hazard Communication; Final Rule."

C. Federal Register, Volume 54, No. 30, pages 6886-6888, dated February 15, 1989; "Hazard Communication; Final Rule; Technical Amendments; Notice Regarding Enforcement."

D. Federal Register, Volume 57, No. 178, dated September 14, 1992: "Occupational Exposure to Cadmium (1915.1027); Final Rule."

E. Federal Register, Volume 57, No. 211, dated October 30, 1992: "Occupational Exposure to Cadmium (1915.1027); Approval of Information Collection Requirements."

F. Federal Register, Volume 58, No. 77, dated April 23, 1993, "Occupational Exposure to Cadmium; Corrections and Amendments to Final Rule."

G. Federal Register, Volume 59, No. 1, dated January 3, 1994, "Occupational Safety and Health Standards for Cadmium in Shipyard Employment and Construction; Final Rule; Miscellaneous Corrections and Technical Amendments."

H. Federal Register, Volume 59, No. 27, pages 6126-6184, dated February 9, 1994; "Hazard Communication; Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

I. Federal Register, Volume 59, No. 137, dated July 19, 1994, "Retention of DOT Markings, Placards, and Labels (1915.100); Final Rule."

J. Federal Register, Volume 59, No. 141, dated July 25, 1994, "Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment; Final Rule."

K. Federal Register, Volume 59, No. 153, dated August 10, 1994, "Occupational Exposure to Asbestos (1915.1001); Final Rule."

L. Federal Register, Volume 59, No. 245, pages 65947-65948, dated December 22, 1994; Hazard Communication; Correction."

M. Federal Register, Volume 60, No. 34, dated February 21, 1995: "Occupational Exposure to Asbestos (1915.1001), Final Rule; Extension of Start-up Dates for Compliance."

N. Federal Register, Volume 60, No. 40, dated March 1, 1995: "Occupational Exposure to Asbestos (1915.1001), Correction."

O. Federal Register, Volume 60, No. 51, dated March 16, 1995: "Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment (1915.12, 1915.14, and 1915.15); Final Rule, Correction."

P. Federal Register, Volume 60, No. 124, dated June 28, 1995: "Occupational Exposure to Asbestos (1915.1001), Final Rule; Extension of Start-up Dates for Compliance."

Q. Federal Register, Volume 60, No. 125, dated June 29, 1995: "Occupational Exposure to Asbestos (1915.1001); Corrections to Final Rule."

R. Federal Register, Volume 60, No. 134, dated July 13, 1995: "Occupational Exposure to Asbestos (1915.1001); Corrections to Final Rule."

S. Federal Register, Volume 60, No. 189, dated September 29, 1995: "Occupational Exposure to Asbestos (1915.1001), Final Rule; Amendments."

T. Federal Register, Volume 61, No. 46, page 9228, dated March 7, 1996: "Miscellaneous Minor and Technical Amendments; Final Rule; Corrections and Technical Amendments."

U. Federal Register, Volume 61, No. 102, page 26322, dated May 24, 1996: "Personal Protective Equipment for Shipyard Employment (PPE); Final Rule."

V. Federal Register, Volume 61, No. 115, page 29957, dated June 13, 1996: "Personal Protective Equipment for Shipyard Employment (PPE); Final Rule; Corrections."

W. Federal Register, Volume 61, No. 120, page 31427, dated June 20, 1996: "Consolidation of Repetitive Provisions; Technical Amendments; Final Rule; Technical Amendments and Recodifications."

X. Federal Register, Volume 61, No. 165, page 43454, dated August 23, 1996: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite; Final Rule: corrections."

Y. Federal Register, Volume 61, No. 214, page 56746, dated November 4, 1996: "Occupational Exposure to 1,3-Butadiene; Final Rule."

Z. Federal Register, Volume 62, No. 7, page 1494, dated January 10, 1997: "Occupational Exposure to Methylene Chloride; Final Rule."

AA. Federal Register, Volume 62, No. 119, page 33547, dated June 20, 1997: "Personal Protective Equipment for Shipyard Employment; Effective Date and Office of Management and Budget Control Numbers Under Paperwork Reduction Act; Final Rule; amendment; announcement of effective date and OMB approval of information collection requirements."

BB. Federal Register, Volume 63, No. 53, page 13338, dated March 19, 1998: "Office of Management and Budget Control Numbers Under Paperwork Reduction Act for Miscellaneous General Industry, Shipyard Employment and Construction Industry Rules and Regulations; Final Rule; Amendments and Announcements of OMB Approval of Information Collection Requirements."

CC. Federal Register, Volume 63, No. 124, page 35137, dated June 29, 1998: "Occupational Exposure to Asbestos; Final Rule."

DD. Federal Register, Volume 63, No. 230, page 66238, dated December 1, 1998: "Powered Industrial Truck Operator Training; Final Rule."

EE. Federal Register, Volume 64, No. 80, page 22552, dated April 27, 1999: "Powered Industrial Truck Operator Training; Correction to Final Rule."

FF. Federal Register, Volume 67, No. 128, pages 44533-44546, dated July 3, 2002: "Occupational Safety and Health Standards for Shipyard Employment; final rule; technical amendments."

GG. Federal Register, Volume 69, No. 178, pages 55668-55708, dated September 15, 2004: "Fire Protection in Shipyard Employment; final rule."

HH. Federal Register, Volume 70, No. 3, pages 1112-1144, dated January 5, 2005: "Standards Improvement Project - Phase II; final rule."

II. Federal Register, Volume 71:

(1) Federal Register, Vol. 71, No. 39, pages 10110-10385, dated February 28, 2006: "Occupational Exposure to Hexavalent Chromium; final rule."

(2) Federal Register, Vol. 71, No. 164, pages 50122-50192, dated August 24, 2006: "Assigned Protection Factors; Final Rule."

(3) Federal Register, Vol. 71, No. 200, pages 60843-60847, dated October 17, 2006: "Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment; direct final rule."

JJ. Federal Register, Volume 72, No. 1, pages 7-8, dated January 3, 2007: "Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment; final rule; confirmation of effective date."

KK. Federal Register, Volume 73, No. 240, pages 75567-75589, dated December, 12, 2008: "Clarification of Employer Duty to Provide Personal Protective Equipment and Train Each Employee; Final Rule."

LL. Federal Register, Volume 74, No. 173, pages 46350-46361, dated September 9, 2009: "Updating OSHA Standards Based on National Consensus Standards; Personal Protective Equipment; Final rule."

MM. Federal Register, Volume 75:

(1) Federal Register, Vol. 75, No. 51, pages 12681-12686, dated March 17, 2010: "Revising the Notification Requirements in the Exposure Determination Provisions of the Hexavalent Chromium Standards; Direct Final rule."

(2) Federal Register, Vol. 75, No. 93, pages 27188-27189, dated May 14, 2010: "Revising the Notification Requirements in the Exposure Determination Provisions of the Hexavalent Chromium Standards; Final rule; confirmation of effective date."

NN. Federal Register, Volume 76:

(1) Federal Register, Vol. 76, No. 84, pages 24576-24711, dated May 2, 2011: "General Working Conditions in Shipyard Employment; Final rule."

(2) Federal Register, Vol. 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

OO. Federal Register, Volume 77:

(1) Federal Register, Vol. 77, No. 58, pages 17574-17896, dated March 26, 2012: "Hazard Communication: Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

(2) Federal Register, Vol. 77, No. 121, pages 37587-37600, dated June 22, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Direct final rule; request for comments."

(3) Federal Register, Vol. 77, No. 222, pages 68684-68685, dated November 16, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Final rule; confirmation of effective date."

PP. Federal Register, Volume 81, No. 58, pages 16286-16890, dated March 25, 2016: "Occupational Exposure to Respirable Crystalline Silica; Final Rule."

QQ. Federal Register, Volume 84, No. 93, pages 21416-21598, dated May 14, 2019: "Standards Improvement Project - Phase IV; Final Rule."

RR. Federal Register, Volume 82, No. 5, pp. 2470-2757, dated January 9, 2017: "Occupational Exposure to Beryllium."

SS. Federal Register, Volume 85, No. 169, pages 53910-53999, dated August 31, 2020: "Occupational Exposure to Beryllium and Beryllium Compounds in the Construction and Shipyard Sectors."

TT. Federal Register, Volume 86, No. 212, pages 61402-61555, dated November 5, 2021: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

UU. Federal Register, Volume 87, No. 17, pages 3928-3929, dated January 26, 2022: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

Subp. 4. **Part 1917.** Part 1917: Safety and Health Standards for Marine Terminals as published in Volume 48, No. 129 of the Federal Register on July 5, 1983; and subsequent changes as follows:

A. Federal Register, Volume 52, No. 163, pages 31852-31886, dated August 24, 1987; "Hazard Communication; Final Rule."

B. Federal Register, Volume 52, No. 186, dated September 25, 1987; "Servicing of Single Piece and Multipiece Rim Wheels at Marine Terminals (1917.44); Final Rule."

C. Federal Register, Volume 52, No. 251, dated December 31, 1987; "Grain Handling Facilities (1917.1 and 1917.72-[removed]); Final Rule."

D. Federal Register, Volume 54, No. 30, pages 6886-6888, dated February 15, 1989; "Hazard Communication; Final Rule; Technical Amendments; Notice Regarding Enforcement."

E. Federal Register, Volume 59, No. 27, pages 6126-6184, dated February 9, 1994; "Hazard Communication; Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

F. Federal Register, Volume 59, No. 137, dated July 19, 1994, "Retention of DOT Markings, Placards, and Labels (1917.29); Final Rule."

G. Federal Register, Volume 59, No. 245, pages 65947-65948, dated December 22, 1994; "Hazard Communication; Correction."

H. Federal Register, Volume 62, No. 143, page 40142, dated July 25, 1997: "Longshoring and Marine Terminals; Final Rule."

I. Federal Register, Volume 63, No. 230, page 66238, dated December 1, 1998: "Powered Industrial Truck Operator Training; Final Rule."

J. Federal Register, Volume 64, No. 80, page 22552, dated April 27, 1999: "Powered Industrial Truck Operator Training; Correction to Final Rule."

K. Federal Register, Volume 64, No. 166, page 46846, dated August 27, 1999: "Powered Industrial Truck Operator Training; Final Rule; Stay of Compliance Dates."

L. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

M. Federal Register, Volume 71, No. 39, pages 10110-10385, dated February 28, 2006: "Occupational Exposure to Hexavalent Chromium; final rule."

N. Federal Register, Volume 73:

(1) Federal Register, Vol. 73, No. 238, pages 75246-75290, dated December 10, 2008: "Longshoring and Marine Terminals; Vertical Tandem Lifts; Final Rule."

(2) Federal Register, Vol. 73, No. 240, pages 75567-75589, dated December 12, 2008: "Clarification of Employer Duty to Provide Personal Protective Equipment and Train Each Employee; Final Rule."

O. Federal Register, Volume 74, No. 173, pages 46350-46361, dated September 9, 2009: "Updating OSHA Standards Based on National Consensus Standards; Personal Protective Equipment; Final rule."

P. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

Q. Federal Register, Volume 77:

(1) Federal Register, Vol. 77, No. 121, pages 37587-37600, dated June 22, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Direct final rule; request for comments."

(2) Federal Register, Vol. 77, No. 222, pages 68684-68685, dated November 16, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Final rule; confirmation of effective date."

R. Federal Register, Volume 86, No. 212, pages 61402-61555, dated November 5, 2021: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

S. Federal Register, Volume 87, No. 17, pages 3928-3929, dated January 26, 2022: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

Subp. 5. **Part 1918.** Part 1918: Safety and Health Regulations for Longshoring as published in Part II, Volume 39, No. 119 of the Federal Register on June 19, 1974, incorporating changes, additions, deletions and corrections made up to June 3, 1974; and subsequent changes as follows:

A. Federal Register, Volume 42, No. 141, dated 7/22/77; "Commercial Diving Operations, adding 1918.99."

B. Federal Register, Volume 52, No. 163, pages 31852-31886, dated August 24, 1987; "Hazard Communication; Final Rule."

C. Federal Register, Volume 43, No. 88, dated 5/5/78; "Occupational Exposure to Benzene; supersedes standards in Part 1918."

D. Federal Register, Volume 54, No. 30, pages 6886-6888, dated February 15, 1989; "Hazard Communication; Final Rule; Technical Amendments; Notice Regarding Enforcement."

E. Federal Register, Volume 59, No. 27, pages 6126-6184, dated February 9, 1994; "Hazard Communication; Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

F. Federal Register, Volume 59, No. 137, dated July 19, 1994, "Retention of DOT Markings, Placards, and Labels (1918.100); Final Rule."

G. Federal Register, Volume 59, No. 245, pages 65947-65948, dated December 22, 1994; "Hazard Communication; Correction."

H. Federal Register, Volume 62, No. 143, page 40142, dated July 25, 1997: "Longshoring and Marine Terminals; Final Rule."

I. Federal Register, Volume 63, No. 230, page 66238, dated December 1, 1998: "Powered Industrial Truck Operator Training; Final Rule."

J. Federal Register, Volume 64, No. 80, page 22552, dated April 27, 1999: "Powered Industrial Truck Operator Training; Correction to Final Rule."

K. Federal Register, Volume 64, No. 166, page 46846, dated August 27, 1999: "Powered Industrial Truck Operator Training; Final Rule; Stay of Compliance Dates."

L. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

M. Federal Register, Volume 71, No. 39, pages 10110-10385, dated February 28, 2006: "Occupational Exposure to Hexavalent Chromium; final rule."

N. Federal Register, Volume 73:

(1) Federal Register, Vol. 73, No. 238, pages 75246-75290, dated December 10, 2008: "Longshoring and Marine Terminals; Vertical Tandem Lifts; Final Rule."

(2) Federal Register, Vol. 73, No. 240, pages 75567-75589, dated December 12, 2008: "Clarification of Employer Duty to Provide Personal Protective Equipment and Train Each Employee; Final Rule."

O. Federal Register, Volume 74, No. 173, pages 46350-46361, dated September 9, 2009: "Updating OSHA Standards Based on National Consensus Standards; Personal Protective Equipment; Final rule."

P. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

Q. Federal Register, Volume 77:

(1) Federal Register, Vol. 77, No. 121, pages 37587-37600, dated June 22, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Direct final rule; request for comments."

(2) Federal Register, Vol. 77, No. 222, pages 68684-68685, dated November 16, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Final rule; confirmation of effective date."

R. Federal Register, Volume 86, No. 212, pages 61402-61555, dated November 5, 2021: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

S. Federal Register, Volume 87, No. 17, pages 3928-3929, dated January 26, 2022: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

Subp. 6. **Part 1926.** Part 1926: Construction Safety and Health Regulations as published in Part VII, Volume 44, No. 29 of the Federal Register on February 9, 1979, which incorporates changes, additions, deletions, and corrections made up to October 17, 1978, the incorporation and redesignation of the regulatory text of the General Industry Occupational Safety and Health Standards (29 CFR Part 1910) that have been identified as applicable to construction work as published in the Federal Register, Volume 58, No. 124, dated June 30, 1993, and corrected in Volume 58, No. 143, dated July 28, 1993; and additional changes as follows:

A. Federal Register, Volume 45, No. 222, dated 11/14/80; "Guarding Low-Pitched Roof Perimeters During Performance of Built-Up Roofing Work."

B. Federal Register, Volume 51:

(1) Federal Register, Vol. 51, No. 119, dated 6/20/86; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1926.58 and 1910.1001); Final Rules."

(2) Federal Register, Vol. 51, No. 133, dated 7/11/86; "Electrical Standards for Construction, Part 1926, Subpart K."

C. Federal Register, Volume 52:

(1) Federal Register, Vol. 52, No. 163, pages 31852-31886, dated August 24, 1987; "Hazard Communication; Final Rule."

(2) Federal Register, Vol. 52, No. 187, dated September 28, 1987; "Revision of Construction Industry Test and Inspection Records (1926.500, 1926.552, and 1926.903); Final Rule."

(3) Federal Register, Vol. 52, No. 233, dated December 4, 1987; "Occupational Exposure to Formaldehyde--1926.55."

D. Federal Register, Volume 53:

(1) Federal Register, Vol. 53, No. 116, dated June 16, 1988; "Concrete and Masonry Construction Safety Standards (1926.700-1926.706)."

(2) Federal Register, Vol. 53, No. 139, dated July 20, 1988; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1926.58); Extension of Partial Stay and Amendment of Final Rule."

(3) Federal Register, Vol. 53, No. 178, dated September 14, 1988; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1910.1001 and 1926.58); Amendment to Final Rule."

E. Federal Register, Volume 54:

(1) Federal Register, Vol. 54, No. 30, pages 6886-6888, dated February 15, 1989; "Hazard Communication; Final Rule; Technical Amendments; Notice Regarding Enforcement."

(2) Federal Register, Vol. 54, No. 105, dated June 2, 1989: "Underground Construction (1926.800) Final Rule."

(3) Federal Register, Vol. 54, No. 139, dated July 21, 1989: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1926.58); Extension of Partial Stay and Amendment of Final Rule."

(4) Federal Register, Vol. 54, No. 192, dated October 5, 1989: "Concrete and Masonry Construction Safety Standards (Subpart O of 29 CFR Part 1926); Final Rule Technical Amendment."

(5) Federal Register, Vol. 54, No. 209, dated October 31, 1989: "Excavations (Subpart P of 29 CFR Part 1926)."

(6) Federal Register, Vol. 54, No. 243, dated December 20, 1989: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1926.58); Partial Response to Court Remand."

F. Federal Register, Volume 55:

(1) Federal Register, Vol. 55, No. 24, dated February 5, 1990: "Occupational Exposure to Asbestos (1926.58); Partial Response to Court Remand."

(2) Federal Register, Vol. 55, No. 165, dated August 24, 1990: "Occupational Exposure to Asbestos (1926.58); Approval of Collection of Information Requirements."

(3) Federal Register, Vol. 55, No. 202, dated October 18, 1990: "Concrete and Masonry Construction Safety Standards; Lift Slab Construction Operations (Subpart Q) Final Rule."

(4) Federal Register, Vol. 55, No. 220, dated November 14, 1990: "Safety Standards for Stairways and Ladders Used in the Construction Industry; Final Rule."

(5) Federal Register, Vol. 55, No. 237, dated December 10, 1990: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (1926.58); Extension of Partial Stay and Amendment of Final Rule."

G. Federal Register, Volume 56:

(1) Federal Register, Vol. 56, No. 15, dated January 23, 1991: "Safety Standards for Stairways and Ladders Used in the Construction Industry; Corrections to Final Rule."

(2) Federal Register, Vol. 56, No. 26, dated February 7, 1991: "Safety Standards for Stairways and Ladders Used in the Construction Industry; Corrections to Final Rule."

(3) Federal Register, Vol. 56, No. 164, dated August 23, 1991: "Safety Standards for Stairways and Ladders Used in the Construction Industry."

(4) Federal Register, Vol. 56, No. 171, dated September 4, 1991: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Extension of Partial Stay and Amendment of Final Rule."

H. Federal Register, Volume 57:

(1) Federal Register, Vol. 57, No. 44, dated March 5, 1992: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Extension of Partial Stay and Amendment of Final Rule."

(2) Federal Register, Vol. 57, No. 110, dated June 8, 1992: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite (1926.58); Final Rule."

(3) Federal Register, Vol. 57, No. 126, dated June 30, 1992: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite (1926.58); Correction."

(4) Federal Register, Vol. 57, No. 154, dated August 10, 1992: "Occupational Exposure to 4,4' Methylenedianiline (MDA) (1926.60)."

(5) Federal Register, Vol. 57, No. 178, dated September 14, 1992: "Occupational Exposure to Cadmium (1926.63); Final Rule."

(6) Federal Register, Vol. 57, No. 211, dated October 30, 1992: "Occupational Exposure to Cadmium (1926.63); Approval of Information Collection Requirements."

I. Federal Register, Volume 58:

(1) Federal Register, Vol. 58, No. 77, dated April 23, 1993, "Occupational Exposure to Cadmium; Corrections and Amendments to Final Rule."

(2) Federal Register, Vol. 58, No. 84, dated May 4, 1993, "Lead Exposure in Construction (1926.62); Interim Final Rule."

(3) Federal Register, Vol. 58, No. 120, dated June 24, 1993, "Occupational Exposure to Lead in Construction; Interim Final Rule--Approval of Information Collection Requirements."

J. Federal Register, Volume 59:

(1) Federal Register, Vol. 59, No. 1, dated January 3, 1994, "Occupational Safety and Health Standards for Cadmium in Shipyard Employment and Construction; Final Rule; Miscellaneous Corrections and Technical Amendments."

(2) Federal Register, Vol. 59, No. 27, pages 6126-6184, dated February 9, 1994; "Hazard Communication; Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

(3) Federal Register, Vol. 59, No. 137, dated July 19, 1994, "Retention of DOT Markings, Placards, and Labels (1926.61); Final Rule."

(4) Federal Register, Vol. 59, No. 152, dated August 9, 1994, "Safety Standards for Fall Protection in the Construction Industry."

(5) Federal Register, Vol. 59, No. 153, dated August 10, 1994, "Occupational Exposure to Asbestos (1926.1101); Final Rule."

(6) Federal Register, Vol. 59, No. 161, dated August 22, 1994, "Hazardous Waste Operations and Emergency Response (1910.120 and 1926.65); Amendments to Final Rule."

(7) Federal Register, Vol. 59, No. 245, pages 65947-65948, dated December 22, 1994; "Hazard Communication; Correction."

K. Federal Register, Volume 60:

(1) Federal Register, Vol. 60, No. 17, dated January 26, 1995: "Safety Standards for Fall Protection in the Construction Industry, Final Rule; Delay of Effective Date."

(2) Federal Register, Vol. 60, No. 34, dated February 21, 1995: "Occupational Exposure to Asbestos (1926.1101), Final Rule; Extension of Start-up Dates for Compliance."

(3) Federal Register, Vol. 60, No. 40, dated March 1, 1995: "Occupational Exposure to Asbestos (1926.1101), Correction."

(4) Federal Register, Vol. 60, No. 124, dated June 28, 1995: "Occupational Exposure to Asbestos (1926.1101), Final Rule; Extension of Start-up Dates for Compliance."

(5) Federal Register, Vol. 60, No. 125, dated June 29, 1995: "Occupational Exposure to Asbestos (1926.1101); Corrections to Final Rule."

(6) Federal Register, Vol. 60, No. 134, dated July 13, 1995: "Occupational Exposure to Asbestos (1926.1101); Corrections to Final Rule."

(7) Federal Register, Vol. 60, No. 148, dated August 1, 1995: "Safety Standards for Fall Protection in the Construction Industry (Part 1926, Subpart M), Final Rule; Correcting Amendment."

(8) Federal Register, Vol. 60, No. 189, dated September 29, 1995: "Occupational Exposure to Asbestos (1926.1101), Final Rule; Amendments."

L. Federal Register, Volume 61;

(1) Federal Register, Vol. 61, No. 46, page 9228, dated March 7, 1996: "Miscellaneous Minor and Technical Amendments; Final Rule; Corrections and Technical Amendments."

(2) Federal Register, Vol. 61, No. 120, page 31427, dated June 20, 1996: "Consolidation of Repetitive Provisions; Technical Amendments; Final Rule; Technical Amendments and Recodifications."

(3) Federal Register, Vol. 61, No. 156, page 41738, dated August 12, 1996: "Incorporation of General Industry Health and Safety Standards Applicable to Construction Work; Final Rule; correcting amendment."

(4) Federal Register, Vol. 61, No. 165, page 43454, dated August 23, 1996: "Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite; Final Rule; corrections."

(5) Federal Register, Vol. 61, No. 170, page 46026, dated August 30, 1996: "Safety Standards for Scaffolds Used in the Construction Industry; Final Rule."

(6) Federal Register, Vol. 61, No. 214, page 56746, dated November 4, 1996: "Occupational Exposure to 1,3-Butadiene; Final Rule."

(7) Federal Register, Vol. 61, No. 228, page 59831, dated November 25, 1996: "Safety Standards for Scaffolds Used in the Construction Industry; Final Rule; Corrections, Partial Stay."

M. Federal Register, Volume 62, No. 7, page 1494, dated January 10, 1997: "Occupational Exposure to Methylene Chloride; Final Rule."

N. Federal Register, Volume 63:

(1) Federal Register, Vol. 63, No. 5, page 1152, dated January 8, 1998: "Respiratory Protection; Final Rule; Request for Comment on Paperwork Requirements."

(2) Federal Register, Vol. 63, No. 17, page 3813, dated January 27, 1998: "Safety Standards for Scaffolds Used in the Construction Industry (Aerial Lifts); Effective Date and Office of Management and Budget Control Numbers Under Paperwork Reduction Act; Final Rule; Amendment; Announcement of Effective Date and OMB Approval of Information Collection Requirements."

(3) Federal Register, Vol. 63, No. 53, page 13338, dated March 19, 1998: "Office of Management and Budget Control Numbers Under Paperwork Reduction Act for Miscellaneous General Industry, Shipyard Employment and Construction Industry Rules and Regulations; Final Rule; Amendments and Announcements of OMB Approval of Information Collection Requirements."

(4) Federal Register, Vol. 63, No. 67, page 17093, dated April 8, 1998: "Office of Management and Budget Control Numbers Under the Paperwork Reduction Act; Final Rule."

(5) Federal Register, Vol. 63, No. 78, page 20098, dated April 23, 1998: "Respiratory Protection; Correction; Final Rule; Correction."

(6) Federal Register, Vol. 63, No. 117, page 33449, dated June 18, 1998: "Standards Improvement (Miscellaneous Changes) for General Industry and Construction Standards; Paperwork Collection for Coke Oven Emissions and Inorganic Arsenic; Final Rule."

(7) Federal Register, Vol. 63, No. 124, page 35137, dated June 29, 1998: "Occupational Exposure to Asbestos; Final Rule."

(8) Federal Register, Vol. 63, No. 191, page 53103, dated October 2, 1998: "Respiratory Protection; Announcement of OMB Approval of Information Collection Requirements; Notice."

(9) Federal Register, Vol. 63, No. 230, page 66238, dated December 1, 1998: "Powdered Industrial Truck Operator Training; Final Rule."

O. Federal Register, Volume 64:

(1) Federal Register, Vol. 64, No. 73, page 18809, dated April 16, 1999: "Office of Management and Budget (OMB) Control Numbers Under the Paperwork Reduction Act for Miscellaneous Construction Industry Rules; Final Rule, OMB Approval of Information Collection Requirements."

(2) Federal Register, Vol. 64, No. 80, page 22552, dated April 27, 1999: "Powered Industrial Truck Operator Training; Correction to Final Rule."

P. Federal Register, Volume 66:

(1) Federal Register, Vol. 66, No. 12, page 5196, dated January 18, 2001: "Safety Standards for Steel Erection; Final Rule."

(2) Federal Register, Vol. 66, No. 236, page 37137, dated July 17, 2001: "Safety Standards for Steel Erection; Final Rule; delay of effective date."

Q. Federal Register, Volume 67, No. 177, pages 57722-57736, dated September 12, 2002: "Safety Standards for Signs, Signals, and Barricades; final rule."

R. Federal Register, Volume 69, No. 110, pages 31880-31882, dated June 8, 2004: "Mechanical Power-Transmission Apparatus; Mechanical Power Presses; Telecommunications; Hydrogen; final rule; technical amendments."

S. Federal Register, Volume 70:

(1) Federal Register, Vol. 70, No. 3, pages 1112-1144, dated January 5, 2005: "Standards Improvement Project - Phase II; final rule."

(2) Federal Register, Vol. 70, No. 249, pages 76979-77025, dated December 29, 2005: "Roll-Over Protective Structures; direct final rule."

T. Federal Register, Volume 71:

(1) Federal Register, Vol. 71, No. 11, pages 2879-2884, dated January 18, 2006: "Steel Erection; Slip Resistance of Skeletal Structural Steel; final rule."

(2) Federal Register, Vol. 71, No. 39, page 9909, dated February 28, 2006: "Roll-Over Protective Structures; final rule; confirmation of effective date."

(3) Federal Register, Vol. 71, No. 39, pages 10110-10385, dated February 28, 2006: "Occupational Exposure to Hexavalent Chromium; final rule."

(4) Federal Register, Vol. 71, No. 139, pages 41127-41161, dated July 20, 2006: "Roll-Over Protective Structures; Final Rule; Corrections and Technical Amendments."

(5) Federal Register, Vol. 71, No. 164, pages 50122-50192, dated August 24, 2006: "Assigned Protection Factors; Final Rule."

U. Federal Register, Volume 73, No. 240, pages 75567-75589, dated December 12, 2008: "Clarification of Employer Duty to Provide Personal Protective Equipment and Train Each Employee; Final Rule."

V. Federal Register, Volume 75:

(1) Federal Register, Vol. 75, No. 51, pages 12681-12686, dated March 17, 2010: "Revising the Notification Requirements in the Exposure Determination Provisions of the Hexavalent Chromium Standards; Direct Final rule."

(2) Federal Register, Vol. 75, No. 93, pages 27188-27189, dated May 14, 2010: "Revising the Notification Requirements in the Exposure Determination Provisions of the Hexavalent Chromium Standards; Final rule; confirmation of effective date."

(3) Federal Register, Vol. 75, No. 94, pages 27428-27429, dated May 17, 2010: "Safety Standards for Steel Erection; Final rule; technical amendment."

(4) Federal Register, Vol. 75, No. 152, pages 47906-48177, dated August 9, 2010: "Cranes and Derricks in Construction; Final rule."

W. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

X. Federal Register, Volume 77:

(1) Federal Register, Vol. 77, No. 58, pages 17574-17896, dated March 26, 2012: "Hazard Communication: Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

(2) Federal Register, Vol. 77, No. 121, pages 37587-37600, dated June 22, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Direct final rule; request for comments."

(3) Federal Register, Vol. 77, No. 222, pages 68684-68685, dated November 16, 2012: "Updating OSHA Standards Based on National Consensus Standards; Head Protection; Final rule; confirmation of effective date."

Y. Federal Register, Volume 78:

(1) Federal Register, Vol. 78, No. 78, pages 23837-23843, dated April 23, 2013: "Cranes and Derricks in Construction: Underground Construction and Demolition; Final Rule."

(2) Federal Register, Vol. 78, No. 103, pages 32110-32116, dated May 29, 2013: "Cranes and Derricks in Construction: Revising the Exemption for Digger Derricks; Final Rule."

Z. Federal Register, Volume 79:

(1) Federal Register, Vol. 79, No. 70, pages 20315-20743, dated April 11, 2014: "Electric Power Generation, Transmission, and Distribution; Electrical Protective Equipment; Final Rule."

(2) Federal Register, Vol. 79, No. 187, pages 57785-57798, dated September 26, 2014: "Cranes and Derricks in Construction: Operator Certification; Final Rule."

AA. Federal Register, Volume 80, No. 85, pages 25366-25526, dated May 4, 2015: "Confined Spaces in Construction; Final Rule."

BB. Federal Register, Volume 81, No. 58, pages 16286-16890, dated March 25, 2016: "Occupational Exposure to Respirable Crystalline Silica; Final Rule."

CC. Federal Register, Volume 83, No. 218, pages 56198-56247, dated November 9, 2018: "Cranes and Derricks in Construction; Operator Qualification; Final Rule."

DD. Federal Register, Volume 84, No. 93, pages 21416-21598, dated May 14, 2019: "Standards Improvement Project - Phase IV; Final Rule."

EE. Federal Register, Volume 82, No. 5, pp. 2470-2757, dated January 9, 2017: "Occupational Exposure to Beryllium."

FF. Federal Register, Volume 85, No. 169, pages 53910-53999, dated August 31, 2020: "Occupational Exposure to Beryllium and Beryllium Compounds in the Construction and Shipyard Sectors."

GG. Federal Register, Volume 85, No. 179, pages 57109-57122, dated September 15, 2020: "Cranes and Derricks in Construction: Railroad Roadway Work."

HH. Federal Register, Volume 86, No. 212, pages 61402-61555, dated November 5, 2021: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

II. Federal Register, Volume 87, No. 17, pages 3928-3929, dated January 26, 2022: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

JJ. Federal Register, Volume 89, No. 239, pages 100321-100346, dated December 12, 2024: "Personal Protective Equipment in Construction."

Subp. 7. **Part 1928.** Part 1928: Occupational Safety and Health Standards for Agriculture as published in Part II, Volume 40, No. 81 of the Federal Register on April 25, 1975, and subsequent changes as follows:

A. Federal Register, Volume 41, No. 206, dated 11/22/76; "Nonsubstantive changes to guarding of farm field equipment."

B. Federal Register, Volume 42:

(1) Federal Register, Vol. 42, No. 141, dated 7/22/77; "Excludes commercial diving operations standards from agricultural applicability."

(2) Federal Register, Vol. 42, No. 146, dated 7/29/77; "Excludes air contaminant standards from agricultural operations."

C. Federal Register, Volume 43:

(1) Federal Register, Vol. 43, No. 122, dated 6/23/78; "Occupational Exposure to Cotton Dust in Cotton Gins, amends 1928.21 by adding paragraph (a)(5)."

(2) Federal Register, Vol. 43, No. 127, dated 6/30/78; "Occupational Exposure to Cotton Dust in Cotton Gins, corrections of errors in 1928.21 and 1928.113."

(3) Federal Register, Vol. 43, No. 153, dated 8/8/78; "Occupational Exposure to Cotton Dust in Cotton Gins, correction of errors in 1928.113."

(4) Federal Register, Vol. 43, No. 234, dated 12/5/78; "Occupational Exposure to Cotton Dust in Cotton Gins, corrections to Appendix C."

D. Federal Register, Volume 52, No. 84, dated May 1, 1987; "Field Sanitation, Final Rule (29 CFR 1928.110)."

E. Federal Register, Volume 52, No. 163, pages 31852-31886, dated August 24, 1987; "Hazard Communication; Final Rule."

F. Federal Register, Volume 53, No. 185, dated September 23, 1988; "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Corrections to September 14, 1988 Federal Register notice."

G. Federal Register, Volume 54, No. 30, pages 6886-6888, dated February 15, 1989; "Hazard Communication; Final Rule; Technical Amendments; Notice Regarding Enforcement."

H. Federal Register, Volume 58, No. 77, dated April 23, 1993, "Occupational Exposure to Cadmium (1928.1027)."

I. Federal Register, Volume 59, No. 27, pages 6126-6184, dated February 9, 1994; "Hazard Communication; Final Rule," with the exception of 1910.1200 (b)(6)(xi) and (xii).

J. Federal Register, Volume 59, No. 137, dated July 19, 1994, "Retention of DOT Markings, Placards, and Labels (1928.21); Final Rule."

K. Federal Register, Volume 59, No. 196, dated October 12, 1994, "Logging Operations, Final Rule (1928.21(a)(3))."

L. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

M. Federal Register, Volume 70, No. 249, pages 76979-77025, dated December 29, 2005: "Roll-Over Protective Structures; direct final rule."

N. Federal Register, Volume 71:

(1) Federal Register, Vol. 71, No. 39, Page 9909, dated February 28, 2006: "Roll-Over Protective Structures; final rule; confirmation of effective date."

(2) Federal Register, Vol. 71, No. 139, pages 41127-41161, dated July 20, 2006: "Roll-Over Protective Structures; Final Rule; Corrections and Technical Amendments."

O. Federal Register, Volume 76, No. 110, pages 33590-33612, dated June 8, 2011: "Standards Improvement Project - Phase III."

P. Federal Register, Volume 86, No. 212, pages 61402-61555, dated November 5, 2021: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

Q. Federal Register, Volume 87, No. 17, pages 3928-3929, dated January 26, 2022: "COVID-19 Vaccination and Testing; Emergency Temporary Standard."

Statutory Authority: *MS s 14.386; 182.655*

History: *7 SR 1706; 8 SR 172; 8 SR 1743; 9 SR 112; 9 SR 663; 9 SR 2585; 10 SR 1507; 10 SR 2418; 11 SR 867; 11 SR 1792; 12 SR 411; 12 SR 634; 12 SR 1618; 12 SR 2622; 13 SR 577; 13 SR 1918; 13 SR 2685; 14 SR 216; 14 SR 1177; 14 SR 2130; 15 SR 124; 15 SR 1122; 15 SR 1876; 16 SR 441; 16 SR 2054; 16 SR 2617; 17 SR 228; 17 SR 1273; 17 SR 2106; 18 SR 1065; 19 SR 187; 19 SR 887; 19 SR 1459; 19 SR 1900; 20 SR 197; 20 SR 1040; 20 SR 2122; 21 SR 202; 21 SR 805; 21 SR 1338; 21 SR 1897; 22 SR 1162; 22 SR 2014; 23 SR 813; 23 SR 1541; 23 SR 2132; 24 SR 274; 24 SR 1211; 26 SR 490; 26 SR 701; 27 SR 766; 27 SR 1409; 28 SR 609; 28 SR 1512; 29 SR 762; 29 SR 1451; 30 SR 880; 30 SR 1319; 31 SR 1138; 32 SR 18; 33 SR 253; 33 SR 1966; 34 SR 1208; 35 SR 801; 35 SR 1199; 36 SR 567; 37 SR 364; 37 SR 1807; 38 SR 610; 39 SR 418; 39 SR 1347; 40 SR 750; 41 SR 391; 42 SR 127; 42 SR 1462; 44 SR 538; 45 SR 39; 45 SR 827; 46 SR 31; 46 SR 789; 46 SR 926; 47 SR 475; 48 SR 559; 49 SR 461; 50 SR 391; 51 SR 526*

Published Electronically: *November 5, 2026*

5205.0015 APPLICATION OF RULES.

Chapter 5205 applies only to general industry locations. Chapter 5207 applies only to construction locations. Chapters 5206, 5208, and 5210 apply to both general industry and construction locations.

Statutory Authority: *MS s 182.655*

History: *12 SR 634; 23 SR 2060*
Published Electronically: *June 11, 2008*

PERSONAL PROTECTIVE EQUIPMENT

5205.0020 HEAD PROTECTION.

Employees working in areas where there is danger of scalp injury if the employee's hair should become entangled in moving machinery parts shall be protected by having their hair contained or secured in a shop cap, snood, or similar device.

Statutory Authority: *MS s 182.655*
Published Electronically: *June 11, 2008*

5205.0030 HIGH VISIBILITY PERSONAL PROTECTIVE EQUIPMENT.

Subpart 1. **General requirement.** Each employee, other than police and fire protection personnel covered by subpart 3, exposed to or working adjacent to moving motor vehicle traffic as part of the employee's assigned job shall be provided with and required to wear a high visibility warning vest or other high visibility garment. A high visibility garment is defined as being a Performance Class 2 garment or greater as specified by ANSI/ISEA Standard 107-2004. Some smaller garments may not meet the background material specifications for Performance Class 2 as defined in ANSI/ISEA 107-2004. In these cases, the garment must be rated by the manufacturer as greater than or exceeding Performance Class 1 requirements.

Subp. 1a. **Maintenance of garments.** If the high visibility personal protective equipment becomes faded, torn, dirty, worn, or defaced, reducing the equipment's performance below manufacturer's recommendations, the high visibility personal protective equipment shall be immediately removed from service and replaced.

Subp. 2. **Exception.** Where permanent or semipermanent barricades designed to stop or deflect vehicle traffic upon impact are in place to protect employees from moving motor vehicles, employees are not required to wear high visibility personal protective equipment while working inside these protected areas.

Subp. 3. **Law enforcement, emergency medical technician, and fire protection personnel.** Law enforcement and emergency medical technician personnel shall be provided with, and be required to wear a high visibility outer garment any time the personnel are engaged in vehicular traffic control. For fire protection personnel, compliance with NFPA No. 1971 is acceptable.

Subp. 4. **Electrical work.** For work within the flash protection boundary as defined by NFPA 70E, high visibility garments constructed of material that complies with NFPA 70E shall be worn.

Subp. 5. [Repealed, 31 SR 517]

Statutory Authority: *MS s 182.655*

History: *25 SR 1241; 31 SR 517; 40 SR 750*
Published Electronically: *January 7, 2016*

5205.0040 [Repealed, 42 SR 1015]
Published Electronically: *February 27, 2018*

5205.0050 [Repealed, 42 SR 1015]
Published Electronically: *February 27, 2018*

5205.0060 [Repealed, 42 SR 1015]
Published Electronically: *February 27, 2018*

5205.0065 [Repealed, 42 SR 1015]
Published Electronically: *February 27, 2018*

5205.0080 [Repealed, 42 SR 1015]
Published Electronically: *February 27, 2018*

GENERAL ENVIRONMENTAL CONTROLS

5205.0100 SUBMISSION OF ENVIRONMENTAL CONTROL MEASURES.

Submission of plans for engineering control of dust, fumes, gas, vapor, or mist generating operations is not required except as noted in part 5205.0110, subpart 4. Tests shall be conducted after the installation of engineering controls to determine whether the control measure is effective in maintaining the exposure concentrations of toxic materials below air contaminant limits.

Statutory Authority: *MS s 182.655; 182.657*

History: *12 SR 634; 21 SR 1897*
Published Electronically: *June 11, 2008*

5205.0105 VENT PIPE OUTLETS.

Vent pipe outlets for hazardous substances, as defined by part 5206.0100, subpart 7, under pressure, including ammonia and refrigerant compressor systems, shall be so located that the discharge is released at a point outside of the building where it will not reenter the building or work area.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0110 INDOOR VENTILATION AND TEMPERATURE IN PLACES OF EMPLOYMENT.

Subpart 1. **Air flow and circulation.** Air shall be provided and distributed in all indoor places of employment as required in this part, unless prohibited by process requirements.

Outdoor air shall be provided to all indoor places of employment at the rate of 15 cubic feet per minute per person.

Air circulated in any indoor place of employment shall be supplied through air inlets arranged, located, and equipped so that the workers shall not be subjected to air velocities exceeding 200 feet per minute except under special circumstances specified in this part or where approved by the Department of Labor and Industry.

Subp. 2. [Repealed, 21 SR 1897]

Subp. 2. **Heat conditions.** The requirements of this subpart cover employee exposure to indoor environmental heat conditions.

A. The following definitions apply when assessing and controlling health hazards associated with indoor climate.

(1) "Wet bulb globe temperature index" or "WBGT" means a measure of the combined effect of air temperature, air speed, humidity, and radiation. WBGT = 0.7 T_{nwb} + 0.3 T_g.

(2) "Natural wet-bulb temperature" or "T_{nwb}" means temperature measured by a thermometer which has its sensor covered by a wetted cotton wick, exposed to natural air movement.

(3) "Globe temperature" or "T_g" means temperature measured by a thermometer with its sensor inside a matte black globe, exposed to radiant heat, Vernon Globe or equivalent.

(4) "Heavy work" means 350 or higher kcal/hr (kilocalories per hour), for example: heavy lifting and pushing, shovel work.

(5) "Moderate work" means 200 to 350 kcal/hr, for example: walking with moderate lifting and pushing.

(6) "Light work" means up to 200 kcal/hr, for example: sitting or standing performing light hand or arm work.

B. Employees shall not be exposed to indoor environmental heat conditions in excess of the values listed in Table 1. The values in Table 1 apply to fully clothed acclimatized workers.

TABLE 1. Two-hour time-weighted average permissible heat exposure limits.

Work Activity	WBGT, °F
Heavy work	77
Moderate work	80
Light work	86

C. Employees with exposure to heat shall be provided training according to part 5206.0700, subparts 1 and 3.

Subp. 3. **Cold conditions.** The requirements of this subpart cover employee exposure to indoor environmental cold conditions. The definitions in subpart 2 apply to this subpart.

A. Indoor places of employment shall maintain a minimum air temperature of 60 degrees Fahrenheit where heavy work is performed, unless prohibited by process requirements.

B. Indoor places of employment shall maintain a minimum air temperature of 65 degrees Fahrenheit where light to moderate work is performed, unless prohibited by process requirements.

Subp. 4. **Recirculated air.** Air from any exhaust system handling materials listed in Code of Federal Regulations, title 29, part 1910, subpart Z, shall not be recirculated without written permission from the Department of Labor and Industry.

Subp. 5. **Definitions.** For the purposes of this part, the following definitions apply.

A. "Indoor" means any space between a floor and a ceiling that is bound on all sides by walls. A wall includes any door, window, retractable divider, garage door, or other physical barrier that is temporary or permanent, whether open or closed.

B. "Place of employment" has the meaning given in Minnesota Statutes, section 182.651, subdivision 10.

Statutory Authority: *MS s 182.655; 182.657*

History: *12 SR 634; 21 SR 1897; 39 SR 418*
Published Electronically: *October 2, 2014*

5205.0115 GAS FIRED MACHINES AND APPLIANCES.

The flame of the gas pilot, burner, or burners in gas fired units, except process heaters in refineries and top burners on domestic kitchen type stoves, shall be protected by a quick acting, flame sensitive safeguard that will automatically shut off the fuel supply in case of pilot or burner failure.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0116 CARBON MONOXIDE MONITORING.

Subpart 1. **Internal combustion engine powered industrial trucks.** The employer shall monitor environmental exposure of employees to carbon monoxide whenever internal combustion engine powered industrial trucks as defined in Code of Federal Regulations, title 29, section 1910.178(a)(1), are operated indoors to ensure that carbon monoxide levels do not exceed 35 parts per million as an eight-hour time-weighted average and 200 parts per million as a five-minute ceiling average. The air monitoring shall be done at least quarterly and represent exposures during a day of highest usage in the areas where employee carbon monoxide exposure is most likely.

Subp. 2. **Tailpipe exhaust gas analysis.** The employer shall ensure that powered industrial truck engine exhaust gases do not contain more than one percent carbon monoxide for propane fueled trucks or two percent carbon monoxide for gasoline fueled trucks measured at idle and at three-fourths throttle during final engine tuning in a regular maintenance program.

Statutory Authority: *MS s 182.655*

History: *12 SR 1754; 21 SR 1897; 39 SR 418*

Published Electronically: *October 2, 2014*

ILLUMINATION

5205.0120 MINIMUM LEVELS OF ILLUMINATION.

Subpart 1. **For traversed spaces.** Illumination by daylight or artificial light shall be supplied for traversed spaces, such as hallways, roadways, etc., during working hours, and for work when attended by operators. Minimum levels of illumination, as listed in the following table, are required in all places of employment in Minnesota. Values greater than these minima shall be used when ordered by the Occupational Safety and Health Division.

Illumination on Traversed Spaces

	Recommended Minimum Footcandles
Roadways, yard thoroughfares	2-1
Storage spaces, aisles and passageways in workrooms, excepting exits and passageways leading thereto	3-2
Spaces such as stairways, hallways, exits and passages leading thereto	5-3
Spaces such as locker rooms, wash rooms, toilet rooms, and passageways where there are exposed moving machines, hot pipes, or live electric parts	6-4

Subp. 2. **At the working place.**

Illumination at the Work

	Recommended Minimum Footcandles
Where discrimination of detail is not essential: Work such as handling material of a coarse nature, grinding clay products, rough sorting, coal and ash handling, foundry charging	5-3
Where slight discrimination of detail is essential: Work such as rough machining, rough assembling, rough bench work, rough forging, grain milling	10-5

Where moderate discrimination of detail is essential: Work such as machining, assembly work, bench work, fine core making in foundries	30
Where close discrimination of detail is essential: Work such as fine lathe work, pattern making, tool making, weaving or sewing light-colored silk or woolen textiles, office-work, accounting, typewriting	50
Where discrimination of minute detail is essential: Work such as drafting, weaving or sewing dark colored material, very fine inspection or inspection of very dark goods	100-25

The preceding table gives the range of minimum illumination values that are considered desirable for different classes of work. These values are based upon practice established through years of experience. Elderly persons or persons with defective eyesight require more light than do those having perfect vision. A range of footcandle values is given for each group of operations. In modern practice it will usually be found desirable to select values in or even beyond the upper portion of the range.

It is recognized that any specific process when carried on in different factories is performed with different degrees of fineness and with other variations, so that one factory may need more illumination than another for the same class of work. In the table, ranges of footcandle values are given to correspond to the variations actually existing in practice. Attention is called to the fact that the values in the table are operating values, that is, they apply to measurements of the lighting system in ordinary use, not simply when the lamps and reflectors are new and clean.

Statutory Authority: *MS s 182.657*

Published Electronically: *June 11, 2008*

5205.0130 DIFFUSION AND DISTRIBUTION OF LIGHT.

Subpart 1. **Requirement.** Lighting, whether natural or artificial, shall be such as to provide good distribution of light and to avoid glare and objectional shadows and extreme contrasts. In artificial lighting, lamps shall be so installed in regard to their height, location, and spacing and shall be so equipped with reflectors, shades, or other suitable accessories as to accomplish these objects.

Subp. 2. **Glare.** Bare light sources, such as exposed lamp filaments, located within the ordinary field of the worker's vision are presumptive evidence of glare. The principal causes of glare are:

A. the light source may be too bright; that is, it may have too high a candlepower per square inch of area;

B. the light source may be too powerful for comfort; that is, it may have too great a total candlepower in the direction of the eye;

C. a given light source may be located at too short a distance from the eye or it may lie too near the center of the field of vision for comfort; that is, within too small an angle from the ordinary line of sight;

D. the contrast between the light source and its darker surroundings may be too great;

E. the time of exposure may be too great; that is, the eye may be subjected to the strain caused by a light source of given strength within the field of vision for too long a time.

Glare from natural lighting may frequently be reduced by the use of refracting or diffusing glass in windows and skylights, and by the rearrangement of machines and benches so that operators are not required to face windows.

Statutory Authority: *MS s 182.657*
Published Electronically: *June 11, 2008*

5205.0140 EXIT AND EMERGENCY LIGHTING.

Subpart 1. **Stairway and exit lighting.** The lighting to be provided in all important stairways and all exits from work places and in the passageways related thereto shall be so supplied that it will not be subject to failure of the room or workspace lighting from internal causes. In artificial illumination, the service for exit and emergency lighting shall preferably be from an independent connection or connections extending back to the main service entrance.

Subp. 2. **Separate supply source.** In cases of unusual danger which may exist on account of the type of building or nature of the work, crowded conditions, or lack of suitable exit space, an independent service shall be assured by connecting to a separate source of supply without or within the building. During the hours of occupancy when daylight is lacking, this separate source of supply shall be connected so as to function continuously or to come on automatically upon failure of the regular lighting service.

Statutory Authority: *MS s 182.655; 182.657*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0150 MAINTAINING THE LEVEL OF ILLUMINATION.

Subpart 1. **Regular maintenance system.** The proper maintenance of equipment for both natural and artificial lighting is essential. Systems which are adequate when first installed will soon deteriorate unless properly maintained. For continued effectiveness and economy in lighting, the factory owner shall establish a regular definite system of maintenance so that skylights, side windows, lamps, and accessories are at all times kept clean, in proper adjustment, and in good repair. Means for easy access to all lighting units shall be provided for employees in charge of their maintenance. Walls and ceilings shall be repainted at regular intervals and preferably in light tones. This is especially true where systems of indirect lighting are used.

Subp. 2. **Measuring equipment.** Especially in connection with the maintenance of lighting systems, attention is called to the desirability of having available in the factory an instrument with which the footcandles of illumination received at any point can be measured. One instrument, the footcandle meter, while not designed for precise measurement, has a wide field of usefulness because, with a little practice, determinations are easily made and are accurate enough for most practical purposes. The footcandle meter is small, light in weight, and entirely self-contained. Illumination is read directly from the scale without computation or manipulation.

By measuring light actually delivered to the work, the footcandle meter automatically reveals the combined effect of all possible causes of deterioration. Ignorance of the magnitude of deterioration has often been the cause of inadequate maintenance.

Statutory Authority: *MS s 182.657*
Published Electronically: *June 11, 2008*

5205.0160 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

5205.0170 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

5205.0180 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

VENTILATION FOR GARAGES

5205.0200 GARAGE VENTILATION.

Subpart 1. **Scope.** Ventilation shall be provided for all repair garages, service stations, body shops, and all live storage garages, housing six or more vehicles driven by internal combustion engines. A live storage area is any area within a building used for the storage of fire trucks, tractors, automobiles, trucks, and other self-propelled vehicles driven in and out under their own power.

Subp. 2. **Size of general ventilation system.** The ventilation system shall be capable of removing a volume of air not less than three-fourths cubic foot per minute per square foot of floor area in garages and not less than one-half cubic foot per minute per square foot of floor area in service stations. Exhaust ducts shall not be more than 18 inches from the floor, so placed as to remove carbon monoxide gas from the entire garage. An equal amount of tempered fresh supply air shall be provided.

Subp. 3. **Size of vehicle exhaust pipe ventilation system.** In addition to general ventilation requirements, exhaust gases from the internal combustion engines being tested shall be discharged to the outdoors through a duct or flexible hose of noncombustible material of suitable size attached as an extension to the exhaust pipe. Repair stalls may be located adjacent to an outside wall so that ten feet or less of extension duct will reach the outdoors through openings not more than one foot above floor level. If repair stalls are not so located, each stall shall be provided with a suitable exhaust extension duct or flexible hose that is or can be connected to a mechanical exhaust system

and to the exhaust pipe of the vehicle. The mechanical exhaust system shall have a capacity in accordance with the following table:

Engine Type	Engine Horsepower	cfm per Tailpipe	Minimum Flexible Duct Inside Diameter, Inches
Gasoline	200 and under	100	3
Gasoline	over 200	200	4
Diesel	------	400	4-1/2

Subp. 4. **Inspection and repair pits.** Inspection and repair pits shall be provided with a ventilating system capable of assuring one complete air change every five minutes (12 air changes per hour). The exhaust air inlet opening or openings shall terminate in a grille that shall be perpendicular to the floor. The bottom of the ventilation openings shall extend to the floor at the lowest point or points of the pit.

Statutory Authority: *MS s 182.655; 182.657*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0210 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

5205.0220 [Repealed, 12 SR 634]
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5205.0230 [Repealed, 12 SR 634]
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5205.0240 [Repealed, 12 SR 634]
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5205.0250 [Repealed, 12 SR 634]
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5205.0260 [Repealed, 12 SR 634]
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5205.0270 [Repealed, 12 SR 634]
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5205.0280 [Repealed, 12 SR 634]
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5205.0290 [Repealed, 12 SR 634]
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5205.0300 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

5205.0310 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

5205.0320 [Repealed, 12 SR 634]
Published Electronically: *June 11, 2008*

STEAM BOILERS

5205.0330 STEAM BOILERS.

Subpart 1. **Scope.** The requirements of this item shall not apply to heating plants in buildings occupied solely for residence purposes, with accommodations therein not to exceed four families; to railroad locomotives; nor to railroad locomotive engineers employed by railroad companies.

Subp. 2. **Definition.** Any steam boiler with a safety valve set to permit a pressure exceeding 15 pounds shall be considered a high-pressure steam boiler.

Subp. 3. **Safety valves.** Safety valves shall not discharge within seven feet of floor, platform, ground, or boiler top, across a passageway or foot-walk or in such a way as to endanger persons operating stop valves. The arrangement of piping must not be such as to create a back pressure on the safety valve.

Subp. 4. **Boiler blowoffs.** Open blowoffs shall not discharge within seven feet of floor, platform, or ground, across a passageway.

Subp. 5. **Exits from boiler room.** Safe exit from all parts of boiler room shall be provided by at least two stairways, ladders permanently fastened in place, or other means of exit.

Subp. 6. **Boiler valve locks.** An effective valve locking device is one which will prevent any motion of the valve stem, and which is so attached to the valve that it cannot be removed. When two or more boilers are connected to a common steam, feedwater, or blowoff line, at least one controlling valve in the connection from each boiler to each such common steam, feed-water, or blowoff line shall be equipped with an effective valve locking device; and whenever a person is working in any boiler of a battery, the steam, feed-water and blowoff valves shall be closed and locked.



Boiler Valve Lock

Subp. 7. **Nonreturn valves.** A nonreturn valve is one which will automatically close and prevent steam from the main line from flowing back into the boiler if the pressure in the latter should fall below that in the steam line. Where two or more boilers are connected to one steam line, a nonreturn valve shall be provided in the main steam connection of each boiler, either in addition to or combined with the regular stop valve.

Statutory Authority: *MS s 182.657*
Published Electronically: *January 27, 2023*

5205.0400 [Repealed, 23 SR 2051]
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5205.0401 [Repealed, 23 SR 2051]
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5205.0410 [Repealed, 23 SR 2051]
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5205.0420 [Repealed, 23 SR 2051]
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5205.0430 [Repealed, 23 SR 2051]
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5205.0440 [Repealed, 23 SR 2051]
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5205.0450 [Repealed, 23 SR 2051]
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5205.0460 Subpart 1. [Repealed, 23 SR 2051]

Subp. 2. [Repealed, 23 SR 2051]

Subp. 3. [Repealed, 23 SR 2051]

Subp. 4. [Repealed, 23 SR 2051]

Subp. 5. [Repealed, 23 SR 2051]

Subp. 6. [Repealed, 23 SR 2051]

Subp. 7. [Repealed, 23 SR 2051]

Subp. 8. [Repealed, 23 SR 2051]

Subp. 9. [Repealed, 23 SR 2051]

Subp. 10. [Repealed, 23 SR 2051]

Subp. 11. [Repealed, 23 SR 2051]

Subp. 12. [Repealed, 23 SR 2051]

Subp. 13. [Repealed, 23 SR 2051]

Subp. 14. [Repealed, 23 SR 2051]

Subp. 15. [Repealed, 12 SR 634]

Subp. 16. [Repealed, 23 SR 2051]

Subp. 17. [Repealed, 23 SR 2051]

Subp. 18. [Repealed, 23 SR 2051]

Subp. 19. [Repealed, 12 SR 634]

Subp. 20. [Repealed, 23 SR 2051]

Subp. 21. [Repealed, 23 SR 2051]

Subp. 22. [Repealed, 23 SR 2051]

Subp. 23. [Repealed, 23 SR 2051]

Subp. 24. [Repealed, 23 SR 2051]

Subp. 25. [Repealed, 23 SR 2051]

Subp. 26. [Repealed, 23 SR 2051]

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5205.0470 [Repealed, 23 SR 2051]

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5205.0480 [Repealed, 23 SR 2051]
Published Electronically: *June 11, 2008*

5205.0490 [Repealed, 23 SR 2051]
Published Electronically: *June 11, 2008*

PLATFORM MANLIFTS

5205.0550 INSTALLATION LIMITATIONS.

Subject to the approval of the Department of Labor and Industry, manlifts may be installed in buildings where such manlifts are not accessible to the public and where their installation and use are safe. Such manlifts shall comply with the safety requirements set out in this part:

A. The use of manlifts shall be restricted to employees and authorized persons who are trained in their use. New employees shall be individually and properly instructed in the use of manlifts.

B. The area adjoining the floor opening shall be kept clear and adequately lighted at all times.

C. Signs shall be posted at a conspicuous position on each landing, at approximately eye level, indicating "Authorized Personnel Only."

Statutory Authority: *MS s 182.655*
Published Electronically: *June 11, 2008*

5205.0560 INSPECTION.

Before final approval, an inspection of each new or relocated manlift shall be made by the Department of Labor and Industry.

Statutory Authority: *MS s 182.655*
Published Electronically: *June 11, 2008*

5205.0570 TYPES OF MANLIFTS.

Manlifts may be of the following types: hand-powered platform passenger type manlifts or special purpose personnel elevators.

Statutory Authority: *MS s 182.655*
Published Electronically: *June 11, 2008*

5205.0580 [Repealed, 40 SR 1646]
Published Electronically: *June 23, 2016*

5205.0590 [Repealed, 23 SR 2051]
Published Electronically: *June 11, 2008*

MAINTENANCE AND REPAIR OF BUILDINGS AND EQUIPMENT

5205.0650 SCOPE.

Parts 5205.0650 to 5205.0720 apply to building and in plant maintenance and repair necessary to maintain buildings and equipment in safe operating condition.

Statutory Authority: *MS s 182.655*

History: *12 SR 634; 36 SR 874*

Published Electronically: *March 1, 2012*

5205.0660 MAINTENANCE GOALS.

Subpart 1. **Building maintenance.** Buildings shall be maintained to assure that no loose parts or equipment including, but not limited to, bricks, mortar, glass, wood, or cement parts can fall in passage or work areas occupied by employees.

Subp. 2. **Walkway maintenance.** Catwalks, platforms, walkways, and stairways shall be maintained in a condition free from the hazards associated with ice, snow, overhanging ice or snow, holes, loose members, or badly deteriorated or corroded members.

Subp. 3. **Asbestos.** Exposed friable asbestos containing materials on ceilings, beams, pipes, boilers, tanks, and similar areas shall be repaired, replaced, removed, enclosed, or encapsulated. Precautions shall be taken to protect employees as required by Code of Federal Regulations, title 29, section 1910.1001 or 1926.1101.

Statutory Authority: *MS s 182.655*

History: *12 SR 634; 21 SR 1897*

Published Electronically: *June 11, 2008*

5205.0665 ELECTRICAL REQUIREMENTS.

Exposed noncurrent carrying metal parts of cord and plug connected equipment that may become energized shall be grounded if used near wet or conductive equipment, materials, or locations.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*

Published Electronically: *June 11, 2008*

5205.0670 BLOCKING AND CRIBBING MACHINERY.

Heavy machinery, equipment, or parts thereof which are suspended or held aloft by slings, cables, chains, jacks, or hoists shall be blocked or cribbed to prevent falling or shifting before employees are permitted to work under or between the members of the equipment.

Elevated bulldozer and scraper blades, power crane booms, end loader buckets, dump truck boxes, and similar equipment shall be fully lowered or adequately blocked or cribbed before being serviced or repaired.

Statutory Authority: *MS s 182.655*
Published Electronically: *June 11, 2008*

5205.0675 COVERS AND OVERHEAD DOORS.

Subpart 1. **Covers.** All covers of sufficient weight or pressure to cause crushing injury to employees in the event of their powered or unpowered closure shall be fastened, secured, or blocked to prevent their closing while employees may be in the path of travel during closure.

Subp. 2. **Overhead doors.** All overhead or sliding doors with sufficient weight or closing force to cause crushing injury to employees shall be provided with a constant pressure closing switch, safety edge, pressure relief mechanism, or three button control station meeting the specifications of Underwriters' Laboratories Standard UL 325 (1987) "Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems," paragraph 29.1C.

Statutory Authority: *MS s 182.655*

History: *12 SR 1754; 21 SR 1897*
Published Electronically: *June 11, 2008*

5205.0680 [Repealed, 14 SR 2130]
Published Electronically: *June 11, 2008*

5205.0685 KNIVES AND CUTTING TOOLS.

Knives and cutting tools shall be kept in sheaths or holders made for the purpose when those tools are not in use.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0686 PRESSURE HOSES.

All hand held pressure hoses and nozzles that could cause injury when the hose or nozzle is not being held, including air, water, hot water and steam, and all high temperature hoses or nozzles including hot water and steam, shall have a constant pressure control.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0690 LUBRICATION OF MOVING MACHINERY.

Machinery or equipment shall be shut down during manual lubrication unless access to lubrication fittings is safeguarded or is located far enough away from moving parts that employees cannot contact them.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*

Published Electronically: *June 11, 2008*

5205.0700 WIRE ROPE CLIPS.

Subpart 1. **Location of U-bolts.** Wire rope clips attached with U-bolts shall have the U-bolts on the dead or short end of the rope.

Subp. 2. **Clip construction.** Clips shall be made of drop forged steel. All nuts on the clip bolts of a newly installed rope shall be retightened after the first hour of service.

Subp. 3. **Clip spacing.** Spacing and number of clips shall be in accordance with the table below:

Rope Diameter (inches)	Number of Clips Drop Forged	Minimum Spacing (inches)
1/8	2	3/4
3/16	2	1-1/8
1/4	2	1-1/2
5/16	2	1-7/8
3/8	2	2-1/4
7/16	2	2-5/8
1/2	3	3
5/8	3	3-3/4
3/4	4	4-1/2
7/8	4	5-1/4
1	5	6
1-1/8	6	6-1/4
1-1/4	6	7-1/2

1-3/8	7	8-1/4
1-1/2	7	9

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0710 ALTERATION OF TOOLS AND EQUIPMENT.

All tools and equipment, whether powered or manually operated, shall be used only for their intended purpose. Tools and equipment shall not be altered, modified, or used for other than their intended purpose without the manufacturer's written approval or unless under the direction of a competent person in accordance with accepted engineering requirements to prevent creating an additional hazard.

Statutory Authority: *MS s 182.655*

History: *12 SR 1754*
Published Electronically: *June 11, 2008*

5205.0720 THERMOPLASTIC PIPING (PVC PIPE).

PVC piping shall be used only for its intended purpose and shall not be used for the transport of compressed air without the manufacturer's written approval unless completely enclosed in a conduit or casing of sufficient strength to provide protection from external damage and deterioration.

Statutory Authority: *MS s 182.655*

History: *33 SR 772*
Published Electronically: *November 20, 2008*

5205.0730 WINDOW CLEANING; BUILDING MAINTENANCE.

Subpart 1. **Scope.** This standard applies to all window cleaning operation, building maintenance operation, or a combination of both, that is performed on the inside or outside of any building, structure, or skyway, when the work is performed at a level that is suspended more than 14 feet above grade or on an adjoining flat roof or other flat surface. This requirement does not apply to a window washing operation or building maintenance operation that is performed from grade level or from a ladder supported at grade.

Subp. 2. **Definitions.** The terms used in this part have the meanings given them in this subpart.

A. "Building maintenance" means operations such as window cleaning, caulking, metal polishing, reglazing, and general maintenance on building surfaces.

B. "Building owner" means a person who exercises control over any management relating to a building or facility, or both, in which window cleaning operations or maintenance operations covered by this standard take place.

C. "Competent person" means an experienced and trained individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate the hazards.

D. "Lifeline" means a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall-arrest system to the anchorage.

E. "Person" means an individual or legal entity, including a lessee.

F. "Qualified individual" means an individual who, by possession of a recognized degree, certificate, or professional standing, and who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the equipment and systems pertaining to the work or project, and the development of plans for the work or project.

G. "Rope descent system" means an assembly of components that supports one employee in a chair or seat board and allows the user to descend in a controlled manner and to stop at any time at a desired level of descent. A rope descent system is a variation of the single-point adjustable suspension scaffold, which is also known as a controlled descent device, controlled descent equipment, or controlled descent apparatus.

H. "Window cleaning" means operations such as window washing, window restoration, window scraping, window sealing, waxing, or metal polishing, or any combination of the six.

Subp. 3. **Written plan.** Any person performing window cleaning operations or building maintenance operations shall provide a written plan developed by the employer or qualified individual before the work begins. The written plan shall be reviewed with the employees doing the work and the building owner or the building owner's operating agent. The written plan shall include the following:

A. the location of work where workers may utilize suspended equipment, and where workers are exposed to falls and other known hazards;

B. the identification of hazardous areas or drop zones, and safety features to be used, which shall include self-rescue;

C. a step-by-step procedure on the control of each hazardous area or drop zone; and

D. an on-site evaluation of the plan implementation by the employer or a qualified individual.

Subp. 4. **Building exterior; visual inspection.** Prior to using any equipment, the building exterior shall be visually inspected by a competent person and appropriate measures shall be taken to ensure that building features such as sharp edges of parapets, window frames, ledges, cornices, or overhangs cannot impair the structural integrity of the rope descent system, or other suspension equipment, and any associated fall-protection rigging. Padding shall be secured in a manner that prevents the padding from dislodging from the surface to be protected. A written signed log of the

inspection shall be maintained on site for the duration of the operation and retained by the employer for one year.

Subp. 5. **Anchorages.** A qualified individual shall determine that there are identified and certified anchorages for:

A. independent safety lines; tiebacks for outriggers, parapet clamps, and cornice hooks; and powered and manual boatswain's chairs;

B. descent systems; and

C. lifelines.

The building owner or its representative shall provide written documentation of the identified and certified anchorages to window cleaning contractors and building maintenance contractors. Building owners shall not allow suspended work to be performed at their facility, and window cleaning contractors and building maintenance contractors shall not perform suspended work at a facility, until a qualified individual has determined that there are identified and certified anchorages for items A to C.

Subp. 6. **Rope descent systems.**

A. The use of a rope descent system is prohibited for heights greater than 300 feet unless the qualified individual can demonstrate that access cannot otherwise be attained safely and practicably.

B. When a rope descent system is used, each employer and competent person shall:

(1) ensure the use of equipment according to the instructions, warnings, and design limitations of the manufacturer and distributor;

(2) inspect all equipment in every rope descent system prior to its use for each day used, and remove damaged equipment from service;

(3) inspect equipment after each descent and when moved to a new area or location to ensure the rope descent system is properly assembled before descending again. Damaged equipment shall be removed from service;

(4) ensure the use of proper rigging, including structural anchorages and tiebacks, with a particular emphasis on providing tiebacks when counterweights, cornice hooks, and parapet clamps, or similar nonpermanent anchorages, are used;

(5) ensure the use of a separate, independent personal fall-arrest system with a separate anchorage point;

(6) ensure that all lifelines are capable of sustaining a minimum tensile load of 5,000 pounds;

(7) provide for prompt rescue of employees in the event of a fall, which shall include self-rescue;

(8) ensure ropes are effectively padded where they contact edges of the building, anchorage, obstructions, and other surfaces which might cut or weaken the rope as required by subpart 4;

(9) provide for stabilization at the specific work location when descents are greater than 130 feet;

(10) prohibit window cleaning or building maintenance when the work area is exposed to excessive wind. Excessive wind is considered to be any wind which constitutes a hazard to a worker, the public, or property;

(11) require each employee to secure equipment, such as tools, squeegees, or buckets by a tool lanyard or similar method to prevent equipment from falling;

(12) protect suspension ropes and lifelines from exposure to open flames, hot work, corrosive chemicals, or other destructive conditions; and

(13) prepare a written daily log of each of subitems (1) to (12), which shall be signed by the competent person and maintained on site for the duration of the operation, and retained for one year thereafter.

Subp. 7. **Fall protection.**

A. Fall protection, perimeter guarding, personal fall-arrest systems, or personal fall-restraint systems shall be provided by the employer for every employee in all work areas that expose the employee to a fall hazard.

B. Each employee using a rope descent system shall be protected from falling four feet or more to lower levels by a personal fall-arrest system.

C. Employees shall wear and completely assemble their personal fall-arrest equipment, and be securely tied back prior to approaching the point of suspension.

Subp. 8. **Training requirements.**

A. The employer shall provide training for each employee who uses personal fall-protection equipment. The training shall enable each employee to recognize fall hazards and the procedures to be followed to minimize those hazards.

B. The employer shall ensure that each employee is trained by a qualified individual or competent person. The employee shall be trained in the following areas:

(1) the nature of fall hazards in the work area;

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

(3) the use, operation, and limitations of personal fall-protection systems, including proper hookup, anchoring, and tie-off techniques; methods of use; and proper methods of equipment inspection and storage as recommended by the manufacturer; and

(4) the use and operation of self-rescue equipment or systems.

C. The employer shall ensure that each employee is trained in the proper care, use, and inspection of equipment covered by this part before the employee is permitted to use the equipment.

D. The employer shall ensure that each employee who uses a rope descent system is trained and retrained as necessary in the proper rigging and safe use of the equipment.

E. The employer shall retrain an employee when any of the following occur:

(1) changes in the workplace render previous training invalid;

(2) changes in the types of fall-protection systems or equipment to be used render previous training invalid; or

(3) inadequacies in an affected employee's knowledge or use of fall-protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

F. The employer shall provide information and training to each employee in a manner that is understandable to that employee.

G. The employer shall maintain training records, which shall include:

(1) the dates training was conducted;

(2) the name, title, and qualifications of the person who conducted the training;

(3) the names and job titles of the employees who completed the training; and

(4) a brief summary or outline of the information that was included in the training.

Statutory Authority: *MS s 182.655*

History: *36 SR 874*
Published Electronically: *March 1, 2012*

VEHICLES

5205.0750 MOTORIZED SELF-PROPELLED VEHICLES.

Subpart 1. **Scope.** This section applies to:

A. all motorized, self-propelled vehicles used off the highway including industrial type trucks, crawler equipment, and rubber-tired vehicles;

B. emergency vehicles including trucks, snow plows, road maintenance vehicles, and related equipment; and

C. service trucks including garbage compactors.

These parts shall not apply to vehicles with less than a 20 HP motor.

Subp. 2. **General requirements.** Motorized, self-propelled vehicles shall meet the requirements of Code of Federal Regulations, title 29, sections 1926.600, 1926.601, and 1926.602.

Subp. 3. **Transportation of employees.** Vehicles being used to transport employees shall be equipped with a seating arrangement securely anchored, a rear end gate, a guardrail and steps or a ladder for mounting and dismounting.

A. Under no circumstances shall any employee be allowed to ride in a standing position or with arms or legs outside of the truck body, or seated on the side fenders, cabs, cabshields, rear of truck, or on the load unless such a position is dictated by a job assignment.

B. No explosives, flammable materials (excepting normal fuel supply), or toxic substances shall be transported in the passenger carrying area of vehicles carrying employees.

C. No vehicle transporting employees shall be moved until the driver has ascertained that all employees are seated and required guardrails and end gates are in place and doors closed.

D. No employee shall be allowed to get on or off any vehicle while it is in motion.

Subp. 4. **Vehicle inspection.** The Code of Federal Regulations, title 29, section 1926.601 (b) (14) shall apply to all vehicles covered in Code of Federal Regulations, title 29, section 1926.602.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*

Published Electronically: *June 11, 2008*

5205.0755 POLICE AND PATROL VEHICLES.

All police and patrol vehicles that are marked in accordance with Minnesota Statutes, section 169.98, that may be used to transport violators or offenders shall be provided with an effective barrier between the front and back seat to protect the officers from assault. The barrier may be retractable so as not to be a hindrance to officers when not transporting violators or offenders. This part is effective January 1, 1989.

Statutory Authority: *MS s 182.655*

History: *12 SR 1754*

Published Electronically: *June 11, 2008*

5205.0760 POWERED INDUSTRIAL TRUCK OPERATIONS.

Subpart 1. **Restricted use.** All industrial trucks designed and constructed for use on solid hard level surfaces shall be restricted to such operations.

Subp. 2. **Surface condition.** All solid hard level surfaces must be free of cracks, irregularities, or holes that could upset the balance of the industrial truck.

Subp. 3. **Load positioning.** When a fork truck operator is positioning a load in an area which is not fully visible to the fork truck operator, the operator shall be assisted by a designated person who shall direct the safe placing of the load by using predetermined signals.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0765 SCISSOR POINT PROTECTION.

Scissor points on all rubber tired skid steer equipment including front end loaders shall be guarded to protect the operator.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0770 GREASE RACKS, HOISTS, AND PITS.

Subpart 1. **Vehicle support.** Vehicles shall not be supported on jacks or held suspended by ropes, chains, or cables but shall be supported by adequate blocking or cribbing or set on supports designed for that purpose.

Subp. 2. **Barricades.** Employees shall not be allowed to stand directly in front of self-propelled vehicles while directing the vehicle onto the hoist or pit, or to work in front of a moving vehicle unless a crib or barricade, adequate to stop the vehicle, is between the employee and the moving vehicle. The crib or barricade shall not in itself create any additional hazards to the employees.

Subp. 3. **Spacing.** A space of two feet or more shall be provided as working clearance between the sides of a vehicle on a floor hoist and any wall surface.

Subp. 4. **Safety factor.** On automotive hoists, an automatic mechanical device having a safety factor of three based on the manufacturer's rated load capacity shall be provided to hold the lift in the fully extended position at the manufacturer's rated load capacity.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

MACHINE GUARDING

5205.0850 PNEUMATIC POWER TOOLS.

All pneumatically driven nailers, staplers, and other fastening equipment provided with automatic fastener feed shall have a safety device on the muzzle which is designed to prevent the tool from ejecting fasteners unless the muzzle is in contact with the work surface.

Statutory Authority: *MS s 182.655*
Published Electronically: *June 11, 2008*

5205.0860 MACHINES WITH REVOLVING PARTS.

Subpart 1. **Scope.** The provisions of this part shall apply to extractors, mixers, mullers, and centrifuges.

Nothing in this part shall apply to equipment used in research laboratories or equipment with less than one-quarter HP driving motors.

Nothing in this part shall apply to any machine which must be hand-fed where the feed opening is protected either by a guarded hopper or automatic feed system which prevents the operator from reaching into the point of operation.

Subp. 2. **Guarding.** Each machine shall be fully guarded with a cover, hatch, or grate with an interlocking device that will prevent the cover, hatch, or grate from being opened while the rotating parts are in motion, and will also prevent the power operation of the machine while the cover, hatch, or grating is not fully closed and secured.

Subp. 3. **Secured position.** Each machine shall be effectively secured in position on the floor or foundation so as to eliminate unnecessary vibrations.

Subp. 4. **Labeling for operating speed.** The manufacturer's recommended speeds shall be stamped on the machine, and located where they are readily visible in letters not less than one-quarter inch in height. The maximum permissible speed shall be given in revolutions per minute (RPM).

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0865 MACHINE CONTROLS AND EQUIPMENT.

On machines with points of operation, pinch points, or nip points, each machine shall be equipped so it is possible for the operator to cut off the power to each machine without leaving the position at the point of operation.

Statutory Authority: *MS s 182.655*

History: *12 SR 1754*
Published Electronically: *June 11, 2008*

5205.0870 FOOT ACTUATED MACHINES.

The treadle or pedal of foot actuated machines, tools, or equipment shall be physically protected to prevent unintended operation.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.0880 MOTOR START BUTTON.

The motor start button on machines with exposed points of operation, pinch points, or nip points shall be physically protected against unintended operation.

Statutory Authority: *MS s 182.655*

History: *12 SR 1754*
Published Electronically: *June 11, 2008*

5205.0890 HYDRAULIC PRESSES.

A barrier guard shall be maintained on all hydraulic presses, whether hand or power operated, where there is a possibility of materials being ejected from the press.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
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5205.1030 [Repealed, 23 SR 2132]

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5205.1040 [Repealed, 23 SR 2132]
Published Electronically: *June 11, 2008*

CRANES AND HOISTS

5205.1200 CRANES AND HOISTS.

Subpart 1. **Scope.** This part applies to any crane, derrick, or hoist having a maximum rated capacity of one ton or less; to railway and automobile wrecking cranes; skip hoists; hoistlike units used for horizontal pulling only; mine hoists; conveyors and shovels; drag line excavators; backhoes; and any equipment such as mobile scaffolds, towers, and platforms.

This part also applies to all monorail cranes, underhung cranes, and top running single girder cranes where the ends of the girders are fastened or fixed to the structure.

Subp. 2. **Initial inspection.** Before initial use, all new and altered cranes shall be inspected to ensure compliance with this part.

Subp. 3. **Frequent inspection.** Items A to F shall be inspected for defects at daily to monthly intervals, or as specifically indicated, including observation during operation for any defects that might appear between regular inspections. All deficiencies, such as those listed in items A to F, that constitute a safety hazard shall be corrected before placing the unit in service.

A. All functional operating mechanisms for maladjustment interfering with proper operation - daily.

B. Lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems for deterioration or leakage - daily.

C. Hooks with deformation or cracks - visual inspection daily, monthly inspection with signed reports. For hooks with cracks or having more than 15 percent in excess of normal throat opening or more than ten degrees twist from the plane of the unbent hook, refer to subpart 6, item B, subitem (1).

D. Hoist chains, including end connections, for excessive wear, twist, distorted links, or stretch beyond manufacturer's recommendations - visual inspection daily, monthly inspection with signed certification record.

E. All functional operating mechanisms for excessive wear of components.

F. Rope reeving for noncompliance with manufacturer's recommendations.

Subp. 4. **Periodic inspection.** Complete inspections of the crane shall be performed monthly or as indicated in subpart 5. These inspections shall include the requirements of subpart 3 and items A to I. All deficiencies, such as those listed in items A to I, that constitute a safety hazard shall be corrected before placing the unit in service:

A. deformed, cracked, or corroded members;

B. loose bolts or rivets;

C. cracked or worn sheaves and drums;

D. worn, cracked, or distorted parts such as pins, bearings, shafts, gears, rollers, and locking and clamping devices;

E. excessive wear on brake system parts, linings, pawls, and ratchets;

F. load, wind, and other indicators over their full range, for any significant inaccuracies;

G. gasoline, diesel, electric, or other power plants for improper performance or noncompliance with applicable safety requirements;

H. excessive wear of chain drive sprockets and excessive chain stretch; and

I. electrical apparatus, for signs of pitting or any deterioration of controller contactors, limit switches, and push-button stations.

Subp. 4a. **Rope inspection.**

A. A thorough inspection of all ropes shall be made at least once a month and a certification record which includes the date of inspection, the signature of the person who performed the inspection, and an identifier for the ropes which were inspected shall be kept on file where readily available to appointed personnel. Any deterioration, resulting in appreciable loss of original strength, shall be carefully observed and a determination made as to whether further use of the rope would constitute a safety hazard. Some of the conditions that could result in an appreciable loss of strength are the following:

(1) reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires;

(2) a number of broken outside wires and the degree of distribution or concentration of such broken wires;

(3) worn outside wires;

(4) corroded or broken wires at end connections;

(5) corroded, cracked, bent, worn, or improperly applied end connections; or

(6) severe kinking, crushing, cutting, or unstranding.

B. All rope which has been idle for a period of a month or more due to shutdown or storage of a crane on which it is installed shall be given a thorough inspection before it is used. This inspection shall be for all types of deterioration and shall be performed by an appointed person whose approval shall be required for further use of the rope. A certification record shall be available for inspection which includes the date of inspection, the signature of the person who performed the inspection, and an identifier for the rope which is inspected.

Subp. 5. **Cranes not in regular use.** A crane that has been idle for one month or more, but less than six months, shall be given an inspection conforming with the requirements of subpart 3 before being placed in service.

A crane that has been idle for over six months shall be given a complete inspection conforming with subparts 3 and 4 before being placed in service.

Standby cranes shall be inspected at least semiannually in accordance with subpart 3.

Subp. 6. **Adjustments and repairs.** Any condition disclosed by the inspections required by this part shall be corrected before operation of the crane is resumed. Adjustments and repairs shall be done only by designated, qualified personnel.

A. Adjustments shall be maintained to ensure correct functioning of all components, such as the following:

(1) all functional operating mechanisms;

(2) limit switches;

(3) control systems;

(4) brakes; and

(5) power plants.

B. Repairs or replacements required by this part shall be provided promptly before resumed operation, including any deficiencies such as:

(1) crane hooks showing defects described in subpart 3, item C, shall be discarded;

(2) load attachment chains and rope slings showing defects described in subpart 3, items D and E, respectively;

(3) all critical parts that are cracked, broken, bent, or excessively worn; and

(4) pendant control stations shall be kept clean and function labels kept legible.

C. After adjustments and repairs have been made, the crane shall not be operated until all guards have been reinstalled, safety devices reactivated, and maintenance equipment removed.

Statutory Authority: *MS s 182.655*

History: *12 SR 634; 23 SR 2132*
Published Electronically: *June 11, 2008*

5205.1210 HOIST HOOK SAFETY DEVICES.

Safety latches (mousings) shall be provided on all hoist hooks used on hoists or cranes that lift or travel with loads attached. This includes the hook used to attach the hoist to the rail, trolley, or structure.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

5205.1220 WARNING SIGNAL.

Whenever a crane or hoist is used to convey molten metal, a gong or other effective warning signal shall be provided and used.

Statutory Authority: *MS s 182.655*

History: *12 SR 634*
Published Electronically: *June 11, 2008*

PERSONNEL PLATFORMS SUSPENDED FROM CRANES AND DERRICKS

5205.1230 PERSONNEL PLATFORMS SUSPENDED FROM CRANES AND DERRICKS.

The design, construction, testing, use, and maintenance of personnel platforms and the hoisting of personnel platforms on the load lines of cranes or derricks shall meet the requirements of Code of Federal Regulations, title 29, section 1926.550, paragraph (g).

Statutory Authority: *MS s 182.655*

History: *12 SR 634; 17 SR 1273*
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5205.1290 [Repealed, 17 SR 1273]
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5205.1300 [Repealed, 17 SR 1273]
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5205.1310 ELEVATING WORK PLATFORM EQUIPMENT.

Subpart 1. **Scope.** This part applies to boom-supported elevating work platforms and personnel elevating platforms supported by rough-terrain forklift trucks, which are used to position personnel to various work locations. This part does not apply to nonarticulating scissor-type elevating work platforms or firefighting equipment.

Subp. 2. **Fall protection.** An employee, while occupying a boom-supported elevating work platform or a personnel elevating platform supported by a rough-terrain forklift truck, shall be protected from falling by the use of personal fall arrest systems that meet the requirements of Code of Federal Regulations, title 29, section 1926.502 (d), or positioning device systems that meet the requirements of Code of Federal Regulations, title 29, section 1926.502 (e).

Statutory Authority: *MS s 182.655*

History: *33 SR 772*

Published Electronically: *November 20, 2008*

HOPPERS

5205.1400 INSPECTION OF HOPPERS.

Subpart 1. **Definitions.** The terms used in this part have the meanings given them in this subpart.

A. "Aggregate" means the natural sands, gravels, and crushed stones used for mixing with cementing material in making mortars and cements.

B. "Corrosive agent or substance" means any agent or substance with a pH factor of ten or greater or four or less.

C. "Hopper" means a metal structure designed for storing and dispensing materials, with a capacity of one ton or greater, that is shaped to allow stored materials to flow from it.

D. "Nondestructive testing" means a testing method that does not damage or destroy the test sample. Nondestructive testing includes, but is not limited to, the use of X-rays, ultrasonics, radiography, and magnetic flux.

E. "Visual inspection" means a thorough physical examination of all interior and exterior surface areas, and support members and their component parts.

Subp. 2. **Inspection.** Hoppers used to hold aggregate shall be inspected according to the schedule in subpart 3 if employees have access to the area beneath the hopper or the area surrounding the hopper, equal to the height of the hopper measured from the ground or floor to the hopper's highest point. The inspection shall be conducted by a person qualified to conduct the inspection under subpart 7.

Subp. 3. **Inspection schedule.**

A. Hoppers that must be inspected under subpart 2 shall be visually inspected every 12 months.

B. Hoppers that must be inspected under subpart 2, that have had corrosive agents or substances used within the system, shall be nondestructively tested every five years.

C. Hoppers that must be inspected under subpart 2, that have not had any corrosive agents or substances used within the system, shall be nondestructively tested every ten years.

D. Hoppers that have been modified, altered, or repaired shall be inspected under subpart 2 before returning the hopper to service when the modifications, alterations, or repairs affect the designed load capacity of the hopper. This includes, but is not limited to, relining of the hopper.

Subp. 4. **Documentation.** Inspections required by this part shall be documented and the required documentation shall be retained for the life of the hopper at the facility where the hopper is located. The documentation shall be made available upon request to representatives of the Occupational Safety and Health Division. The documentation of the inspections shall include:

A. the dates on which inspections were conducted;

B. the names, addresses, and employers of persons conducting the inspections;

C. the means used to inspect the hoppers;

D. the findings of the inspections;

E. the deficiencies noted as a result of the inspections; and

F. the dates on which recommended repairs were completed.

Subp. 5. **Repairs.** If deficiencies found during an inspection do not compromise the designed load capacity of the hopper, all repairs shall be made within the minimum amount of time necessary to complete repairs. If deficiencies found during an inspection do compromise the designed load capacity, the hopper shall be emptied and removed from service until all repairs are completed.

Subp. 6. **Means of inspection.** All inspections conducted under this part shall include visual inspections and nondestructive testing that is capable of determining that erosion, corrosion, stress, fatigue, damage, repairs, or alterations have not compromised the designed load capacity.

Subp. 7. **Qualified person.** A person is qualified to conduct inspections under this part if, through education, training, or experience, the person is capable of determining through visual inspections and nondestructive testing that erosion, corrosion, stress, fatigue, damage, repairs, or alterations have not compromised the designed load capacity.

Statutory Authority: *MS s 182.655*

History: *16 SR 542*

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