Division 2/A, General

437-002-0005 Adoption by Reference. In addition to, and not in lieu of, any other safety and health codes contained in OAR Chapter 437, the Department adopts by reference the following federal [rules as] regulations printed [in] as part of the Code of Federal Regulations, 29 CFR 1910, [revised as of 7/1/98, and any subsequent amendments published] in the Federal Register [as listed below]:


1910.6 Incorporation by Reference.

(a) The standards of agencies of the U.S. Government, and organizations which are not agencies of the U.S. Government which are incorporated by reference in this part, have the same force and effect as other standards in this part. Only the mandatory provisions (i.e., provisions containing the word “shall” or other mandatory language) of standards incorporated by reference are adopted as standards under the Occupational Safety and Health Act.

(2) Any changes in the standards incorporated by reference in this part and an official historic file of such changes are available for inspection at the national office of the Occupational Safety and Health Administration, U.S. Department of Labor, Washington, DC 20210.

(3) The materials listed in paragraphs (b) through (w) of this section are incorporated by reference in the corresponding sections noted as they exist on the date of the approval, and a notice of any change in these materials will be published in the Federal Register. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(4) Copies of the following standards that are issued by the respective private standards organizations may be obtained from the issuing organizations. The materials are available for purchase at the corresponding addresses of the private standards organizations noted below. In addition, all are available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington DC, and through the OSHA Docket Office, room N2625, U.S. Department of Labor, 200 Constitution Ave, Washington, DC 20210, or any of its regional offices.

(b) The following material is available for purchase from the American Conference of Governmental Industrial Hygienists (ACGIH), 1014 Broadway, Cincinnati, OH 45202:

(2) Threshold Limit Values and Biological Exposure Indices for 1986-87, IBR approved for §1910.120, PEL definition.

(c) The following material is available for purchase from the American Society of Agricultural Engineers (ASAE), 2950 Niles Road, Post Office Box 229, St. Joseph, MI 49085:

(1) ASAE Emblem for Identifying Slow Moving Vehicles, ASAE S276.2 (1968), IBR approved for §1910.145(d)(10).
(2) (Reserved)

(d) The following material is available for purchase from the Agriculture Ammonia Institute – Rubber Manufacturers (AAI-RMA) Association, 1400 K St. NW, Washington DC 20005:

(1) AAI-RMA Specifications for Anhydrous Ammonia Hose, IBR approved for §1910.111(b)(8)(i).
(2) (Reserved)

(e) The following material is available for purchase from the American National Standards Institute (ANSI), 25 West 43rd St., Fourth Floor, New York, NY 10036:

(1) (Reserved)
(2) (Reserved)
(3) ANSI A11.1-65 (R 70) Practice for Industrial Lightning, IBR approved for §§1910.219(c)(5)(iii); 1910.261(a)(3)(i), (c)(10), and (k)(21); and 1910.265(c)(2).
(5) (Reserved)
(9) ANSI A14.3-56 Safety Code for Fixed Ladders, IBR approved for §§1910.68(b)(4) and (12); 1910.179(c)(2); and 1910.261(a)(3)(vi) and (c)(3)(i).
(10) ANSI A17.1-65 Safety Code for Elevators, Dumbwaiters and Moving Walks, Including Supplements, A17.1a (1967); A17.1b (1968); A17.1c (1969); A17.1d (1970); IBR approved for §1910.261(a)(3)(vii), (g)(11)(i), and (l)(4).
(12) ANSI A90.1-69 Safety Standard for Manlifts, IBR approved for §1910.68(b)(3).
(13) ANSI A92.2-69 Standard for Vehicle Mounted Elevating and Rotating Work Platforms, IBR approved for §§1910.67(b)(1), (2), (c)(3), and (4) and 1910.268(s)(1)(v).
(18) ANSI B30.2-43 (R 52) Safety Code for Cranes, Derricks, and Hoists, IBR approved for §1910.261(a)(3)(xi), (c)(2)(vi), and (c)(8)(i) and (iv).
(19) ANSI B30.2.0-67 Safety Code for Overhead and Gantry Cranes, IBR approved for §§1910.179(b)(2); 1910.261(a)(3)(xii), (c)(2)(v), and (c)(8)(i) and (iv).
(22) ANSI B31.1-55 Code for Pressure Piping, IBR approved for §1910.261(g)(18)(iii).
(29) ANSI B56.1-69 Safety Standard for Powered Industrial Trucks, IBR approved for §§1910.178(a)(2) and (3) and 1910.261(a)(3)(xv), (b)(6), (m)(2), and (m)(5)(iii).
(30) ANSI B57.1-65 Compressed Gas Cylinder Valve Outlet and Inlet Connections, IBR approved for §1910.253(b)(1)(iii).
(31) (Reserved)
(33) (Reserved)
(34) ANSI C33.2-56 Safety Standard for Transformer-Type Arc Welding Machines, IBR approved for §1910.254(b)(1).
(35) (Reserved)
(36) ANSI H23.1-70 Seamless Copper Water Tube Specification, IBR approved for §1910.110(b)(8)(iii) and (13)(ii)(b)(1).
(37) ANSI H38.7-69 Specification for Aluminum Alloy Seamless Pipe and Seamless Extruded Tube, IBR approved for §1910.110(b)(8)(j).
(38) ANSI J6.4-71 Standard Specification for Rubber Insulating Blankets, IBR approved for §1910.268(f)(1) and (n)(11)(v).
(41) ANSI K61.1-60 Safety Requirements for the Storage and Handling of Anhydrous Ammonia, IBR approved for §1910.111(b)(11)(i).
(43) ANSI O1.1-54 (R 61) Safety Code for Woodworking Machinery, IBR approved for §1910.261(a)(3)(xvii), (e)(7), and (i)(2).
(44) ANSI S1.4-71 (R 76) Specification for Sound Level Meters, IBR approved for §1910.95 Appendixes D and I.
(45) ANSI S1.11-71 (R 76) Specification for Octave, Half-Octave and Third-Octave Band Filter Sets, IBR approved for §1910.95 Appendix D.
(46) ANSI S3.6-69 Specifications for Audiometers, IBR approved for §1910.95(h)(2) and (5)(ii) and Appendix D.
(48) (Reserved)
(51) ANSI Z9.2-60 Fundamentals Governing the Design and Operation of Local Exhaust Systems, IBR approved for §§1910.94(a)(4)(i) introductory text, (a)(6) introductory text, (b)(3)(ix), (b)(4)(i) and (ii), (c)(3)(i) introductory text, (c)(5)(iii)(b), and (c)(7)(iv)(a); 1910.261(a)(3)(xx), (g)(1)(i) and (iii), and (h)(2)(ii).
(55) ANSI Z21.30-64 Requirements for Gas Appliances and Gas Piping Installations, IBR approved for §1910.265(c)(15).
(57) ANSI Z33.1-61 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying, IBR approved for §§1910.94(a)(4)(i); 1910.261(a)(3)(xxii) and (f)(5); and 1910.265(c)(20)(i).
(58) ANSI Z33.1-66 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying, IBR approved for §1910.94(a)(2)(ii).
(59) ANSI Z35.1-68 Specifications for Accident Prevention Signs, IBR approved for §1910.261(a)(3)(xxiv) and (c)(16).
(60) ANSI Z41.1-67 Men’s Safety Toe Footwear, IBR approved for §§1910.94(a)(5)(v); 1910.136(b)(2) and 1910.261(i)(4).
(61) ANSI Z41-91 Personal Protection – Protective Footwear, IBR approved for §1910.136(b)(1).
(62) (Reserved)
(63) (Reserved)
(64) ANSI Z49.1-67 Safety in Welding and Cutting, IBR approved for §1910.252(c)(1)(iv)(A) and (B).
(67) ANSI Z87.1-68 Practice of Occupational and Educational Eye and Face Protection, IBR approved for §§1910.133(b)(2); 1910.252(b)(2)(i)(l) and 1910.261(a)(3)(xxv), (d)(1)(ii), (f)(5), (g)(10), (g)(15)(v), (g)(18)(ii), and (i)(4).
(68) ANSI Z87.1-89, Practice for Occupational and Educational Eye and Face Protection, IBR approved for §1910.133(b)(1).
(69) ANSI Z88.2-69 Practices for Respiratory Protection, IBR approved for §§1910.94(c)(6)(iii)(a); 1910.134(c); and 1910.261(a)(3)(xxvi), (b)(2), (f)(5), (g)(15)(v), (h)(2)(iii) and (iv), and (i)(4).
(70) ANSI Z89.1-69 Safety Requirements for Industrial Head Protection, IBR approved for §§1910.35(b)(2); and 1910.261(a)(3)(xxvii), (b)(2), (g)(15)(v), and (i)(4).
(71) ANSI Z89.1-86, Protective Headwear for Industrial Workers Requirements, IBR approved for §1910.135(b)(1).
(72) ANSI Z89.2-71  Safety Requirements for Industrial Protective Helmets for Electrical Workers, Class B, IBR approved for §1910.268(i)(1).

(f) The following material is available for purchase from the American Petroleum Institute (API), 1220 L Street NW, Washington, DC 20005:

(1) (Reserved)

(g) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), United Engineering Center, 345 East 47th Street, New York, NY 10017:

(1) ASME Boiler and Pressure Vessel Code, Sec. VIII, 1949, 1950, 1952, 1956, 1959, and 1962 Ed., IBR approved for §§1910.110(b)(10)(ii) (Table H-26), (d)(2) (Table H-31); (e)(3)(1) (Table H-32), (h)(2) (Table H-34); and 1910.111(b)(2)(vii);
(2) ASME Code for Pressure Vessels, 1968 Ed., IBR approved for §§1910.106(i)(3)(i); 1910.110(g)(2)(iii)(b)(2); and 1910.217(b)(12);
(3) ASME Boiler and Pressure Vessel Code, Sec. VIII, 1968, IBR approved for §§1910.103; 1910.104(b)(4)(ii); 1910.106(b)(1)(iv)(b)(2) and (i)(3)(ii); 1910.107; 1910.110(b)(1)(i)(b) and (iii)(a)(1); 1910.111(b)(2)(ii), (ii), and (iv); and 1910.169(a)(2)(i) and (ii);
(4) ASME Boiler and Pressure Vessel Code, Sec. VIII, Paragraph UG-84, 1968, IBR approved for §1910.104(b)(4)(ii) and (b)(5)(iii);
(5) ASME Boiler and Pressure Vessel Code, Sec. VIII, Unfired Pressure Vessels, Including Addenda (1969), IBR approved for §§1910.261; 1910.262; 1910.263(i)(24)(ii);
(6) Code for Unfired Pressure Vessels for Petroleum Liquids and Gases of the API and the ASME, 1951 Ed., IBR approved for §1910.110(b)(3)(ii); and

(h) The following material is available for purchase from the American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103:

(2) ASTM A 53-69 Welded and Seamless Steel Pipe, IBR approved for §§1910.110(b)(8)(i)(a) and (b) and 1910.110(b)(7)(iv).
(6) ASTM B 88-69 Seamless Copper Water Tube, IBR approved for §1910.110(b)(8)(i)(a) and (13)(ii)(b)(1).
(8) ASTM B 117-64 Salt Spray (Fog) Test, IBR approved for §1910.268(g)(2)(i)(A).
(9) ASTM B 210-68 Aluminum-Alloy Drawn Seamless Tubes, IBR approved for §1910.110(b)(8)(ii).
(10) ASTM B 241-69, IBR approved for §1910.110(b)(8)(i) introductory text.
(11) ASTM D 5-65 Test for Penetration by Bituminous Materials, IBR approved for §1910.106(a)(17).
(12) ASTM D 56-70 Test for Flash Point by Tag Closed Tester, IBR approved for §1910.106(a)(14)(i).
(13) ASTM D 86-62 Test for Distillation of Petroleum Products, IBR approved for §§1910.106(a)(5) and 1910.119(b) “Boiling point.”
(14) ASTM D 88-56 Test for Saybolt Viscosity, IBR approved for §1910.106(a)(37).
(15) ASTM D 93-71 Test for Flash Point by Pensky Martens, IBR approved for §1910.106(a)(14)(ii).
(18) ASTM D 1692-68 Test for Flammability of Plastic Sheeting and Cellular Plastics, IBR approved for §1910.103(c)(1)(v)(d).

(i) The following material is available for purchase from the American Welding Society (AWS), 550 NW LeJeune Road, PO Box 351040, Miami, FL 33135:

1. (Reserved)
2. (Reserved)
3. AWS B3.0-41 Standard Qualification Procedure, IBR approved for §1910.67(c)(5)(i).
5. AWS D2.0-69 Specifications for Welding Highway and Railway Bridges, IBR approved for §1910.67(c)(5)(iv).

(j) The following material is available for purchase from the Department of Commerce:


(k) The following material is available for purchase from the Compressed Gas Association (CGA), 1235 Jefferson Davis Highway, Arlington, VA 22202:

3. CGA G-1 (1966) Acetylene, IBR approved for §1910.102(a).] NOTE: For acetylene in Oregon, OAR 437-002-2102(1) applies, which adopted the CGA Pamphlet G-1-
2009. Copies of CGA Pamphlet G-1-2009 are available for purchase from the: Compressed Gas Association, Inc., 4221 Walney Road, 5th Floor, Chantilly, VA 20151; telephone: 708-788-2700; fax: 703-961-1831; e-mail: cga@cganet.com. A copy of CGA Pamphlet G-1-2009 is available for viewing at Oregon OSHA’s Resource Center, 350 Winter Street NE, Salem, OR 97301.

[(4) CGA G-1.3 (1959) Acetylene Transmission for Chemical Synthesis, IBR approved for §1910.102(b).]

[(5) CGA G-1.4 (1966) Standard for Acetylene Cylinder Charging Plants, IBR approved for §1910.102(b).]


(l) The following material is available for purchase from the Crane Manufacturer’s Association of American, Inc. (CMAA), 1 Thomas Circle NW, Washington, DC 20005:

(1) CMAA Specification 1B61, Specifications for Electric Overhead Traveling Cranes, IBR approved for §1910.179(b)(6)(i).

(2) (Reserved)

(m) The following material is available for purchase from the General Services Administration:


(2) (Reserved)

(n) The following material is available for purchase from the Department of Health and Human Services:

(1) Publication No. 76-120 (1975), List of Personal Hearing Protectors and Attenuation Data, IBR approved for §1910.95 App. B.

(2) (Reserved)

(o) The following material is available for purchase from the Institute of Makers of Explosives (IME), 420 Lexington Avenue, New York, NY 10017:

(1) IME Pamphlet No. 17, 1960, Safety in the Handling and Use of Explosives, IBR approved for §1910.261(a)(4)(ii) and (c)(14)(ii).

(2) (Reserved)
(p) The following material is available for purchase from the National Electrical Manufacturer’s Association (NEMA):

2. (Reserved)

(q) The following material is available for purchase from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269:

16. (Reserved)
(34) NFPA 51A (2001) Standard for Acetylene Cylinder Charging Plants, IBR approved for §1910.102(b) and (c). Copies of NFPA 51A-2001 are available for purchase from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471; telephone: 1-800-344-3557; e-mail: custserv@nfpa.org
NOTE: In Oregon, OAR 437-002-2102 applies.
(35) NFPA 51A (2006) Standard for Acetylene Cylinder Charging Plants, IBR approved for §1910.102(b) and (c). Copies of NFPA 51A-2006 are available for purchase from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471; telephone: 1-800-344-3557; e-mail: custserv@nfpa.org
NOTE: In Oregon, OAR 437-002-2102 applies.

(r) The following material is available for purchase from the National Food Plant Institute, 1700 K St NW, Washington, DC 20006:
(1) Definition and Test Procedures for Ammonium Nitrate Fertilizer (Nov. 1964), IBR approved for §1910.109 Table H-22, fn. 3.
(2) (Reserved)

(s) The following material is available for purchase from the National Institute for Occupational Safety and Health (NIOSH):
(1) Registry of Toxic Effects of Chemical Substances, 1978, IBR approved for §1910.20(c)(13)(i) and Appendix B.
(3) NIOSH Recommendations for Occupational Safety and Health Standards (Sept. 1987), IBR approved for §1910.120 PEL definition.

(t) The following material is available for purchase from the Public Health Service:
(1) U.S. Pharmacopeia, IBR approved for §1910.134(d)(1).

(u) The following material is available for purchase from the Society of Automotive Engineers (SAE), 485 Lexington Avenue, New York, NY 10017:

1. SAE J185, June 1988, Recommended Practice for Access Systems for Off-Road Machines, IBR approved for §1910.266(f)(5)(i).
5. SAE 765 (1961) SAE Recommended Practice: Crane Loading Stability Test Code, IBR approved for §1910.180(c)(1)(iii) and (e)(2)(iii)(a).

(v) The following material is available for purchase from the Fertilizer Institute, 1015 18th Street NW, Washington, DC 20036:

2. (Reserved)

(w) The following material is available for purchase from Underwriters Laboratories (UL), 207 East Ohio Street, Chicago, IL 60611:

3. UL 142-68 Steel Aboveground Tanks for Flammable and Combustible Liquids, IBR approved for §1910.106(b)(1)(iii)(a)(1).

Stat. Auth.: ORS 654.025(2) and 656.726(4).
OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.
OR-OSHA Admin. Order 4-2005, f. 12/14/05, ef. 12/14/05.
OR-OSHA Admin. Order 4-2007, f. 8/15/07, ef. 8/15/07.
OR-OSHA Admin. Order 7-2008, f. 5/30/08, ef. 5/30/08.
OR-OSHA Admin. Order 1-2010, f. 2/19/10, ef. 2/19/10.

Division 2/H, Hazardous Materials

437-002-0100 Adoption by Reference. In addition to § and not in lieu of § any other safety and health codes contained in OAR Chapter 437, the Department adopts by reference the following federal [rules as] regulations printed as part of [in] the Code of Federal Regulations, 29 CFR
1910, [revised as of 7/1/02, and any subsequent amendments published in the Federal Register [as listed below]:

(12) Reserved for 29 CFR 1910.111 (Reserved)
(13) Reserved for 29 CFR 1910.113 (Reserved)


These standards are on file with the Oregon Occupational Safety and Health Division, Oregon Department of Consumer and Business Services, and the United States Government Printing Office.

Stat. Auth.: ORS 654.025(2) and ORS 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
APD Admin. Order 12-1989, f. 7/14/89, ef. 7/14/90 (Hazardous Wastes – Final).
OR-OSHA Admin. Order 2-1992, f. 2/6/92, ef. 5/1/92 (all except Hazwaste).
OR-OSHA Admin. Order 3-1992, f. 2/6/92, ef. 2/6/92 (Hazwaste).
OR-OSHA Admin. Order 3-1995, f. 2/22/95, ef. 2/22/95 (Haz Wst/Emg Rsp).
OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.
OR-OSHA Admin. Order 3-1998, f. 7/7/98, ef. 7/7/98.
OR-OSHA Admin. Order 4-2002, f. 5/30/02, ef. 5/30/02.
OR-OSHA Admin. Order 3-2003, f. 4/21/03, ef. 4/21/03.
OR-OSHA Admin. Order 4-2004, f. 9/15/04, ef. 9/15/04.
OR-OSHA Admin. Order 4-2005, f. 12/14/05, ef. 12/14/05.
(a) Cylinders. The in-plant transfer, handling, storage, and utilization of acetylene in cylinders shall be in accordance with Compressed Gas Association Pamphlet G-1-1966, which is incorporated by reference as specified in §1910.6.

(b) Piped systems. The piped systems for the in-plant transfer and distribution of acetylene shall be designed, installed, maintained, and operated in accordance with Compressed Gas Association Pamphlet G-1.3-1959, which is incorporated by reference as specified in §1910.6.

(c) Generators and filling cylinders. Plants for the generation of acetylene and the charging (filling) of acetylene cylinders shall be designed, constructed, and tested in accordance with the standards prescribed in Compressed Gas Association Pamphlet G-1.4-1966, which is incorporated by reference as specified in §1910.6.

Stat. Auth.: ORS 654.025(2) and ORS 656.726(3).
Stats. Implemented: ORS 654.001 to 654.295.
____ OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.]
cabinets, automobile trunks, unventilated vehicle compartments, or toolboxes.

Handling – Moving, connecting, or disconnecting a compressed gas container under normal conditions.

PSIG (Gauge Pressure) – Pressure above or below local atmospheric pressure displayed as pounds per square inch.

Secure – Arrange to prevent movement (including lashing and chaining), or a minimum of three points of contact with other cylinders or walls.

Use – Withdrawing and using the gas in a non-recoverable manner for applications other than manufacturing or repackaging of compressed gasses.

(c) Acetylene Cylinders General Requirements.

(A) You must:

(i) Store and use cylinders valve end up.

   NOTE: Gas suppliers and distributors may store secured containers in a horizontal position.

(ii) Secure cylinder(s) to prevent falling or movement.

(iii) Use a cylinder cart or cylinder pallet to move acetylene cylinders.

   NOTE: This rule does not apply to acetylene fill plants, handling, distribution, and maintenance processes where cylinders are tilted and rolled on their bottom edge only the minimal distance necessary to get them on and off carts or pallets.

(iv) Attach the cylinder to a pressure reducing regulator or blow back manifold before opening the cylinder valve.

(v) Remove pressure regulators before moving cylinders unless they are secured in an upright position on a cylinder cart.

(vi) Back out regulator adjusting screws before opening cylinder valves.

(vii) Protect cylinders from contact with welding spatters and cutting or burning slag.

(viii) Install reverse flow check valves and flashback arrester according to manufacturer recommendation.

(B) You must not:
(i) Drop cylinders.

(ii) Drag cylinders.

(iii) Apply a torch to the side of a cylinder.

(iv) Hoist cylinders using lifting magnets, slings, ropes, chains, or any other device where the cylinders form a part of the carrier.

(v) Handle cylinders so that the bottom fusible metal pressure relief device can strike an object.

(vi) Expose any part of your body to the line of discharge of a fusible metal pressure relief device.

(vii) Use acetylene at a pressure exceeding 15 psig.

(viii) Exceed an acetylene withdrawal rate of one-seventh of the cylinder capacity per hour for welding, cutting, and allied processes.

(d) Transporting Acetylene Cylinders (additional requirements).

(A) You must protect cylinders and attached regulators:

(i) From damage when being transported by any vehicle.

(ii) From abnormal mechanical shock that is likely to damage the cylinder, valve, or fusible metal pressure relief device.

(B) You must not transport cylinders in automobiles or unventilated, enclosed vehicle compartments.

(e) Acetylene Cylinder Storage.

(A) You must store cylinders:

(i) In assigned locations.

(ii) In areas posted with signs prohibiting smoking and open flame.

(iii) In well-ventilated locations.

(iv) Away from heat sources.

(v) Where they are protected from corrosion.

(B) You must not store cylinders:

(i) Where they contact electrical welding equipment or electrical circuits.
NOTE: All high and low pressure cylinders in contact with or secured to a conductive table or column without being isolated from electrical current can become part of an electrical circuit.

(ii) Where they can be struck by heavy objects.

(iii) In enclosed spaces.

(iv) In confined spaces.

(v) Within 20 feet of oxygen unless they are separated by a noncombustible partition. Partitions must:

(I) vertically extend at least 18 inches above the tallest container and not less than 5 feet.

(II) laterally extend at least 18 inches beyond the sides of the containers.

(III) have a fire resistance rating of at least one-half hour.

NOTE 1 (paragraph (1)(e)(B)(v)): Single cylinders of acetylene and oxygen can be stored secured on a cart or used adjacent to each other without a partition.

NOTE 2 (paragraph (1)(e)(B)(v)): Single cylinders of acetylene and oxygen secured at a work station without attached pressure reducing regulators are considered to be in use.

(vi) With full and empty cylinders grouped together.

NOTE (paragraph (1)(e)(B)(vi)): This does not apply to the cylinder distribution process.

(f) Connecting and Disconnecting Acetylene Cylinders for Use.

(A) You must:

(i) Return cylinders with contaminated valves (mud, oil, grease, and similar material) to the supplier.

(ii) Secure the cylinder(s) where it can not contact any electrical circuit or electrical welding equipment.

NOTE: All high and low pressure cylinders in contact with or secured to a conductive table or column without being isolated from electrical current can become part of an electrical circuit.
(iii) Inspect hoses before each shift.

(iv) Remove damaged hoses from service.

(v) Check pressurized cylinder valves, fuse plugs and all connections for leaks prior to use.

(vi) Use industry approved leak detection solution or oil free soapy water.

(vii) Notify the gas supplier of any leaking cylinder, and follow the supplier’s instruction for returning the cylinder.

(viii) Back out the regulator adjusting screws before opening cylinder valves.

(ix) Close the system valves and release all gas from the regulators before removing the regulator from a cylinder.

(x) Keep the cylinder key used for opening the cylinder valve on the valve spindle when the cylinder is in use.

(B) You must not attempt to repair or alter cylinders or valves.

(2) Piped Systems.


(b) When employers can demonstrate that the facilities, equipment, structures, or installations used to generate acetylene or to charge (fill) acetylene cylinders were installed prior to February 16, 2006, these employers may comply with the provisions of Chapter 7 (“Acetylene Piping”) of NFPA 51A-2001 (“Standard for Acetylene Charging Plants”) (National Fire Protection Association, 2001 ed., 2001).

(c) The provisions of 437-002-2102(2)(b) also apply when the facilities, equipment, structures, or installation used to generate acetylene or to charge (fill) acetylene cylinders were approved for construction or installation prior to February 16, 2006, but constructed and installed on or after that date.

(d) For additional information on acetylene piping systems, see CGA G-1.2-2006, Part 3 (“Acetylene piping”) (Compressed Gas Association, Inc., 3rd ed., 2006).

(3) Generators and filling cylinders.

(a) Employer must ensure that facilities, equipment, structures, or installations used to generate acetylene or to charge (fill) acetylene cylinders comply with the provisions of NFPA 51A-2006 (“Standard for Acetylene Charging plants”) (National Fire Protection Association, 2006 ed., 2006).
(b) When employers can demonstrate that the facilities, equipment, structures, or installations used to generate acetylene or to charge (fill) of acetylene cylinders were constructed or installed prior to February 16, 2006, these employers may comply with the provisions of NFPA 51A-2001 (“Standard for Acetylene Charging Plants”) (National Fire Protection Association, 2001 ed., 2001).

(c) The provisions of 437-002-2102(3)(b) also apply when the facilities, equipment, structures, or installation were approved for construction or installation prior to February 16, 2006, but constructed and installed on or after that date.

Stat. Auth.: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist.: OR-OSHA Admin. Order 1-2010, f. 2/19/10, ef. 2/19/10