

# COMPRESSED GASES / ACETYLENE

# H

## SUBDIVISION H

### HAZARDOUS MATERIALS

**Authority:** Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Orders Nos. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), or 5-2007 (72 FR 31159), as applicable; and 29 CFR part 1911.

Sections 1910.103, 1910.106 through 1910.111, and 1910.119, 1910.120, and 1910.122 through 1910.126 also issued under 29 CFR part 1911.

Section 1910.119 also issued under Section 304, Clean Air Act Amendments of 1990 (Pub. L. 101-549), reprinted at 29 U.S.C. 655 Note.

Section 1910.120 also issued under Section 126, Superfund Amendments and Reauthorization Act of 1986 as amended (29 U.S.C. 655 Note), and 5 U.S.C. 553.

### §1910.101 Compressed Gases (General Requirements).

**(a) Inspection of compressed gas cylinders.** Each employer shall determine that compressed gas cylinders under his control are in a safe condition to the extent that this can be determined by visual inspection. Visual and other inspections shall be conducted as prescribed in the Hazardous Materials Regulations of the Department of Transportation (49 CFR Parts 171-179 and 14 CFR Part 103). Where those regulations are not applicable, visual and other inspections shall be conducted in accordance with Compressed Gas Association Pamphlets C-6-1968 and C-8-1962, which is incorporated by reference as specified in §1910.6.

**(b) Compressed gases.** The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tankcars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965, which is incorporated by reference as specified in §1910.6.

**(c) Safety relief devices for compressed gas containers.** Compressed gas cylinders, portable tanks, and cargo tanks shall have pressure relief devices installed and maintained in accordance with Compressed Gas Association Pamphlets S-1.1-1963 and 1965 addenda and S-1.2-1963, 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.

**Hist:** OR-OSHA Admin. Order 2-1992, f. 2/6/92, ef. 5/1/92.  
OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.

### §1910.102 Acetylene.

**(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.

**Hist:** OR-OSHA Admin. Order 2-1992, f. 2/6/92, ef. 5/1/92.  
OR-OSHA Admin. Order 4-1997, f. 4/2/97, ef. 4/2/97.

## §1910.103 Hydrogen.

### (a) General.

**(1) Definitions.** As used in this section:

**(i) Gaseous hydrogen system** is one in which the hydrogen is delivered, stored and discharged in the gaseous form to consumer's piping. The system includes stationary or movable containers, pressure regulators, safety relief devices, manifolds, interconnecting piping and controls. The system terminates at the point where hydrogen at service pressure first enters the consumer's distribution piping.

**(ii) Approved** – Means, unless otherwise indicated, listed or approved by a nationally recognized testing laboratory. Refer to §1910.7 for definition of nationally recognized testing laboratory.

**(iii) Listed** – See “approved.”

**(iv) ASME** – American Society of Mechanical Engineers.

**(v) DOT Specifications** – Regulations of the Department of Transportation published in 49 CFR Chapter I.

**(vi) DOT regulations** – See §1910.103(a)(1)(v).

### (2) Scope.

#### (i) Gaseous hydrogen systems.

**(A)** Paragraph (b) of this section applies to the installation of gaseous hydrogen systems on consumer premises where the hydrogen supply to the consumer premises originates outside the consumer premises and is delivered by mobile equipment.

**(B)** Paragraph (b) of this section does not apply to gaseous hydrogen systems having a total hydrogen content of less than 400 cubic feet, nor to hydrogen manufacturing plants or other establishments operated by the hydrogen supplier or his agent for the purpose of storing hydrogen and refilling portable containers, trailers, mobile supply trucks, or tank cars.