§ 197.310 Air compressor system.

(a) A compressor used to supply breathing air to a diver must have—

(i) A volume tank that is—

(ii) The maximum working pressure of the section of the breathing supply system in which used; and

(iii) A relief valve; and

(iv) A drain valve; and

(b) Intakes that are located away from areas containing exhaust fumes of internal combustion engines or other hazardous contaminants;

(c) An efficient filtration system; and

(d) Slow-opening shut-off valves when the maximum allowable working pressure of the system exceeds 500 psig.

§ 197.312 Breathing supply hoses.

(a) Each breathing supply hose must—

(i) Have a maximum working pressure that is equal to or exceeds—

(ii) The pressure equivalent of the maximum depth of the dive relative to the supply source plus 100 psig;

(iii) Have a bursting pressure of four times its maximum working pressure; and

(iv) A capability to remove an injured diver from the water.

(b) Each umbilical must—

(i) Meet the requirements of paragraph (a) of this section; and

(ii) Be marked from the diver or open bell end in 10-foot intervals to 100 feet and in 50-foot intervals thereafter.

§ 197.314 First aid and treatment equipment.

(a) Each dive location must have—

(i) A medical kit approved by a physician that consists of—

(ii) A copy of an American Red Cross Standard First Aid handbook;

(iii) A bag-type manual resuscitator with transparent mask and tubing; and

(iv) A capability to remove an injured diver from the water.

(b) Each diving installation must have a two-way communications system to obtain emergency assistance except when the vessel or facility ship-to-shore, two-way communications system is readily available.

(c) Each dive location supporting mixed-gas dives, dives deeper than 130 fsw, or dives outside the no-decompression limits must meet the requirements of paragraph (a) of this section and have—

(i) A decompression chamber;

(ii) Decompression and treatment tables;

(iii) A supply of breathing gases sufficient to treat for decompression sickness;

(iv) The medical kit required by paragraph (a)(1) of this section that is—

(v) Suitable for use under hyperbaric conditions; and
§ 197.318 Gages and timekeeping devices.

(a) A gage indicating diver depth must be at each dive location for surface-supplied dives.

(b) A timekeeping device must be at each dive location.

§ 197.320 Diving ladder and stage.

(a) Each diving ladder must—

(1) Be capable of supporting the weight of at least two divers;

(2) Extend 3 feet below the water surface;

(3) Be firmly in place;

(4) Be available at the dive location for a diver to enter or exit the water unless a diving stage or bell is provided; and

(5) Be—

(i) Made of corrosion-resistant material; or

(ii) Protected against and maintained free from injurious corrosion.

(b) Each diving stage must—

(1) Be capable of supporting the weight of at least two divers;

(2) Have an open-grating platform;

(3) Be available for a diver to enter or exit the water from the dive location and for in-water decompression if the diver is—

(i) Wearing a heavy-weight diving outfit; or

(ii) Diving outside the no-decompression limits, except when a bell is provided; and

(4) Be—

(i) Made of corrosion-resistant material; or

(ii) Protected against and maintained free from injurious corrosion.

§ 197.322 Surface-supplied helmets and masks.

(a) Each surface-supplied helmet or mask must have—

(1) A nonreturn valve at the attachment point between helmet or mask and umbilical that closes readily and positively;

(2) An exhaust valve; and

(3) A two-way voice communication system between the diver and the dive location or bell.

(b) Each surface-supplied air helmet or mask must—

(1) Ventilate at least 4.5 ACFM at any depth at which it is operated; or

(2) Be able to maintain the diver’s inspired carbon dioxide partial pressure below 0.02 ATA when the diver is producing carbon dioxide at the rate of 1.6 standard liters per minute.

§ 197.324 Diver’s safety harness.

Each safety harness used in surface-supplied diving must have—

(a) A positive buckling device; and

(b) An attachment point for the umbilical life line that—

(1) Distributes the pulling force of the umbilical over the diver’s body; and

(2) Prevents strain on the mask or helmet.

§ 197.326 Oxygen safety.

(a) Equipment used with oxygen or oxygen mixtures greater than 40 percent by volume must be designed for such use.

(b) Oxygen systems with pressures greater than 125 psig must have slow-opening shut-off valves except pressure boundary shut-off valves may be ball valves.

§ 197.328 PVHO—General.

(a) Each PVHO, contracted for or purchased after February 1, 1979, must be built and stamped in accordance with ASME PVHO–1.

(b) Each PVHO, contracted for or constructed before February 1, 1979, and not Coast Guard approved, must be submitted to the Coast Guard for approval prior to February 1, 1984.

(c) To be approved under paragraph (b), a PVHO must be—

(1) Constructed in accordance with part 54 of this chapter; or—

(2) Be built in accordance with section VIII, division 1 or division 2 of the ASME Code; and—

(i) Have the plans approved in accordance with §54.01–18 of this chapter;

(ii) Pass the radiographic and other survey tests of welded joints required by section VIII, division 1 or division 2, as appropriate, of the ASME Code; and

(iii) Pass—

(A) The hydrostatic test described in §54.10–10 of this chapter; or