

*Surface-supplied air diving* means a diving mode in which the diver is supplied from the dive location or bell with compressed breathing air including oxygen or oxygen enriched air if supplied for treatment.

*Surface-supplied mixed-gas diving* means a diving mode in which the diver is supplied from the dive location or bell with a compressed breathing mixture other than air.

*Timekeeping device* means a device for measuring the time of a dive in minutes.

*Treatment table* means a depth, time, and breathing gas profile designed to treat a diver for decompression sickness.

*Umbilical* means the hose bundle between a dive location and a diver or bell, or between a diver and a bell, that supplies the diver or bell with a life-line, breathing gas, communications, power, and heat as appropriate to the diving mode or conditions.

*Vessel* means any waterborne craft including mobile offshore drilling units required to have a Certificate of Inspection issued by the Coast Guard or any waterborne craft connected with a deepwater port or within the deepwater port safety zone, or any waterborne craft engaged in activities related to the Outer Continental Shelf.

*Volume tank* means a pressure vessel connected to the outlet of a compressor and used as an air reservoir.

*Working pressure* means the pressure to which a pressure containment device is exposed at any particular instant during normal operating conditions.

**§ 197.205 Availability of standards.**

(a) Several standards have been incorporated by reference in this subchapter. The incorporation by reference has been approved by the Director of the Federal Register under the provisions of 1 CFR part 51.

(b) The standards are available from the appropriate organizations whose addresses are listed below:

(1) American National Standards Institute, 11 West 42nd Street, New York, NY 10036.

(2) American Society of Mechanical Engineers, United Engineering Center,

345 East 47th Street, New York, NY 10017.

[CGD 76-009, 43 FR 53683, Nov. 16, 1978, as amended by CGD 96-041, 61 FR 50735, Sept. 27, 1996]

**§ 197.206 Substitutes for required equipment, materials, apparatus, arrangements, procedures, or tests.**

(a) The Coast Guard may accept substitutes for equipment, materials, apparatus, arrangements, procedures, or tests required in this subpart if the substitute provides an equivalent level of safety.

(b) In any case where it is shown to the satisfaction of the Commandant that the use of any particular equipment, material, apparatus, arrangement, procedure, or test is unreasonable or impracticable, the Commandant may permit the use of alternate equipment, material, apparatus, arrangement, procedure, or test to such an extent and upon such condition as will insure, to his satisfaction, a degree of safety consistent with the minimum standards set forth in this subpart.

**§ 197.208 Designation of person-in-charge.**

(a) The owner or agent of a vessel or facility without a designated master shall designate, in writing, an individual to be the person-in-charge of the vessel or facility.

(b) Where a master is designated, the master is the person-in-charge.

**§ 197.210 Designation of diving supervisor.**

The name of the diving supervisor for each commercial diving operation shall be—

(a) Designated in writing; and

(b) Given to the person-in-charge prior to the commencement of any commercial diving operation.

EQUIPMENT

**§ 197.300 Applicability.**

(a) Each diving installation used on each vessel or facility subject to this subpart must meet the requirements of this subpart.

**§ 197.310**

(b) In addition to the requirements of this subpart, equipment which is permanently installed on vessels and is part of the diving installation must meet Subchapters F and J of this chapter.

(c) All repairs and modifications to pressure vessels used for commercial diving operations must be made in accordance with the requirements of section VIII, division 1 or division 2 of the ASME Code, ASME PVHO-1, part 54 of this chapter, or 49 CFR 173.34, as applicable.

(d) All repairs and modifications to pressure piping used for commercial diving operations must be made in accordance with the requirements of the ANSI Code or part 56 of this chapter, as applicable.

**§ 197.310 Air compressor system.**

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

- (a) A volume tank that is—
  - (1) Built and stamped in accordance with section VIII, division 1 of the ASME Code with—
    - (i) A check valve on the inlet side;
    - (ii) A pressure gage;
    - (iii) A relief valve; and
    - (iv) A drain valve; and
  - (2) Tested after every repair, modification, or alteration to the pressure boundaries as required by § 197.462;
- (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—
  - (1) Have a maximum working pressure that is equal to or exceeds—
    - (i) The maximum working pressure of the section of the breathing supply system in which used; and
    - (ii) The pressure equivalent of the maximum depth of the dive relative to the supply source plus 100 psig;
  - (2) Have a bursting pressure of four times its maximum working pressure;
  - (3) Have connectors that—

**46 CFR Ch. I (10-1-04 Edition)**

- (i) Are made of corrosion-resistant material;
- (ii) Are resistant to accidental disengagement; and
- (iii) Have a maximum working pressure that is at least equal to the maximum working pressure of the hose to which they are attached; and
- (4) Resist kinking by—
  - (i) Being made of kink-resistant materials; or
  - (ii) Having exterior support.
- (b) Each umbilical must—
  - (1) Meet the requirements of paragraph (a) of this section; and
  - (2) 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—
  - (1) A medical kit approved by a physician that consists of—
    - (i) Basic first aid supplies; and
    - (ii) Any additional supplies necessary to treat minor trauma and illnesses resulting from hyperbaric exposure;
  - (2) A copy of an American Red Cross Standard First Aid handbook;
  - (3) A bag-type manual resuscitator with transparent mask and tubing; and
  - (4) 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—
  - (1) A decompression chamber;
  - (2) Decompression and treatment tables;
  - (3) A supply of breathing gases sufficient to treat for decompression sickness;
  - (4) The medical kit required by paragraph (a)(1) of this section that is—
    - (i) Capable of being carried into the decompression chamber; and
    - (ii) Suitable for use under hyperbaric conditions; and