

Subpart B—Commercial Diving Operations

GENERAL

§ 197.200 Purpose of subpart.

This subpart prescribes rules for the design, construction, and use of equipment, and inspection, operation, and safety and health standards for commercial diving operations taking place from vessels and facilities under Coast Guard jurisdiction.

§ 197.202 Applicability.

(a) This subpart applies to commercial diving operations taking place at any deepwater port or the safety zone thereof as defined in 33 CFR part 150; from any artificial island, installation, or other device on the Outer Continental Shelf and the waters adjacent thereto as defined in 33 CFR part 147 or otherwise related to activities on the Outer Continental Shelf; and from all vessels required to have a certificate of inspection issued by the Coast Guard including mobile offshore drilling units regardless of their geographic location, or from any vessel connected with a deepwater port or within the deepwater port safety zone, or from any vessel engaged in activities related to the Outer Continental Shelf; except that this subpart does not apply to any diving operation—

- (1) Performed solely for marine scientific research and development purposes by educational institutions;
- (2) Performed solely for research and development for the advancement of diving equipment and technology; or
- (3) Performed solely for search and rescue or related public safety purposes by or under the control of a governmental agency.

(b) Diving operations may deviate from the requirements of this subpart to the extent necessary to prevent or minimize a situation which is likely to cause death, injury, or major environmental damage. The circumstances leading to the situation, the deviations made, and the corrective action taken, if appropriate, to reduce the possibility of recurrence shall be recorded by the diving supervisor in the logbook as required by §197.482(c).

§ 197.203 Right of appeal.

Any person directly affected by a decision or action taken under this subchapter, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88-033, 54 FR 50382, Dec. 6, 1989]

§ 197.204 Definitions.

As used in this subpart:

ACFM means actual cubic feet per minute.

ANSI Code1 means the B31.1 American National Standards Institute “Code for Pressure Piping, Power Piping.”

ASME Code means the American Society of Mechanical Engineers “Boiler and Pressure Vessel Code.”

ASME PVHO-1 means the ANSI/ASME standard “Safety Standard for Pressure Vessels for Human Occupancy.”

ATA means a measure of pressure expressed in terms of atmosphere absolute (includes barometric pressure).

Bell means a compartment either at ambient pressure (open bell) or pressurized (closed bell) that allows the diver to be transported to and from the underwater work site, allows the diver access to the surrounding environment, and is capable of being used as a refuge during diving operations.

Bottom time means the total elapsed time measured in minutes from the time the diver leaves the surface in descent to the time to the next whole minute that the diver begins ascent.

Breathing gas/breathing mixture means the mixed-gas, oxygen, or air as appropriate supplied to the diver for breathing.

Bursting pressure means the pressure at which a pressure containment device would fail structurally.

Commercial diver means a diver engaged in underwater work for hire excluding sport and recreational diving and the instruction thereof.

Commercial diving operation means all activities in support of a commercial diver.

Cylinder means a pressure vessel for the storage of gases under pressure.

Decompression chamber means a pressure vessel for human occupancy such

as a surface decompression chamber, closed bell, or deep diving system especially equipped to recompress, decompress, and treat divers.

Decompression sickness means a condition caused by the formation of gas or gas bubbles in the blood or body tissue as a result of pressure reduction.

Decompression table means a profile or set of profiles of ascent rates and breathing mixtures designed to reduce the pressure on a diver safely to atmospheric pressure after the diver has been exposed to a specific depth and bottom time.

Depth means the maximum pressure expressed in feet of seawater attained by a diver and is used to express the depth of a dive.

Dive location means that portion of a vessel or facility from which a diving operation is conducted.

Dive team means the divers and diver support personnel involved in a diving operation, including the diving supervisor.

Diver means a person working beneath the surface, exposed to hyperbaric conditions, and using underwater breathing apparatus.

Diver-carried reserve breathing gas means a supply of air or mixed-gas, as appropriate, carried by the diver in addition to the primary or secondary breathing gas supplied to the diver.

Diving installation means all of the equipment used in support of a commercial diving operation.

Diving mode means a type of diving requiring SCUBA, surface-supplied air, or surface-supplied mixed-gas equipment, with related procedures and techniques.

Diving stage means a suspended platform constructed to carry one or more divers and used for putting divers into the water and bringing them to the surface when in-water decompression or a heavy-weight diving outfit is used.

Diving supervisor means the person having complete responsibility for the safety of a commercial diving operation including the responsibility for the safety and health of all diving personnel in accordance with this subpart.

Facility means a deepwater port, or an artificial island, installation, or other device on the Outer Continental

Shelf subject to Coast Guard jurisdiction.

Fsw means feet of seawater (or equivalent static pressure head).

Gas embolism means a condition caused by expanding gases, which have been taken into and retained in the lungs while breathing under pressure, being forced into the bloodstream or other tissues during ascent or decompression.

Heavy-weight diving outfit means diver-worn surface-supplied deep-sea dress.

Hyperbaric conditions means pressure conditions in excess of surface atmospheric pressure.

Injurious corrosion means an advanced state of corrosion which may impair the structural integrity or safe operation of the equipment.

Liveboating means the support of a surfaced-supplied diver from a vessel underway.

Maximum working pressure means the maximum pressure to which a pressure containment device can be exposed under operating conditions (usually the pressure setting of the pressure relief device).

No-decompression limits means the air depth and bottom time limits of appendix A.

Pressure vessel means a container capable of withstanding an internal maximum working pressure over 15 psig.

Psi(g) means pounds per square inch (gage).

PVHO means pressure vessel for human occupancy but does not include pressure vessels for human occupancy that may be subjected to external pressures in excess of 15 psig but can only be subjected to maximum internal pressures of 15 psig or less (*i.e.*, submersibles, or one atmosphere observation bells).

Saturation diving means saturating a diver's tissues with the inert gas in the breathing mixture to allow an extension of bottom time without additional decompression.

SCUBA diving means a diving mode in which the diver is supplied with a compressed breathing mixture from diver carried equipment.

Standby diver means a diver at the dive location available to assist a diver in the water.

§ 197.205

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,

46 CFR Ch. I (10-1-13 Edition)

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.