

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

§6051. Definitions.

As used in this Article, the listed terms are as follows:

Diving Mode. A type of diving requiring specific equipment, procedures and techniques (SCUBA, surface-supplied air, or mixed gas).

Film and TV Diving. Underwater operations associated with the production of feature films, television, natural history visuals, corporate videos, and photographic stills, which are not an integral part of an on-going construction, demolition, or maintenance job.

~~HOOKAH~~ **Hookah Diving.** A type of shallow water surface-supplied diving where the diver uses the second stage of a SCUBA regulator connected to a non-return valve and hose to a surface air source.

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No-Decompression Limits. The depth-time limits of the “no-decompressions limits and repetitive dive group designations table for no-decompression air dives.” U.S. Navy diving Manual or equivalent limits which the employer can demonstrate to be equally effective.

Positive Buckling Device. A device used to attach a safety harness to the diver, which is designed to prevent strap pull-through and accidental release by the diver. Unbuckling the device shall not be possible by a single action.

~~Technical Diving.~~ All diving other than scientific or commercial diving performed by employees in making or performing observations, measurements, adjustments, underwater photography or special effects and related activities, etc., which require technical expertise and are not an integral part of an ongoing construction, demolition, repair, maintenance, shipbuilding, shipbreaking, or ship repair job.

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Technical Diving. Diving other than scientific or commercial diving, which requires technical expertise and is not an integral part of an on-going construction, demolition, repair, maintenance, shipbuilding, shipbreaking, or ship repair job. Such activities include, but are not limited to, making or performing observations, measurements, and adjustments, film and TV diving, and zoo and aquarium exhibit diving.

Working Pressure. The normal pressure at which the system is designed to operate.

Zoo and Aquarium Exhibit Diving. Diving performed inside zoo and aquarium exhibits and holding tanks for the purpose of science, education, or animal care, which requires technical expertise and is not an integral part of an on-going construction, demolition, or maintenance job.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code. ®



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§6056. Basic Operation Procedures.

(a) SCUBA Diving (Compressed Air and Mixed Gas).

(1) Limits:

(C) SCUBA diving shall not be conducted against currents exceeding one (1) knot unless line-tended.

EXCEPTION to 6056(a)(1)(C): Technical divers performing film and TV diving operations in controlled environments can artificially increase currents above one (1) knot provided the artificial current can be reduced to one (1) knot or less in case of an emergency and the dive team is trained to work in such conditions.

(D) SCUBA diving shall not be conducted in enclosed or physically confining spaces unless line-tended.

EXCEPTION to 6056(a)(1)(D): Technical divers performing film and TV diving operations in controlled environments can work in enclosed or physically confined spaces without being line-tended provided the dive team is trained to respond to an emergency in such conditions.

(2) Procedures.

(A) A standby diver shall be available while a diver is in the water. ~~or~~

(B) A diver shall be line-tended from the surface or accompanied by another SCUBA diver in the water where they shall remain in effective communication with each other and be able to render immediate assistance in case of an emergency throughout the diving operation.

~~(C) A SCUBA diver shall be accompanied in the water by another SCUBA diver and they shall remain in effective communication with each other throughout the diving operation.~~

EXCEPTION to 6056(a)(2): Technical divers shall be deemed to be in compliance with subsection 6056(a)(2) provided the employer complies with either (A) or (B).

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~~(DC)~~ A diver shall be stationed at the underwater point of entry when diving is conducted in enclosed or physically confining spaces; or an orientation line shall be used in enclosed spaces where there is a probability of entrapment or disorientation.

~~(ED)~~ If loss of effective communication occurs, within a buddy team, all divers shall surface and re-establish contact.

~~(FE)~~ Each diver or buddy team shall have an adequate depth gauge and underwater time keeping device.

~~(GF)~~ Each diver shall have a submersible pressure gauge for monitoring SCUBA tank pressure, capable of being monitored by the diver during the dive.

~~(HG)~~ The dive shall be terminated while there is still sufficient tank pressure to permit the diver to safely reach the surface (including decompression time if a decompression chamber is not provided at the dive site).

~~(H)~~ Each diver shall have the capability of achieving and maintaining positive buoyancy.

~~(J)~~ A diver-carried reserve breathing gas supply shall be provided for each diver consisting of:
1. A manual reserve (J valve); or
2. An independent reserve cylinder with a separate regulator or connected to the underwater breathing apparatus.

~~(K)~~ The valve of the reserve breathing gas supply shall be in the closed position prior to the dive.

(5) ~~HOOKAH~~ Hookah.

(A) Hookah diving shall be permissible only during technical diving operations.

~~(AB) HOOKAH~~ Hookah divers shall comply with all SCUBA diving procedures in this section except for the depth limitations contained in Section 6056(a)(1). ~~HOOKAH~~ Hookah diving shall not be conducted at depths greater than ~~190 fsw (58 msw)~~ 30 fsw (9 msw).

(C) A non-return valve shall be connected to the mask, helmet, or second stage of the SCUBA regulator.

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(D) When using hookah, each diver shall wear a safety harness with:

1. A positive buckling device;

2. An attachment for the primary gas hose to distribute the pull force of the line and to prevent strain on the mask, helmet, or second stage regulator; and

3. A lifting point to distribute the pull force of the line over the diver's body.

~~(B)~~ Divers using the ~~HOOKAH~~hookah mode shall be equipped with a regulator and an independent reserve breathing gas supply sufficient to return to the surface ~~and regulator.~~

~~(C)~~ Each ~~HOOKAH~~hookah diver shall be hose-tended by a separate dive team member while in the water.

~~(D)~~ The ~~HOOKAH~~hookah breathing gas supply shall be sufficient to support all ~~HOOKAH~~hookah divers in the water for the duration of the planned dive, including decompression.

(H) Second stage regulators used for hookah shall be designed to function within the delivered breathing gas supply pressure at the diver's working depth.

(b) Surface-Supplied-Air-Diving.

(2) Procedures.

(A) A separate dive team member shall continuously tend each diver in the water;

(B) Continuous two-way voice communications between the diver and the surface shall be maintained for each surface-supplied diver in the water.

(C) A ~~standby~~ diver equipped with surface-supplied gear, or a pair of SCUBA divers, shall hose-tend at the underwater point of entry when diving is conducted in enclosed or physically confining spaces.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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§6057. Equipment Procedures and Requirements.

(a) Recordkeeping. Each equipment modification, repair, test, calibration or maintenance service shall be logged including the date and nature of work performed, serial number of the item and the name of the person performing the work for the following equipment:

(b) SCUBA.

(1) Regulators. Regulators shall be submitted to functional test every six months at which time, at a breathing rate of 15 breaths per minute the regulator must have an exhalation pressure not to exceed 3 inches of water nor a negative inhalation pressure not to exceed minus 3 inches of water.

(2) SCUBA ~~†~~Tanks.

(A) SCUBA tanks shall be designed, constructed and maintained in accordance with the applicable provisions of Section 454, Unfired Pressure Vessel Safety Orders, Title 8, California Administrative Code;

(B) SCUBA tanks ~~must~~shall be hydrostatically tested in accordance with DOT standards.

(C) SCUBA tanks ~~must~~shall have an internal visual inspection at intervals not to exceed 12 months.

(D) SCUBA tank valves shall be functionally tested at intervals not to exceed 12 months.

(3) Submersible Pressure Gauges. Submersible pressure gauges shall be tested against a master gauge at intervals not to exceed six months.

(4) Buoyancy Compensators.

(A) A dry suit or other variable volume ~~buoyancy~~buoyancy compensation device shall be equipped with an exhaust valve.

(B) Buoyancy compensation devices shall be functionally inspected at intervals not to exceed six months.

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(5) Submersible Depth Gauge. Each depth gauge shall be tested or calibrated every six months and when there is reasonable cause to believe a discrepancy exists.

(6) Weight Belts and Harnesses. Weight belts and harnesses used by SCUBA divers shall be capable of quick release.

(7) Underwater Breathing Masks and Helmets. Underwater breathing masks and helmets used ~~at~~for SCUBA ~~must~~shall meet the requirements for the same equipment used in the surface supplied mode.

(c) Surface Supplied Diving.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

