

DEPARTMENT OF INDUSTRIAL RELATIONS
Occupational Safety and Health Standards Board
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INITIAL STATEMENT OF REASONS

CALIFORNIA CODE OF REGULATIONS

TITLE 8: Sections 6051, 6056, and 6057
of the General Industry Safety Orders

Commercial Diving Operations

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

The Association of Diving Contractors International contacted federal OSHA, claiming that in several specific instances California's diving regulations are not as protective as the corresponding federal regulations. Federal OSHA contacted Board staff to discuss amendments to the regulations and resolve the concerns.

In 2017, several of California's regulations were amended via Labor Code Section 142.3(a)(3) which permits an expedited rulemaking process by exempting the Board from certain provisions of the Government Code when adopting standards substantially the same as federal standards (also known as the Horcher process). For the remaining instances where the amendments could not be made via that expedited process, the Board is proposing to make the changes in accordance with the requirements of the Administrative Procedures Act (APA).

The following proposed amendments are intended to provide worker safety at places of employment in California.

Section 6051. Definitions.

Section 6051 contains definitions for use in interpreting and complying with Article 152 "Diving Operations." The Board proposes to add new definitions for "Film and TV Diving", "Positive Buckling Device", and "Zoo and Aquarium Exhibit Diving" and to modify the existing definition for "Technical Diving." The changes are necessary to aid the regulated public in complying with the requirements of the associated sections.

The Board also proposes to correct all occurrences of the word "HOOKAH" to read "hookah." The proposed change is editorial and will have no regulatory effect.

Section 6056. Basic Operation Procedures.

Section 6056 contains depth limitations, breathing gas, diver supervision, and other safety requirements for divers engaged in SCUBA diving, surface-supplied air diving, and liveboating.

Existing subsection 6056(a)(1)(C) allows SCUBA diving to take place only in currents of one (1) knot or less unless the diver is line-tended. An exception to the requirement, however, is proposed for technical divers performing film and TV diving operations in a controlled environment where the current is artificially increased above one (1) knot and where, in case of an emergency, the current can be reduced to one (1) knot or less. The exception also requires the dive team to be trained to work in such conditions. The exception is necessary to allow technical divers performing film and TV diving operations to safely and feasibly produce media for film and television.

Subsection 6056(a)(1)(D) prohibits SCUBA diving in enclosed or physically confining space unless the diver is line-tended. An exception to the requirement is proposed for technical divers performing film and TV diving operations in a controlled environment where the dive team is trained to respond to emergencies which could arise under such conditions. The exception is necessary to allow technical divers performing film and TV diving operations to safely and feasibly produce media for film and television.

Subsection 6056(a)(2) provides requirements for the supervision of an in-water SCUBA diver. In order to be commensurate with federal OSHA requirements, the subsection is proposed for amendment to require a standby diver at all times while a SCUBA diver is in the water. Likewise, the federal requirements and the corresponding proposed California amendment require the in-water diver to be line-tended from the surface, or accompanied by another SCUBA diver in the water.

California opts to retain the more protective existing language requiring the companion SCUBA diver to remain in effective communication with the diver being supervised throughout the operation, instead of being “in continuous visual contact” as required by the corresponding federal regulation. The Board also proposes to match the layout of the federal text by deleting subsection 6056(a)(2)(C) and combining it with existing subsection 6056(a)(2)(B). The amendment is necessary to make the California language commensurate with federal language and render the requirements easier to understand.

Furthermore, an exception to subsection 6056(a)(2) is proposed to allow technical divers to comply with any one of the supervisory diving requirements: a standby diver, line-tending from the surface, or an in-water companion SCUBA diver. The exception is necessary to allow technical divers reasonable latitude in providing supervision to an in-water diver.

Subsection 6056(a)(5) provides requirements for diving with the use of hookah gear. Newly proposed subsection 6056(a)(5)(A) restricts hookah diving to technical diving operations only. Existing subsection 6056(a)(5)(A) is proposed to be re-lettered to 6056(a)(5)(B) and amended to limit hookah diving to a maximum depth of 30 feet of seawater (fsw), instead of the current limit of 190 fsw. The depth limitation of 30 fsw is based on the ability of the first stage hookah regulator to properly function at the depth without the need to compensate for increased pressures at greater depths.

Newly proposed subsections 6056(a)(5)(C) and (D) require additional safety protections such as the use of a non-return valve and a safety harness that allows the hookah diver to be safely pulled from the water in an emergency.

Existing subsections 6056(a)(5)(B)-(D) are proposed to be re-lettered to subsections 6056(a)(5)(E)-(G). Existing subsection 6056(a)(5)(B), (proposed to be re-lettered to subsection (E)), is proposed for further amendment to add the word “gas” to the phrase “independent reserve breathing [gas] supply”. Additionally, the subsection is proposed for amendment to require a hookah diver to carry sufficient reserve breathing gas to return to the surface should the diver’s air supply malfunction. The existing requirement that the hookah diver be equipped with a regulator is proposed to be placed before the requirement for the reserve breathing gas to increase readability.

Finally, newly proposed subsection 6056(a)(5)(H) requires a second stage regulator used for hookah diving to be designed to function at the diver’s working depth. The above proposed amendments relating to hookah diving are necessary to ensure that technical divers can safely use hookah equipment during technical diving operations.

The semi-colon at the end of subsection 6056(b)(2)(A) is proposed to be replaced with a period. Additionally, a hyphen is proposed to be added between the words “surface” and “supplied” in subsection 6056(b)(2)(B) to match other occurrences of the word “surface-supplied” in California’s diving regulations. Neither change will have any regulatory effect.

Existing subsection 6056(b)(2)(C) is proposed for amendment to delete the word “standby” from the phrase “A standby diver equipped with surface-supplied gear...shall hose tend at the underwater point of entry...”. The use of the word “standby” conflicts with the definition of a “standby diver”, which is a topside diver ready to assist in the rescue of an in-water diver.

The existing language of subsection 6056(b)(2)(C) requires the diver(s) to be located at the underwater point of entry into an enclosed or physically confining space and not on the surface. The change is necessary to remove a potential point of confusion from the existing language and ensure that a diver working in enclosed or physically confining spaces is attended at the underwater point of entry.

Section 6057. Equipment Procedures and Requirements.

Section 6057 contains requirements for recordkeeping of alteration, maintenance, repair, testing, or calibration of dive equipment. The section also contains requirements for specific features and functions for SCUBA, surface-supplied air, and other diving equipment.

Subsection 6057(a) is proposed to be amended to add the missing word “shall” in the sentence “Each equipment modification, repair, test, calibration or maintenance service [sic] be logged...” The corresponding federal language found in 29 CFR 1910.430(a)(2) includes the word “shall”. The proposed revision will have no regulatory effect in that, notwithstanding the correction being appropriate, the preexisting sentence’s meaning had been implicitly clear.

Subsections 6057(b)(2)(B) and (C) are proposed for amendment to replace the word “must” with “shall” in the phrase “SCUBA tanks must...”, which appears in both subsections. Additionally, subsection 6057(b)(4)(A) is proposed for amendment to correct the misspelling of the word “buoyancy”. Finally, subsection 6057(b)(7) is proposed for amendment to replace the word “at” with the word “for” in the phrase “Underwater breathing masks and helmets used at [sic] SCUBA must meet...” The word “must” is proposed for replacement with the word “shall” in this subsection as well. The proposed amendments are editorial and will have no regulatory effect.

TECHNICAL, THEORETICAL AND/OR EMPIRICAL STUDIES, REPORTS OR DOCUMENTS RELIED ON BY THE BOARD

1. September 13, 2018, advisory committee meeting minutes, list of advisory committee members, and attendance sheets.
2. 2017 Bureau of Labor Statistics (BLS) data,
<https://www.bls.gov/oes/2017/may/oes499092.htm>. Accessed 3/27/19.
3. Total Hourly Rate from the Department of Industrial Relations,
<https://www.dir.ca.gov/OPRL/2018-1/PWD/Determinations/Northern/NC-023-31-11.pdf>

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

PETITION

This proposal was not the result of a petition.

ADVISORY COMMITTEE

This proposal was developed with the assistance of an advisory committee. (A list of advisory committee members, attendance sheets, and minutes are included as Documents Relied Upon.)

FIRE PREVENTION STATEMENT

This proposal does not include fire prevention or protection standards. Therefore, approval of the State Fire Marshal pursuant to Government Code Section 11359 or Health and Safety Code Section 18930(a)(9) is not required.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

ECONOMIC IMPACT ANALYSIS/ASSESSMENT

The proposed regulation will not affect the: (1) creation or elimination of California jobs, (2) creation of new businesses or elimination of existing California businesses, or (3) expansion of existing California businesses, because the amendments seek to preserve existing requirements for technical divers that would be lost if replaced by federal requirements for commercial divers.

A 2017 rulemaking effort to correct deficiencies in California diving regulations deemed non-commensurate with federal OSHA regulations drew concerns from technical divers, who wanted to retain key differences between requirements for technical diving and commercial diving operations. The proposed amendments are intended to bring California's commercial diving regulations into conformity with their federal counterparts, while preserving existing language which addresses the needs of technical divers.

Furthermore, proposed amendments covering technical diving operations (e.g. definitions, exceptions for technical diving operations, and hookah diving requirements) are not mandatory. Technical divers can choose to follow the federally commensurate commercial diving requirements, or the proposed amendments for technical diving.

The proposed amendment to bring California's regulation in line with the federal requirement for a standby diver during commercial diving operations that employ SCUBA will also have no significant economic impact. Labor Code §142.3(a)(2) requires California to adopt standards as least as effective as federal standards. Because California did not adopt an equivalent standard to the federal requirement within 6 months of the federal promulgation of the regulation, the federal standard is enforceable by Cal/OSHA and has been for many years (See Labor Code §142.3(a)(4)(A)).

An effort to identify contractors that utilize SCUBA for commercial diving work found only a handful of such businesses statewide. Such contractors typically work in a team of at least three individuals, which often already includes a standby diver, due to the specific requirements of the work and the desire to avoid decompression limits.

Therefore, the Board expects minimal economic impact for employers of commercial divers. In the rare situations that an employer utilizes SCUBA for commercial diving work and does not already have a diver available to serve as the topside standby diver, the expected cost for providing one would be about \$680 for an 8-hour day. The Board estimates that such an occurrence would happen less than 100 times each year and have a statewide economic impact of less than \$6.8 million per year.

All of the stakeholders that responded to the Board's request for information on the economic impact of requiring a standby diver responded that they normally utilize surface-supplied air diving for commercial diving operations instead of SCUBA because it has the ability to communicate more easily with the diver and is a safer diving mode. A standby diver is already required to be present for commercial diving operations using surface-supplied air.

BENEFITS OF THE PROPOSED ACTION

The proposal promotes worker safety by updating commercial diving requirements to be at least as effective as their federal counterparts, while preserving reasonable protective measures for divers engaged in technical diving operations. Additionally, the proposal corrects many errors in the existing text that could cause confusion for stakeholders seeking compliance. No significant environmental impact is anticipated from the proposed action.

EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESSES

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses/individuals, including the ability of California businesses to compete with businesses in other states. Because the proposed changes allow employers additional options for compliance, the employers can choose to follow existing regulations or the new amended regulations. For specific dive tasks, employers may experience a small cost savings by following the technical diving requirements instead of the corresponding commercial diving requirements.

REASONABLE ALTERNATIVES TO THE PROPOSAL AND THE BOARD'S REASONS FOR REJECTING THOSE ALTERNATIVES

No reasonable alternatives to the proposal were identified or brought to the Board's attention. Requiring divers to follow commercial diving requirements when performing technical diving operations can be unnecessarily burdensome and has not been shown to improve diver safety.