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## **FINAL STATEMENT OF REASONS**

### CALIFORNIA CODE OF REGULATIONS

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

### **Commercial and Technical Diving Operations** **(Noticed as "Commercial Diving Operations")**

### **MODIFICATIONS AND RESPONSE TO COMMENTS RESULTING FROM** **THE 45-DAY PUBLIC COMMENT PERIOD**

There are no modifications to the information contained in the Initial Statement of Reasons except for the following substantive and sufficiently related modifications that are the result of public comments and/or Board staff evaluation.

#### **Section 6056. Basic Operation Procedures.**

The initially proposed amendment of subsection 6056(a)(2)(B) is proposed to be further modified by adding clarifying text ensuring companion divers be able to render immediate assistance in case of emergency to the requirement that the divers remain in effective communication with each other.

During discussions with federal OSHA (OSHA) regarding the potential differences between the California requirement for both the primary diver and the companion diver to "remain in effective communication" and the corresponding federal requirement for the divers to "remain in continuous visual contact," OSHA representatives suggested that the purpose of the requirement was to ensure that divers be close enough to one another to render aid in an emergency. The proposed modification is necessary to ensure that the divers are able to render immediate assistance to each other in an emergency while maintaining effective communication.

#### **Summary of and Responses to Written and Oral Comments:**

##### **I. Written Comments**

**Ms. Amber Rose, CIH, Area Director, United State Department of Labor, Occupational Safety and Health Administration (OSHA), Region IX, by letter dated February 4, 2020.**

Comment:

Ms. Rose states that the proposed occupational safety and health standards do not appear to be commensurate with the federal standard. Specifically:

1. OSHA does not recognize “Technical Diving”, only Commercial and Scientific Diving as defined in 29 CFR Subpart T. The use of the term is not prohibited, but the regulations must still be as effective as the federal standard.
2. OSHA does not consider the term “effective communication” in Section 6056(a)(2)(B) to be as effective as the comparable standard 29 CFR 1910.424(c)(2) term “continuous visual contact”.
3. OSHA does not consider Section 6056(a)(2) on hookah diving as effective since it is defined as surface-supplied air diving and OSHA requires the ability to communicate with this method.

Response:

**Item 1.** The Board appreciates the comment. With regard to the assertion that the proposed definition and requirements for technical diving are not at least as protective as federal regulations, the Board points Federal OSHA to the following facts:

The proposed definition for technical diving in Article 152 is intended to fill a void that exists in federal regulations between traditional construction commercial diving and scientific diving. The proposed definition more accurately reflects occupational diving in specialized environments and therefore more adequately protects divers engaged in the practice. Federal standards, written more than 40 years ago, are designed to protect employees engaged in underwater drilling and construction, whose activities include such tasks as placing or removing heavy objects, pipeline inspection, construction, demolition, cutting or welding, or the use of explosives.

By definition, technical divers perform tasks which are not part of an on-going construction, demolition, repair, maintenance, shipbuilding, shipbreaking, or ship repair job. Instead, their activities involve making or performing observations, measurements, and adjustments, film and TV diving, and zoo and aquarium exhibit diving.

In support of this distinction, the Fifth Circuit Court of Appeals published a July 15, 2020, decision, reversing a ruling by the Occupational Safety and Health Review Commission, where the Commission ruled that cleaning and feeding dives at the Houston Aquarium were subject to

the requirements of the federal Commercial Diving Operations (CDO) regulations<sup>1</sup>. The decision includes the following finding:

The regulatory history [of the CDO regulation] as a whole highlights that OSHA's purpose in creating the CDO standard was to improve workplace safety for divers working on dangerous tasks such as construction and drilling, which are not present at the Aquarium. OSHA discerned that institutions like the Aquarium, which can achieve a low rate of, or no accidents by self-regulation, did not require regulation under the CDO standard. (Page 12.)

Further, the decision states that "there is evidence that adding **the additional safety equipment required under the CDO standard could make the divers and animals *less safe*** in the Aquarium environment." (Page 13, emphasis added.) Although the decision focuses on the differences between scientific and commercial diving operations, technical diving operations are also "clearly distinguishable from any of the listed activities, which are typically associated with construction and industrial work." (Page 11.)

The Board asserts that the hazards of a diving operation are based upon the nature, depth, and environment of the task being performed, as well as the training of the person performing the task. The existence of an alternate set of requirements for scientific divers is proof that different tasks are treated differently by the CDO regulations. Because scientific divers do not perform tasks with the same degree of risk as commercial divers, they are allowed to self-regulate. The tasks performed, not the job classification, determine the hazards and the necessary precautions to be taken.

By the same reasoning, technical divers perform tasks more closely related to scientific divers and are clearly distinguishable from commercial divers. However, instead of seeking to self-regulate, as many of them could qualify to do as scientists, they are requesting a uniform set of regulations tailored to their specialized, non-construction dive environments. Stakeholder testimony includes decades of dive experience and thousands of hours of underwater practice attesting to the equivalent safety of technical diving when compared to commercial diving.

**Item 2.** In discussions with representatives from federal OSHA on the merits of "effective communication" vs. "continuous visual contact," both sides cited instances where one term could prove more protective than the other. The discussion resulted in the intent of the requirement being that the companion SCUBA diver required by subsection 6056(a)(2)(B) "be able to render immediate assistance in case of an emergency" to the other diver. As a result of the comment and follow-up discussions, the Board proposes to explicitly require the intent of the federal and state regulations, instead of using the vague term "continuous visual contact."

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<sup>1</sup> United States Court of Appeals, Fifth Circuit. "Houston Aquarium, Inc. v. Occupational Safety and Health Review Commission; Eugene Scalia, Secretary, U.S. Department of Labor." No. 19-60245. Document: 00515490818. Filed July 15, 2020, <http://www.ca5.uscourts.gov/opinions/pub/19/19-60245-CV0.pdf>.

**Item 3.** Hookah diving is a necessary diving mode for technical divers and has been performed safely in California since 1980, according to stakeholder testimony. Stakeholders diving in the specialized environments of zoo and aquarium exhibits assert that the small footprint and minimal equipment requirements of hookah diving are the most safe and effective mode for the small, delicate, specialized environments where animals, corals and humans are in such close proximity. Although some exhibits could fit the additional equipment required by the CDO regulation and the requirements for SCUBA or surface-supplied air diving, in many instances the equipment will not fit safely into the tank or work area and can pose an obstacle in rescuing a diver in the event of an emergency. Similarly, film and TV divers use hookah for camera operators filming in small spaces like swimming pools, where excess equipment can impede camera movement.

In support of hookah diving and the reduction of unnecessary diving equipment in specialized diving environments, the Fifth Circuit Court decision states:

Indeed, the alleged violations with which the Aquarium has been charged were not shown in the record to have safety benefits. OSHA charged the Aquarium with, inter alia, not having a two-way communication system, not having a reserve air supply, and not having a safety harness. The Aquarium's Senior Dive Officer, Todd Hall, testified that Aquarium divers do not need a two-way communication system, because unlike divers who may be in open or murky water or separated by long distances, Aquarium divers can easily see the spotter standing outside of the tank and can communicate using hand signals. Divers also do not need reserve air supplies in the Aquarium's tanks that are a mere 12 or 14 feet deep. If a diver loses his air supply, he can propel himself to the surface in equal or less time than switching to a second air supply. Lastly, divers do not need safety harnesses, which are used for emergency extractions, because the Aquarium uses quick-deploy harnesses when needed. Because of the short distance, divers can be pulled out using these harnesses in less than two minutes. .... Indeed, there is evidence that adding the additional safety equipment required under the CDO standard could make the divers and animals less safe in the Aquarium environment.(Pages 12 and 13.)

The Board is not persuaded by the comment and asserts that the lack of a two-way voice communication system does not affect the overall safety of the dive mode. Although the Fifth Circuit Court decision mentions that a reserve air supply and safety harness "were not shown in the record to have safety benefits" (page 12), California technical divers seek to explicitly require these and other safety measures to ensure adequate employee protections while engaged in hookah diving. The Board asserts that the proposed regulations for technical divers, which are specifically tailored to the specialized environments in which they work, are at least as protective as the CDO regulations when implemented as proposed.

The Board thanks Ms. Rose for her comment and participation in the Board's rulemaking process.

Mr. Andrew Solomon, Dive Safety Officer / Boating Safety Officer, California Science Center Foundation, by letter dated February 10, 2020.

Mr. Paul Dimeo, Dive Safety Officer, Aquarium of the Pacific, by letter dated February 12, 2020.

Mr. George Z. Peterson, Director of Dive Programs / Diving Control Board Chairman, Monterey Bay Aquarium, by letter dated February 12, 2020.

Comment:

The commenters were in support of the proposed amendments and urged the Board to adopt the proposed modifications to the regulation.

Response:

The Board thanks the commenters for their comments and participation in the Board's rulemaking process.

II. Oral Comments

Oral comments received at the February 20, 2020, Public Hearing in Rancho Cordova, California.

Mr. Andrew Solomon, Dive Safety Officer / Boating Safety Officer, representing the California Science Center Foundation.

Mr. Paul Dimeo, Dive Safety Officer, representing the Aquarium of the Pacific.

Mr. George Z. Peterson, Director of Dive Programs / Diving Control Board Chairman, representing the Monterey Bay Aquarium.

Comment:

The commenters echoed their written comments in support of the proposed amendments and urged the Board to adopt the proposed modifications to the regulation.

Response:

The Board thanks the commenters for their comments and participation in the Board's rulemaking process.

**MODIFICATIONS AND RESPONSE TO COMMENTS RESULTING FROM  
THE 15-DAY NOTICE OF PROPOSED MODIFICATIONS**

No further modifications to the information contained in the Initial Statement of Reasons are proposed as a result of the 15-day Notice of Proposed Modifications mailed on October 2, 2020.

**Summary of and Responses to Written and Oral Comments:**

Ms. Amber Rose, CIH, Area Director, United State Department of Labor, Occupational Safety and Health Administration (OSHA), Region IX, by letter dated October 14, 2020.

Comment:

Ms. Rose reiterated her concerns from her February 4, 2020, letter written in response to the initial 45-day comment period, except for the change proposed in the 15-day notice. Regarding the proposed change in the 15-day notice, she wrote in support of the amendment, saying that federal OSHA finds the language ALAEA (at least as effective as the federal requirements).

Response:

The Board thanks Ms. Rose for her comments and participation in the Board's rulemaking process. For the Board response to Ms. Rose's 45-day comment period concerns, please see the Board's response to her February 4, 2020, letter above.

Mr. Andrew Solomon, Dive Safety Officer / Boating Safety Officer, California Science Center Foundation, by letter dated October 22, 2020.

Mr. Paul Dimeo, Dive Safety Officer, Aquarium of the Pacific, by letter dated October 20, 2020.

Mr. George Z. Peterson, Director of Dive Programs / Diving Control Board Chairman, Monterey Bay Aquarium, by letter received October 23, 2020.

Comment:

The commenters were in support of the proposed amendments and urged the Board to adopt the proposed modifications to the regulation.

**Response:**

The Board thanks the commenters for their comments and participation in the Board's rulemaking process.

**ADDITIONAL DOCUMENTS RELIED UPON**

United States Court of Appeals, Fifth Circuit. *Houston Aquarium, Inc. v. Occupational Safety and Health Review Commission; Eugene Scalia, Secretary, U.S. Department of Labor*. No. 19-60245. Document: 00515490818. Filed July 15, 2020  
<http://www.ca5.uscourts.gov/opinions/pub/19/19-60245-CV0.pdf>.

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**ADDITIONAL DOCUMENTS INCORPORATED BY REFERENCE**

None.

**DETERMINATION OF MANDATE**

These standards do not impose a mandate on local agencies or school districts.

**ALTERNATIVES CONSIDERED**

The Board invited interested persons to present statements or arguments with respect to alternatives to the proposed standard. No alternative considered by the Board would be: (1) more effective in carrying out the purpose for which the action is proposed, or (2) would be as effective as and less burdensome to affected private persons than the adopted action, or (3) would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law. Board staff were unable to come up with any alternatives or no alternatives were proposed by the public that would have the same desired regulatory effect.

**ATTACHMENT TO FINAL STATEMENT OF REASONS**

The California Standards Comparison table, dated May 8, 2019, is incorporated by reference into the Final Statement of Reasons.