#### CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

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

Amend Section 6052 to read:

§6052. General Requirements.

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- (b) Requirement for a Manual for Diving Safety. The employer shall develop and maintain a Manual for Diving Safety which shall be made available at the dive location to each dive team member. The emergency evacuation and emergency medical treatment sections of the Manual for Diving Safety shall be abstracted and with the decompression, repetitive, and nodecompression tables (as appropriate) be available at the dive location.
- (c) The Dive Team.
- (1) Person-in-Charge:
- (A) Definition and Authority: The employer or a person appointed by the employer shall be designated as the person-in-charge. This person shall be in charge of all aspects of the diving operation and shall be at the dive location or the dive site during the diving operation. The employer or an employee designated by the employer shall be at the dive location in charge of all aspects of the diving operation affecting the safety and health of dive team members.
- (B) Qualifications: The person-in-charge shall have experience and training to conduct the diving operation.—The designated person-in-charge shall have experience and training in the conduct of the assigned diving operation.
- (C) Responsibilities.

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#### 4. Post Dive Procedures.

- (i) After the completion of a day's diving, the designated-person-in-charge shall observe the physical condition of each diver and shall conduct an interview with each diver regarding any physical problems or symptoms of decompression sickness.
- (ii) When diving outside the no-decompression limits, deeper that 100 fsw or using mixed gas as a breathing mixture, the employer shall insure the diver remains awake for at least one hour after

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diving (including decompression or treatment if appropriate), and in the vicinity of the decompression chamber (if required at the dive location), or in the company of a dive team member who is prepared to transport the diver to a decompression chamber if necessary.

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- (e) Warning Flag. When diving in areas capable of supporting marine traffic, either:
- (1) A a rigid replica of the international code flag "A" at least one meter in height shall be displayed at the dive location in a manner which allows all round visibility, and shall be illuminated during night diving operations, or.
- (2) The use of a smaller code flag "A" shall be permitted for shallow diving, commensurate with the size of boats, skiffs, or other surface floats used in the dive operation, or
- (3) A flag and/or other signal required by the agency which has jurisdiction at the dive location shall be displayed to indicate that diving operations are being conducted.
- (e) Warning Signal. When diving from surfaces other than vessels in areas capable of supporting marine traffic, a rigid replica of the international code flag "A" at least one meter in height shall be displayed at the dive location in a manner which allows all-round visibility, and shall be illuminated during night diving operations.
- (f) First-Aid Supplies.
- (1) A first-aid kit adequate appropriate for the diving operation and approved by a physician shall be available at the dive location.
- (2) When used in a decompression chamber or bell, the first-aid kit shall be suitable for use under hyperbaric conditions.
- (3) In addition to any other first aid supplies, an American Red Cross standard first aid handbook or equivalent, and a bag-type manual resuscitator with transparent mask and tubing shall be available at the dive location.
- (g) Record of Dive.

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- (H) For each dive outside the no-decompression limits, deeper than 100 fsw or using mixed gas, the following additional information shall be recorded and maintained:
- 1. Depth-time and breathing gas profiles;
- 2. Decompression table designation (including modification); and
- 3. Elapsed time since last pressure exposure if less than 24 hours or repetitive dive designation for each diver.

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# PROPOSED STATE STANDARD

TITLE 8, DIVISION 1, CHAPTER 4
Amend Section 6056 to read:
§6056. Basic Operation Procedures.
(a) SCUBA Diving (Compressed Air and Mixed Gas).
(1) Limits:
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(C) SCUBA diving shall not be conducted against currents exceeding one (1) 3 knots unless linetended.
(D) SCUBA diving shall not be conducted <u>in enclosed or physically confining spaces unless linetended.</u>
(2) Procedures.
(A) A standby diver shall be available while a diver is in the water; or.
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(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.
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(b) Surface-Supplied-Air-Diving.
(1) Limits.
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## PROPOSED STATE STANDARD, TITLE 8, DIVISION 1, CHAPTER 4

- (E) A decompression chamber shall be ready for use at the dive location for any dive outside the no-decompression limits or deeper than 100 fsw.
- (2) Procedures.

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- (E) For dives deeper than 100 fsw (30 msw) or outside the no-decompression limits:
- 1. A separate dive team member shall tend each diver in the water;
- 1.2. A standby diver shall be available while a surface supplied diver is in the water;
- 2. 3. A diver-carried reserve breathing gas supply shall be provided for each diver.
- 3. 4. A dive-location reserve breathing gas supply shall be provided.

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#### CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

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

Add new Section 6056.1 as follows:

#### §6056.1 Post Dive Procedures.

- (a) General. The employer shall comply with the following requirements, which are applicable after each diving operation, unless otherwise specified:
- (b) Precautions.
- (1) After the completion of any dive, the employer shall:
- (A) Check the physical condition of the diver;
- (B) Instruct the diver to report any physical problems or adverse physiological effects including symptoms of decompression sickness;
- (C) Advise the diver of the location of a decompression chamber which is ready for use; and
- (D) Alert the diver to the potential hazards of flying after diving.
- (2) For any dive outside the no-decompression limits, deeper than 100 fsw or using mixed gas as a breathing mixture, the employer shall instruct the diver to remain awake and in the vicinity of the decompression chamber which is at the dive location for at least one hour after the dive (including decompression or treatment as appropriate).
- (c) Recompression Capability.
- (1) A decompression chamber capable of recompressing the diver at the surface to a minimum of 165 fsw (6 ATA) shall be available at the dive location for:
- (A) Surface-supplied air-diving to depths deeper than 100 fsw and shallower than 220 fsw;
- (B) Mixed-gas diving shallower than 300 fsw; or
- (C) Diving outside the no-decompression limits shallower than 300 fsw.
- (2) A chamber capable of recompressing the diver at the surface to the maximum depth of the dive shall be available at the dive location for dives deeper than 300 fsw.
- (3) The decompression chamber shall be:

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

#### (A) Dual-lock;

NOTE: Dual-lock is meant to include multi-lock components if each is large enough to transfer personnel and supplies into and out of the main compartment while it is pressurized. Medical locks do not meet the intent of this requirement. A diving bell or manned deep diving system capable of mating with a decompression chamber would meet this requirement.

- (B) Multiplace; and
- (C) Located within 5 minutes of the dive location.
- (4) The decompression chamber shall be equipped with:
- (A) A pressure gauge for each pressurized compartment designed for human occupancy;
- (B) A built-in-breathing-system with a minimum of one mask per occupant;
- (C) A two-way voice communication system between occupants and a dive team member at the dive location;
- (D) A viewport; and
- (E) Illumination capability to light the interior.
- (5) Treatment Table. Treatment gas appropriate to the diving mode, and sufficient gas to conduct treatment shall be available at the dive location.
- (6) A dive team member shall be available at the dive location during and for at least one hour after the dive to operate the decompression chamber (when required or provided).

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

Amend Section 6057 to read:
§6057. Equipment Procedures and Requirements.
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(c) Surface Supplied Diving.
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(2) Hoses and Umbilicals.
(A) Hoses used in surface supplied diving shall:
1. Have a working pressure at least equal to the working pressure of the total-breathing-gas system; equal to that portion of the breathing gas system in which it will be utilized;
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(4) Buoyancy Control.
(A) Variable volume suits must have an exhaust valve or if connected directly to a helmet must have an air passageway between the suit and helmet.
(B) Bouyancy compensators must be equipped with an exhaust valve.
(C) When used for SCUBA diving, a buoyancy compensator shall have an inflation source separate from the breathing gas supply.
(D) An inflatable flotation device capable of maintaining the diver at the surface in a face-up position, having a manually activated inflation source independent of the breathing supply, an oral inflation device, and an exhaust valve shall be used for SCUBA diving.
(5) Weights and Harnesses
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NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

### CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

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

Amend Section 6060 to read:

§6060. Procedures During Dive.

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(d) Dive Profiles. A depth-time<del>r,</del> profile, including when appropriate any breathing gas changes, shall be maintained for each diver during the dive including decompression.

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#### CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

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

Amend Section 6062 to read:

§6062. Post Dive Procedures. (Repealed)

- (a) General. The employer shall comply with the following requirements which are applicable after each diving operation, unless otherwise specified:
- (1) After the completion of a day's diving the designated person in charge shall observe the physical condition of each diver and shall conduct an interview regarding any physical problems or symptoms of decompression sickness.
- (2) Advise the diver of the location of a decompression chamber which is ready for use; and
- (3) Alert the diver to the potential hazards of flying after diving.
- (b) Recompression Capability.
- (1) A decompression chamber capable of recompressing the diver at the surface to a minimum of 165 fsw (6 ATA) shall be available at the dive location for:
- (A) Surface supplied air diving to depths deeper than 100 fsw and shallower than 220 fsw;
- (B) Mixed-gas diving shallower than 300 fsw; or
- (C) Diving outside the no-decompression limits shallower than 300 fsw.
- (2) A chamber capable of recompressing the diver at the surface to the maximum depth of the dive shall be available at the dive location for dives deeper than 300 fsw.
- (3) The decompression chamber shall be:
- (A) Dual-lock;
- NOTE: Dual-lock is meant to include multi-lock components if each is large enough to transfer personnel and supplies into and out of the main compartment while it is pressurized. Medical locks do not meet the intent of this requirement. A diving bell or manned deep diving system capable of mating with a decompression chamber would meet this requirement.
- (B) Multiplace; and

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- (C) Located within 5 minutes of the dive location.
- (4) The decompression chamber shall be equipped with:
- (A) A pressure gauge for each pressurized compartment designed for human occupancy;
- (B) A built-in-breathing-system with a minimum of one mask per occupant;
- (C) A two-way voice communication system between occupants and a dive team member at the dive location;
- (D) A viewport; and
- (E) Illumination capability to light the interior.
- (5) Treatment Table. Treatment gas appropriate to the diving mode, and sufficient gas to conduct treatment shall be available at the dive location.
- (6) A dive team member shall be available at the dive location during and for at least one hour after the dive to operate the decompression chamber (when required or provided).