

**§ 197.404**

**46 CFR Ch. I (10-1-04 Edition)**

(b) Prior to permitting any commercial diving operation involving liveboating to commence, the person-in-charge shall insure that—

(1) A means of rapid communications with the diving supervisor while the diver is entering, in, or leaving the water is established; and

(2) A boat and crew for diver pickup in the event of an emergency is provided.

(c) The person-in-charge shall insure that a boat and crew for SCUBA diver pickup is provided when SCUBA divers are not line-tended from the dive location.

(d) The person-in-charge shall coordinate the activities on and of the vessel or facility with the diving supervisor.

(e) The person-in-charge shall insure that the vessel or facility equipment and personnel are kept clear of the dive location except after coordinating with the diving supervisor.

**§ 197.404 Responsibilities of the diving supervisor.**

(a) The diving supervisor shall—

(1) Be fully cognizant of the provisions of this subpart;

(2) Be fully cognizant of the provisions of the operations manual required by § 197.420;

(3) Insure that diving operations conducted from a vessel or facility subject to this subpart meet the regulations in this subpart;

(4) Prior to the commencement of any commercial diving operation, provide the report required by § 197.402 to the person-in-charge;

(5) Coordinate with the person-in-charge any changes that are made to the report required by § 197.402; and

(6) Promptly notify the person-in-charge of any diving related casualty, accident, or injury.

(b) The diving supervisor is in charge of the planning and execution of the diving operation including the responsibility for the safety and health of the dive team.

**§ 197.410 Dive procedures.**

(a) The diving supervisor shall insure that—

(1) Before commencing diving operations, dive team members are briefed on—

(i) The tasks to be undertaken;

(ii) Any unusual hazards or environmental conditions likely to affect the safety of the diving operation; and

(iii) Any modifications to the operations manual or procedures including safety procedures necessitated by the specific diving operation;

(2) The breathing gas supply systems, masks, helmets, thermal protection, when provided, and bell lifting equipment, when a bell is provided or required, are inspected prior to each diving operation;

(3) Each diver is instructed to report any physical problems or physiological effects including aches, pains, current illnesses, or symptoms of decompression sickness prior to each dive;

(4) A depth, bottom time profile, including any breathing mixture changes, is maintained at the dive location for each diver during the dive, except that SCUBA divers shall maintain their own profiles;

(5) A two-way voice communication system is used between—

(i) Each surface-supplied diver and a dive team member at the dive location or bell (when provided); and

(ii) The bell (when provided) and the dive location;

(6) A two-way communication system is available at the dive location to obtain emergency assistance;

(7) After the completion of each dive—

(i) The physical condition of the diver is checked by—

(A) Visual observation; and

(B) Questioning the diver about his physical well-being;

(ii) The diver is instructed to report any physical problems or adverse physiological effects including aches, pains, current illnesses, or symptoms of decompression sickness or gas embolism;

(iii) The diver is advised of the location of an operational decompression chamber; and

(iv) The diver is alerted to the potential hazards of flying after diving;

(8) For any dive outside the no-decompression limits, deeper than 130 fsw, or using mixed-gas as a breathing mixture—

(i) A depth, time, decompression profile including breathing mixture

changes is maintained for each diver at the dive location;

(ii) The diver is instructed to remain awake and in the vicinity of the dive location decompression chamber for at least one hour after the completion of a dive, decompression, or treatment; and

(iii) A dive team member, other than the diver, is trained and available to operate the decompression chamber; and

(9) When decompression sickness or gas embolism is suspected or symptoms are evident, a report is completed containing—

(i) The investigation for each incident including—

(A) The dive and decompression profiles;

(B) The composition, depth, and time of breathing mixture changes;

(C) A description of the symptoms including depth and time of onset; and

(D) A description and results of the treatment;

(ii) The evaluation for each incident based on—

(A) The investigation;

(B) Consideration of the past performance of the decompression table used; and

(C) Individual susceptibility; and

(iii) The corrective action taken, if necessary, to reduce the probability of recurrence.

(b) The diving supervisor shall ensure that the working interval of a dive is terminated when he so directs or when—

(1) A diver requests termination;

(2) A diver fails to respond correctly to communications or signals from a dive team member;

(3) Communications are lost and can not be quickly reestablished between—

(i) The diver and a dive team member at the dive location; or

(ii) The person-in-charge and the diving supervisor during liveboating operations; or

(4) A diver begins to use his diver-carried reserve breathing gas supply.

#### § 197.420 Operations manual.

(a) The diving supervisor shall—

(1) Provide an operations manual to the person-in-charge prior to com-

mencement of any diving operation; and

(2) Make an operations manual available at the dive location to all members of the dive team.

(b) The operations manual must be modified in writing when adaptation is required because of—

(1) The configuration or operation of the vessel or facility; or

(2) The specific diving operation as planned.

(c) The operations manual must provide for the safety and health of the divers.

(d) The operations manual must contain the following:

(1) Safety procedures and checklists for each diving mode used.

(2) Assignments and responsibilities of each dive team member for each diving mode used.

(3) Equipment procedures and checklists for each diving mode used.

(4) Emergency procedures for—

(i) Fire;

(ii) Equipment failure;

(iii) Adverse environmental conditions including, but not limited to, weather and sea state;

(iv) Medical illness; and

(v) Treatment of injury.

(5) Procedures dealing with the use of—

(i) Hand-held power tools;

(ii) Welding and burning equipment; and

(iii) Explosives.

#### SPECIFIC DIVING MODE PROCEDURES

#### § 197.430 SCUBA diving.

The diving supervisor shall insure that—

(a) SCUBA diving is not conducted—

(1) Outside the no-decompression limits;

(2) At depths greater than 130 fsw;

(3) Against currents greater than one (1) knot unless line-tended; and

(4) If a diver cannot directly ascend to the surface unless line-tended;

(b) The SCUBA diver has the equipment required by § 197.346(a);

(c) A standby diver is available while a diver is in the water;

(d) A diver is line-tended from the surface or accompanied by another diver in the water in continuous visual contact during the diving operation;