



**DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS**  
**DIRECTOR'S OFFICE**  
**GENERAL INDUSTRY SAFETY STANDARDS**

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(By authority conferred on the director of the department of consumer and industry services by sections 16 and 21 of Act No. 154 of the Public Acts of 1974, as amended, and Executive Reorganization Order No. 1996-2, being §§408.1016, 408.1021, and 445.2001 of the Michigan Compiled Laws)

R 408.17903 of the Michigan Administrative Code, appearing on page 3949 of the 1979 Michigan Administrative Code, is amended, and R 408.17904 to R 408.17962 are added, to read as follows:

**PART 79. DIVING OPERATIONS**

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**GENERAL PROVISIONS**

**R 408.17901 Scope.**

**Rule 7901.** This part pertains to the safe use and maintenance of equipment and procedures of the occupation of diving and the related support operations as used in general industry. This part does not apply to a diving operation performed solely for recreational instruction purposes using open-circuit compressed- air SCUBA and conducted within the no-decompression limits.

**R 408.17903 Definitions; A to C.**

- Rule 7903.** (1) "Acfm" means actual cubic feet per minute.  
(2) "ATA" means atmosphere absolute.  
(3) "Bell" means an enclosed compartment which is pressurized (closed bell) or unpressurized (open bell), which

allows a diver to be transported to and from the underwater work area, and which may be used as a temporary refuge during diving operations.

(4) "Bottom time" means the total elapsed time, measured in minutes, from the time when a diver leaves the surface in descent to the time that the diver begins ascent.

(5) "Bursting pressure" means the pressure at which a pressurized device would fail structurally.

(6) "Cylinder" means a pressure vessel for the storage of gases.

**R 408.17904 Definitions; D.**

**Rule 7904.** (1) "Decompression chamber" means a pressure vessel which is for human occupancy, such as a surface decompression chamber, pressurized bell, or deep diving system, and which is used to decompress divers and to treat decompression sickness.

(2) "Decompression sickness" means a condition that has a variety of symptoms which may result from gas or bubbles in the tissues of divers after pressure reduction.

(3) "Decompression table" means a profile or set of profiles of depth-time relationships for ascent rates and breathing mixtures to be followed after a specific depth-time exposure or exposures.

(4) "Dive location" means a surface or vessel from which a diving operation is conducted.

(5) "Dive location reserve breathing gas" means a volume tank or dependent supply of air or mixed gas at the dive location that is sufficient, under standard operating conditions, to allow a diver to reach the surface.

(6) "Diver" means an employee who is in the water and who uses underwater apparatus that supplies compressed breathing gases at the ambient pressure.

(7) "Diver-carried reserve breathing gas" means a diver-carried supply of air or mixed gas that is sufficient, under standard operating conditions, to allow a diver to reach the surface or a bell or to be rescued by a standby diver.

(8) "Dive team" means divers and support employees who are involved in a diving operation, including the designated person in charge.

(9) "Diving mode" means a type of diving that requires specific equipment, procedures, and techniques, such as scuba, surface-supplied air, or mixed-gas diving.

**R 408.17905 Definitions; F to M.**

**Rule 7905.** (1) "Fsw" means feet of seawater or equivalent static pressure head.

(2) "Heavy gear" means diver-worn deep-sea dress, including helmet, breastplate, dry suit, and weighted shoes.

(3) "Hyperbaric conditions" means pressure conditions in excess of surface pressure.

(4) "Inwater stage" means a suspended underwater platform that supports a diver in the water.

(5) "Liveboating" means the practice of supporting a surface-supplied air or mixed gas diver from a vessel that is underway.

(6) "Mixed-gas diving" means a diving mode in which a diver is supplied in the water with a breathing gas other than air.

**R 408.17906 Definitions; N to S.**

**Rule 7906.** (1) "No-decompression limits" means a combination of the depth of a dive and the bottom time which permits a diver to return to the surface without decompression, as expressed in the provisions of volume I air diving, revision II, December, 1988, and volume II mixed gas diving, revision III, May, 1991, of the United States navy diving manual, which provisions are adopted in these rules by reference and may be inspected at the Lansing office of the department of consumer and industry services. These volumes may be purchased at a cost as of the time of adoption of these rules of \$34.00 and \$24.00, respectively, from the Superintendent of Documents, Government Printing Office, Public Document Department, Washington, DC 20402, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(2) "O.H. rule" means an occupational health rule that was incorporated by reference pursuant to section 14 of Act No. 154 of the Public Acts of 1974, as amended, being §408.1014 of the Michigan compiled laws. Copies of these rules are available from the Michigan Department of Consumer and

Industry Services, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909.

(3) "Psig" means pounds per square inch, gauge.

(4) "Qualified employee" means an individual who, by extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve or resolve problems that relate to the subject matter, the work, or the project.

(5) "Scuba diving" means a diving mode which is independent of a surface supply and in which the diver uses open-circuit, self-contained underwater breathing apparatus.

(6) "Standby diver" means a diver who is at the dive location and who is available in a sufficient state of readiness to assist a diver in the water.

(7) "Surface-supplied air diving" means a diving mode in which the diver in the water is supplied from the dive location with compressed air for breathing.

**R 408.17907 Definitions; T to W.**

**Rule 7907.** (1) "Treatment table" means a depth-time and breathing gas profile that is used in the treatment of decompression sickness.

(2) "Umbilical" means a composite hose bundle between a dive location and a diver or bell, or between a diver and a bell, that may supply a diver or bell with breathing gas, communications, power, and heat and may include a safety line.

(3) "Volume tank" means a pressure vessel which is connected to the outlet of a compressor and which is used as an air reservoir.

(4) "Working pressure" means the maximum pressure to which a pressure containment device may be exposed under standard operating conditions.

**R 408.17909 Emergencies.**

**Rule 7909.** An employer may deviate from the requirements of these rules to the extent necessary to prevent or minimize a situation which is likely to cause death, serious physical harm, or major environmental damage if the employer complies with both of the following provisions:

- (a) Notifies the department of consumer and industry services, within 48 hours of the onset of the emergency situation, of the nature of the emergency and extent of the deviation from these rules.
- (b) Upon request from the department of consumer and industry services, submits the information specified in subdivision (a) of this rule in writing.

**R 408.17911 Employer compliance with rules.**

**Rule 7911.** An employer shall comply with all provisions of these rules of general applicability and with all requirements of these rules that pertain to specific diving modes to the extent that the diving operation modes are conducted.

**R 408.17912 Dive team; qualifications.**

**Rule 7912.** (1) An employer shall ensure that each dive team member has the experience and training that is necessary to perform assigned tasks in a safe and healthful manner. The training and experience shall include all of the following areas:

- (a) The use of tools, equipment, and systems relevant to assigned tasks.
- (b) Techniques of the assigned diving mode.
- (c) Diving operations and emergency procedures.
- (d) Familiarity with the contents of the safe practices manual that is required pursuant to the provisions of R 408.17914.

(2) All dive team members shall be trained in cardiopulmonary resuscitation and first aid by the American red cross or an equivalent organization.

(3) Each dive team member who is exposed to, or who controls the exposure of others to, hyperbaric conditions shall be trained in diving-related physics and physiology.

**R 408.17913 Dive team; designation and qualifications of person in charge; basis of assignment of tasks; exposure to hyperbaric conditions.**

**Rule 7913.** (1) An employer or an employee who is designated by the employer shall be at the dive location and shall be in charge of all aspects of the diving operation that affect the safety of dive team members.

(2) The designated person in charge shall have experience and training in the conduct of the assigned diving operation.

(3) Each dive team member shall be assigned tasks in accordance with the member's experience or training, except that limited additional tasks may be assigned to an employee who is undergoing training if these tasks are performed under the direct supervision of an experienced dive team member.

(4) An employer shall not require a dive team member to be exposed to hyperbaric conditions against the employee's will, except when necessary to complete decompression or treatment procedures.

(5) An employer shall not permit a dive team member to dive or be otherwise exposed to hyperbaric conditions for the duration of any temporary, physical impairment or condition which is known to the employer and which is likely to adversely affect the health of a dive team member.

**R 408.17914 Safe practices manual.**

**Rule 7914.** (1) An employer shall develop and maintain a safe practices manual, which shall be made available to each dive team member at the dive location.

(2) The safe practices manual shall contain a copy of these rules, the employer's policies for implementing these rules, and all of the following:

- (a) Operating procedures and checklists for diving operations.
- (b) Assignments and responsibilities of the dive team members.
- (c) Equipment procedures and checklists.
- (d) Emergency procedures for all of the following subjects:
  - (i) Fire.
  - (ii) Equipment failure.
  - (iii) Adverse environmental conditions.
  - (iv) Medical illness.
  - (v) Injury.

**R 408.17921 Pre-dive procedures; emergency aid.**

**Rule 7921.** (1) A list of all of the following telephone or call numbers shall be kept at the dive location:

- (a) An operational decompression chamber, if a chamber is not available at the dive location.
- (b) Accessible hospitals.
- (c) Available physicians.
- (d) Available means of transportation.
- (e) The nearest United State coast guard rescue coordination center.

(2) A first aid kit which is appropriate for the diving operation and which is approved by a physician shall be available at the dive location.

(3) When used in a decompression chamber or bell, the first aid kit shall be suitable for use under hyperbaric conditions.

(4) In addition to any other first aid supplies, an American red cross standard first aid handbook or equivalent and a bag-type manual resuscitator that has a transparent mask and tubing shall be available at the dive location.

**R 408.17922 Pre-dive procedures; planning and assessment.**

**Rule 7922.** (1) Planning for a diving operation shall include an assessment of the safety and health aspects of all of the following:

- (a) Diving mode.
  - (b) Surface and underwater conditions and hazards.
  - (c) Breathing gas supply, including reserves.
  - (d) Thermal protection.
  - (e) Diving equipment and systems.
  - (f) Dive team assignments and the physical fitness of the dive team members, including any member impairment that is known to the employer.
  - (g) Repetitive dive designation or residual inert gas status of the dive team members.
  - (h) Decompression and treatment procedures, including altitude corrections.
  - (i) Decompression tables.
  - (j) Emergency procedures.
- (2) Decompression, repetitive, and no-decompression tables, as appropriate, shall be at the dive location.

**R 408.17923 Pre-dive procedures; coordination with other activities.**

**Rule 7923.** To minimize hazards to the dive team, diving operations shall be coordinated with other activities in the vicinity that are likely to interfere with the diving operation.

**R 408.17924 Pre-dive procedures; employee briefing.**

**Rule 7924.** (1) Dive team members shall be briefed in all of the following areas:

- (a) The tasks to be undertaken.
  - (b) Operating procedures for the diving mode.
  - (c) Any unusual hazards or environmental conditions that are likely to affect the safety of the diving operation.
  - (d) Any modifications to operating procedures that are necessitated by the specific diving operation.
- (2) Before making individual dive team member assignments, an employer shall inquire into the dive team members current state or physical fitness and indicate to the dive team member the procedure for reporting physical problems or adverse physiological effects during and after the dive.

**R 408.17925 Pre-dive procedures; communications.**

**Rule 7925.** An operational 2-way voice communication system shall be provided as follows:

- (a) At the dive location to obtain emergency assistance.
- (b) Between each surface-supplied air or mixed-gas diver and a dive team member at the dive location or bell.
- (c) Between the bell and the dive location.

**R 408.17926 Pre-dive procedures; equipment inspection.**

**Rule 7926.** The breathing gas supply system, including all of the following items, shall be inspected before each dive:

- (a) Reserve breathing gas supplies.
- (b) Masks.
- (c) Helmets.
- (d) Gauges.
- (e) Timekeeping devices.
- (f) Thermal protection.
- (g) Bell handling mechanisms, when appropriate.

**R 408.17927 Pre-dive procedures; warning flag.**

**Rule 7927.** Any person who dives or submerges in any of the waters of this state with the aid of a diving suit or other mechanical diving device shall place a buoy or boat in the water at or near the point of submergence. The buoy or boat shall bear a red flag which is not less than 14 inches by 16 inches and which has a 3 1/2-inch white stripe running from 1 upper corner to a diagonal lower corner. The flag shall be in

place only while actual diving operations are in progress. A vessel shall not be operated within 100 feet of a buoyed diver's flag unless it is involved in tending the diving operation. A person who is diving shall stay within a surface area of 100 feet of the diver's flag.

**R 408.17931 Procedures during dive; water entry and exit.**

**Rule 7931.** (1) A means that is capable of supporting the diver shall be provided for entering and exiting the water.

(2) The means that is provided for exiting the water shall extend below the water surface.

(3) A means shall be provided to assist an injured diver out of the water or into a bell.

**R 408.17932 Procedures during dive; hand-held power tools and equipment.**

**Rule 7932.** (1) Tools and equipment shall be qualified for underwater use.

(2) Hand-held electrical tools and equipment shall be deenergized before being placed into or retrieved from the water.

(3) A hand-held power tool shall not be supplied with power from the dive location until requested by the diver.

(4) A current supply switch to interrupt the current flow to the welding or cutting electrode shall be tended by a dive team member who is in voice communication with the diver who performs the welding or cutting and shall be kept in the open position, except when the diver is welding or cutting.

(5) The welding machine frame shall be grounded and a ground wire shall be connected directly to the work.

(6) Welding and cutting cables, electrode holders, and connections shall be capable of carrying the maximum current that the work requires and shall be properly insulated.

(7) Insulated gloves shall be provided to divers who perform welding and cutting operations.

(8) Prior to welding or cutting on a closed compartment, a structure, or a pipe which contains a flammable vapor or in which a flammable vapor may be generated by the work, the compartment, structure, or pipe shall be vented, flooded, or purged with a mixture of gases that will not support combustion.

**R 408.17933 Procedures during dive; explosives.**

**Rule 7933.** (1) Explosives shall be transported, stored, and used as prescribed in this rule and the applicable provisions of the construction safety standards commission standard, Part 27. Blasting and Use of Explosives, being R 408.42701 et seq. of the Michigan Administrative Code, or the general industry safety standards commission standard, 1910.109, Explosives and Blasting Agents, that was incorporated by reference in section 14 of Act No. 154 of the Public Acts of 1974, as amended, being §408.1014 of the Michigan Compiled Laws.

(2) The electrical continuity of explosive circuits shall not be tested until a diver is out of the water.

(3) Explosives shall not be detonated while a diver is in the water.

**R 408.17934 Procedure during dive; termination of work interval.**

**Rule 7934.** The working interval of a dive shall be terminated when any 1 of the following situations occurs:

- (a) A diver requests termination.
- (b) A diver fails to respond correctly to communications or signals from a dive team member.
- (c) Communications are lost and cannot be quickly reestablished between the diver and a dive team member at the dive location, or between the designated person in charge and the person who controls the vessel in liveboating operations.
- (d) A diver begins to use diver-carried reserve breathing gas or the dive location reserve breathing gas.

- (e) When the scheduled work interval has expired.

**R 408.17941 Post-dive procedures; check of, and instructions to, diver.**

**Rule 7941.** An employer shall comply with all of the following requirements, which are applicable after each diving operation:

- (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 that is ready for use.
- (d) Alert the diver to the potential hazards of flying after diving.
- (e) Instruct the diver to remain awake and in the vicinity of the dive location for not less than 1 hour after a dive that requires the use of a decompression chamber.

**R 408.17942 Post-dive procedures; record of dive.**

**Rule 7942.** (1) All of the following information shall be recorded and maintained for each diving operation:

- (a) Names of dive team members, including the designated person in charge.
- (b) Date, time, and location.
- (c) Diving modes used.
- (d) General nature of the work performed.
- (e) Approximate underwater and surface conditions, such as visibility, water temperature, wind velocity, and current.
- (f) Maximum depth and bottom time for each diver.

(2) For each dive for which a decompression chamber is required, all of the following additional information shall be recorded and maintained:

- (a) Depth-time and breathing gas profiles.
- (b) Decompression table designation, including any modification.
- (c) The elapsed time since the last pressure exposure is less than 24 hours or the repetitive dive designation for each diver.

(3) For each dive in which decompression sickness is suspected or symptoms are evident, the following additional information shall be recorded and maintained:

- (a) A description of the decompression sickness symptoms, including the time of the onset of symptoms and the depth at which symptoms occurred.
- (b) A description and results of treatment.

**R 408.17945 Liveboating; conduct during certain conditions prohibited.**

**Rule 7945.** Diving operations that involve liveboating shall not be conducted during any of the following conditions:

- (a) With an inwater decompression time of more than 120 minutes.
- (b) Using surface-supplied air at depths deeper than 190 fsw, except that dives with bottom times of 30 minutes or less may be conducted to depths of 220 fsw.
- (c) Using mixed gas at depths of more than 220 fsw.
- (d) In rough seas with a wave height of more than 3 feet.
- (e) In other than daylight hours.

**R 408.17946 Liveboating; stoppage of propeller; use of device to prevent entanglement of hose in propeller; use of 2-way communication; standby diver; diver-carried reserve breathing gas supply required.**

**Rule 7946.** (1) The propeller of the vessel shall be stopped before the diver enters or exits the water.

(2) A device that minimizes the possibility of entanglement of the diver's hose in the propeller of the vessel shall be used.

(3) Two-way voice communication between the designated person in charge and the person who controls the vessel shall be used while the diver is in the water.

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

(5) A diver-carried reserve breathing gas supply shall be carried by each diver who is engaged in liveboating operations.

**R 408.17951 Equipment; record of modification, repair, test, calibration, or maintenance.**

**Rule 7951.** Equipment modification, repair, test, calibration, or maintenance service shall be recorded by means of a tagging or logging system and shall include the date and nature of the work performed and the name or initials of the person who performs the work.

**R 408.17952 Equipment; breathing gas supply hoses.**

**Rule 7952.** (1) Breathing gas supply hoses shall be in compliance with all of the following provisions:

- (a) Have a working pressure of not less than the working pressure of the breathing gas system.
- (b) Have a rated bursting pressure of not less than 4 times the working pressure.
- (c) Be tested initially and not less than annually thereafter to 1.5 times their working pressure.
- (d) Be tensile tested before being placed into initial services and after any repair, modification, or alteration by subjecting each hose-to-fitting connection to a 200-pound axial load and by making a visual examination for evidence of separation, slippage, or other damage to the assembly.
- (e) Be inspected before each diving operation for cuts, kinks, soft spots, or bubbles.
- (f) Have their open ends taped, capped, or plugged when not in use.

(2) Breathing gas supply hose connectors shall be in compliance with all of the following provisions:

- (a) Be made of corrosion-resistant materials.
- (b) Have a working pressure at least equal to the working pressure of the hose to which they are attached.
- (c) Be resistant to accidental disengagement.

**R 408.17953 Equipment; umbilicals.**

**Rule 7953.** Umbilicals shall be in compliance with all of the following provisions:

- (a) Be marked and labeled at 10-foot increments to 100 feet beginning at the diver's end and at 50 foot increments after 100 feet.
- (b) Be made of kink-resistant materials.
- (c) Have a working pressure that is greater than the pressure equivalent to the maximum depth of the dive relative to the supply source plus 100 psig.

**R 408.17954 Equipment; buoyancy control.**

**Rule 7954.** (1) Helmets or masks that are connected directly to the dry suit or other buoyancy-changing equipment shall be equipped with an exhaust valve.

(2) A dry suit or other buoyancy changing equipment that is not directly connected to the helmet or mask shall be equipped with an exhaust valve.

(3) When used for scuba diving, a buoyancy compensator shall have an inflation source that is separate from the breathing gas supply.

(4) Except when a diver is wearing a variable-volume suit, an inflatable flotation device which is capable of maintaining the diver at the surface in a face-up position and which has a manually activated inflation source that is independent of the breathing supply, an oral inflation device, and an overpressure relief device or exhaust valve shall be used for scuba diving.

**R 408.17955 Equipment; compressed-gas cylinders.**

**Rule 7955.** A compressed-gas cylinder shall be in compliance with all of the following provisions:

- (a) Be designed, constructed, and maintained pursuant to the applicable provisions of 29 C.F.R. §§1910.101 and 1910.169 to 1910.171, which are incorporated by reference pursuant to section 14 of Act No. 154 of the Public Acts of 1974, as amended, being §408.1014 of the Michigan Compiled Laws.
- (b) Be stored in a ventilated area and protected from excessive heat.
- (c) Be secured from falling.
- (d) Have shutoff valves that are recessed into the cylinder or protected by a cap, except when in use or manifolded, or when used for scuba diving.
- (e) Be subjected to internal inspection for rust and corrosion not less than annually.

**R 408.17956 Decompression chambers; operation; construction requirements.**

**Rule 7956.** (1) A qualified employee shall be available to operate a decompression chamber for not less than 1 hour after a dive for which a decompression chamber is required. The qualified employee may be a dive team member or another employee who is qualified to operate the decompression chamber.

(2) Necessary treatment tables, treatment gas that is appropriate to the diving mode, and sufficient gas to conduct treatment shall be available to a decompression chamber operator at the chamber location.

(3) A muffler on each decompression intake and exhaust line and the suction guard on the exhaust line shall be regularly inspected and maintained.

(4) A 2-way voice communication system shall be provided between the occupants of other separately pressurized compartments and a dive team member at the chamber location.

(5) A decompression chamber shall be maintained and operated to minimize sources of ignition and combustible materials in each compartment.

(6) A decompression chamber that is 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.

(7) The decompression chamber shall be a dual-lock and multiplace chamber and shall be located within 5 minutes' air time of the dive location.

(8) A decompression chamber that is manufactured after October 20, 1977, shall be built, stamped, and maintained in accordance with the provisions of ASME code, section VIII, 1974, and the addenda thereto through 1989, and the pvho-1, 1990 edition. The provisions are adopted in these rules by reference and may be inspected at the Lansing office of the Michigan department of consumer and industry services. Section viii of the ASME code and pvho-1 may be purchased at a cost as of the time of adoption of these rules of \$310.00 and \$97.00, respectively, by ordering from the American Society of Mechanical Engineers, 22 Law Drive, Box 2300, Fairfield, New Jersey 07007, or from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.

(9) A decompression chamber that was manufactured before October 20, 1977, shall be maintained in compliance with the code requirements in effect at the time it was built or with their equivalent.

(10) A decompression chamber shall be of dual-lock construction and shall be large enough to accommodate a diver and a person or persons to render treatment.

(11) A decompression chamber shall be equipped with all of the following:

- (a) An interior and exterior pressure gauge for each compartment that is designed for human occupancy.
- (b) A built-in breathing system that has a minimum of 1 mask per occupant.
- (c) A means to maintain the oxygen level in the chamber atmosphere below 25% by volume.
- (d) A viewport that allows all bunks to be seen from the exterior for their entire length.
- (e) Illumination that is sufficient to light the interior to allow viewing of the occupants, the reading of gauges by an occupant, and the operation of installed systems within each compartment.
- (f) A sound-powered telephone system or other emergency backup communication systems.
- (g) A means of operating all installed man-way locking devices from both sides of a closed hatch.
- (h) A capability to supply breathing mixtures at the maximum rate required by all occupants that is sufficient to maintain the interior atmosphere below 2% surface equivalent carbon dioxide by volume.
- (i) A means of overriding and controlling, from the exterior, all interior breathing and pressure supply controls.
- (j) Electrical equipment which is installed inside the chamber and which shall be explosion-proof.

**R 408.17957 Equipment; gauges and time keeping devices.**

**Rule 7957.** (1) Gauges which indicate diver depth and which can be read at the dive location shall be used for all surface-supplied dives.

(2) Each depth gauge shall be dead-weight tested or calibrated against a master reference gauge initially and every 6 months thereafter and shall also be tested when there is a discrepancy of more than plus or minus 2% of full scale between any 2 equivalent gauges.

(3) A timekeeping device shall be available and monitored at each surface-supplied dive location.

(4) A cylinder pressure gauge that is capable of being monitored by the diver during the dive shall be worn by each scuba diver.

(5) A timekeeping device shall be worn by each scuba diver in a position that can be monitored by the diver.

**R 408.17958 Equipment; weights and harnesses.**

**Rule 7958.** (1) Divers shall be equipped with a weight belt or assembly that is capable of quick release except when heavy gear is worn.

(2) Except when heavy gear is worn or except in scuba diving, each diver shall wear a safety harness that has all of the following:

- (a) A positive-buckling device.

- (b) An attachment point for the umbilical to prevent strain on the mask or helmet.
- (c) A lifting point to distribute the pull force of the line over the diver's body.

**R 408.17961 Recordkeeping; recording and reporting injuries and illnesses.**

**Rule 7961.** (1) An employer shall record and report occupational injuries and illnesses pursuant to the department of consumer and industry services requirements of Part II. Recording and Reporting of Occupational Injuries and Illnesses, being R 408.22101 et seq. of the Michigan Administrative Code.

(2) In addition, an employer shall record the occurrence of any diving-related injury or illness that requires any dive team member to be hospitalized for 24 hours or more. The record shall specify the circumstances of the incident and the extent of any injuries or illnesses.

**R 408.17962 Recordkeeping; availability of records.**

**Rule 7962.** (1) Upon the request of the director of the department of consumer and industry services, an employer shall make available for inspection and copying any record or document that is required by these rules.

(2) Upon the request of any employee, former employee, or authorized representative, an employer shall make any record or document which is required by these rules and which pertains to the individual employee or former employee available for inspection and copying.

(3) Records and documents that are required by these rules shall be retained by the employer for the following periods:

- (a) Dive team member physician reports – 5 years.
- (b) Safe practices manual – current document only.
- (c) Depth-time profile – until completion of the recording of the dive or until completion of the decompression procedure assessment where there has been an incident of decompression sickness.
- (d) Recording of dive – 1 year, except 5 years where there has been an incident of decompression sickness.
- (e) Decompression procedure assessment evaluations – 5 years.
- (f) Records of hospitalizations – 5 years.
- (g) Equipment inspections and testing records – current entry or tag or until equipment is withdrawn from service.



Michigan Occupational Safety and Health Administration  
 PO Box 30643  
 Lansing, Michigan 48909-8143  
 Ph: 517.322.1845

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