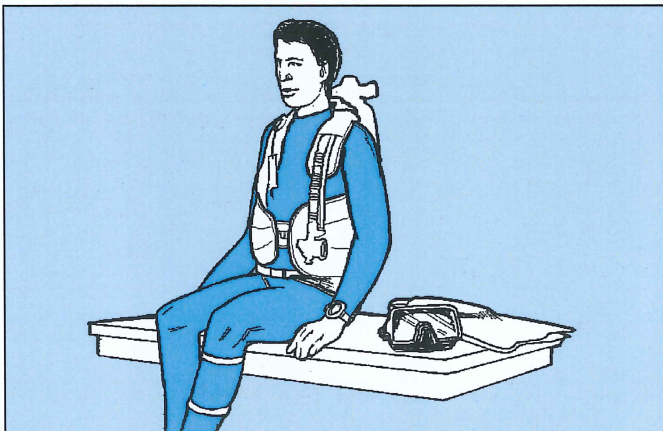


Dive

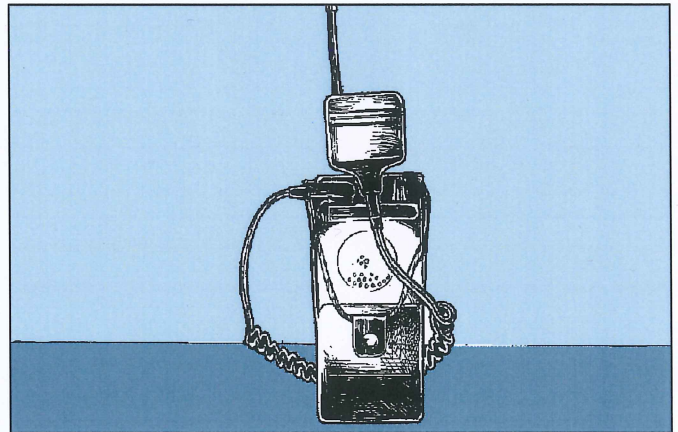
Seafood harvesters who use scuba or surface-supply diving gear **must** be trained in the equipment and procedures necessary for their particular diving activities. Divers **must** meet the minimum requirements of CSA Standard Z275.4: Competency Standard for Diving Operations. By law, a copy of the WorkSafeBC Occupational Health and Safety Regulation **must** be on hand at all dive sites. For all diving operations, minimum crew requirements **must** be followed, and a diving supervisor **must** be on-site and in control.

Other dive requirements include the following:

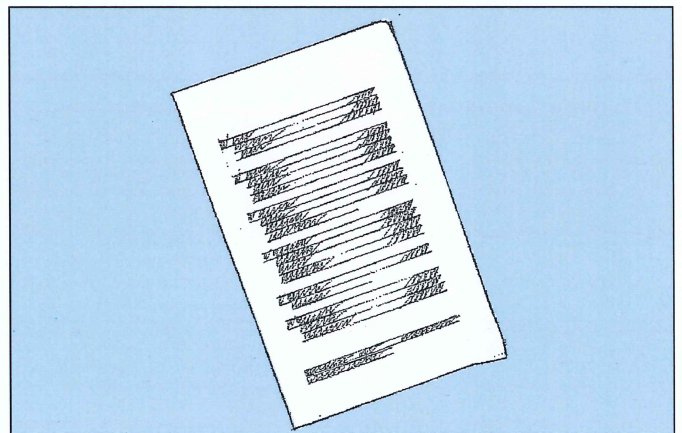
- Owners and masters **must** ensure that all divers have adequate training and know how to use available diving gear. An original or notarized copy of competency documents **must** be available at the dive site.
- Owners and masters **must** ensure all divers have current medical certification prior to entering the water. Certification **must** be from a physician knowledgeable and competent in diving medicine. The original or a copy of the medical certificate **must** be available at the dive site.



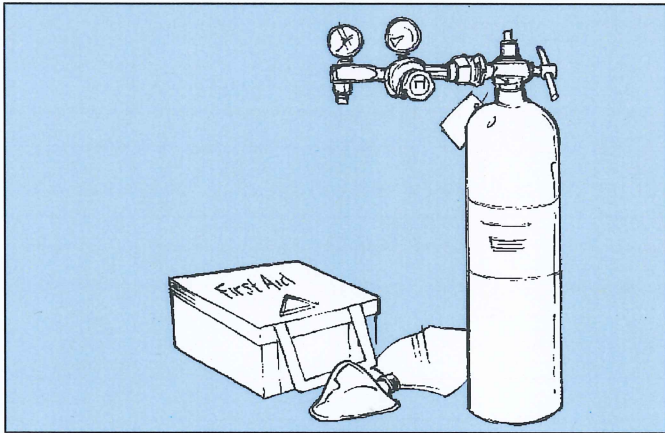
- When diving is in progress, a dressed-in, standby diver **must** be on the dive site at all times to give emergency aid, if needed. The standby diver **must** be able to enter the water within one minute.



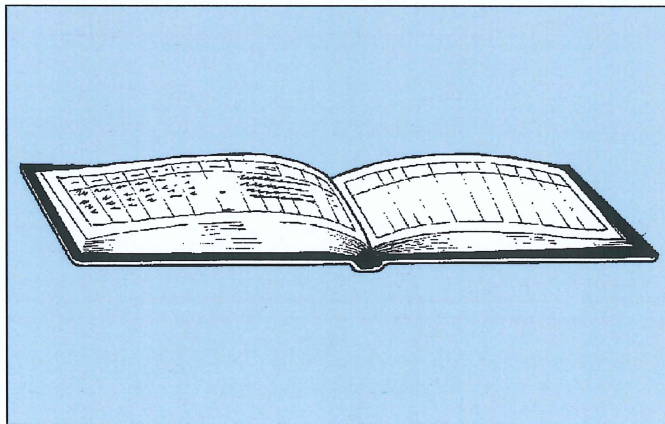
- Each dive site **must** have a radio or a phone to allow voice contact with emergency services.



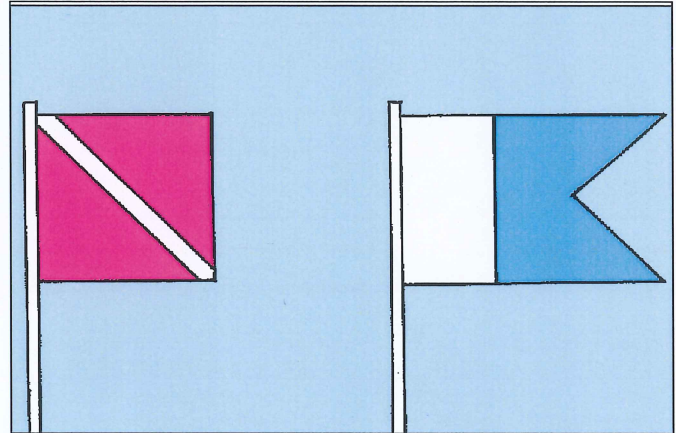
- Each dive site **must** have an up-to-date list of the locations and telephone numbers of nearby facilities with recompression chambers, and numbers for emergency services such as the Canadian Coast Guard, medical airlifts, and doctors knowledgeable and competent in diving medicine.



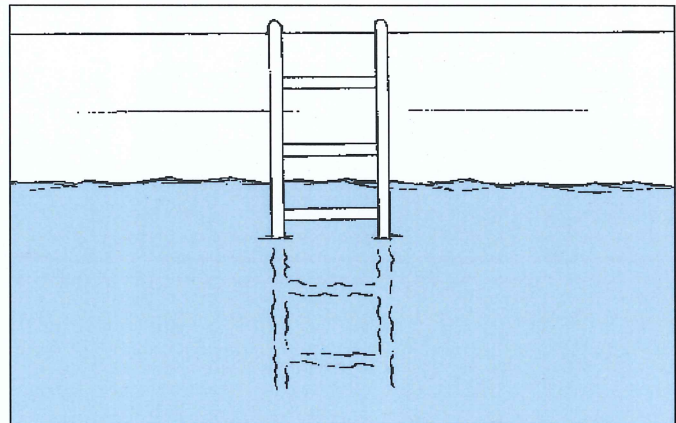
- Dive sites **must** have all necessary first aid equipment, including sufficient oxygen to reach emergency services. Each diver **must** be qualified in CPR, oxygen therapy, and dive accident management. CSA Standard Z275.4 for diving operations requires each diver to have a current occupational first aid ticket.



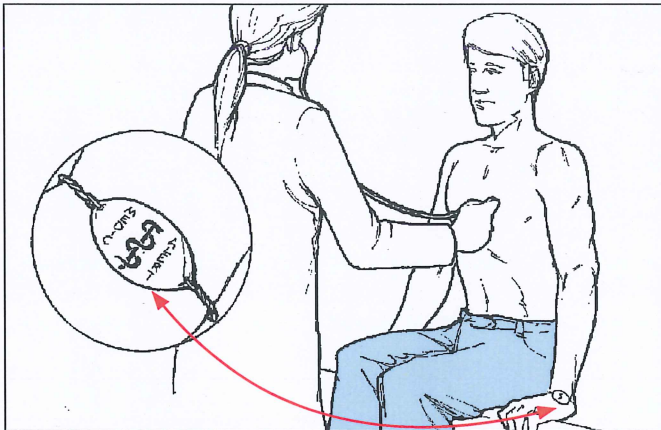
- Both the diving supervisor and the diver **must** keep separate diving logs. The log books **must** include the type of apparatus and gas medium, times, maximum depth, surface interval, decompression tables used, date, and remarks. Both logs **must** be on-site and the diving supervisor's log **must** be filed with the employer after the dive.



- In navigable waters, the recognized diver's flag (left) **must** be flown or displayed. Some authorities may require vessels engaged in diving operations to show the International Code "alpha" flag (right). Show diving flags **only** while diving operations are in progress. Remove them when diving has stopped and there are no divers in the water.



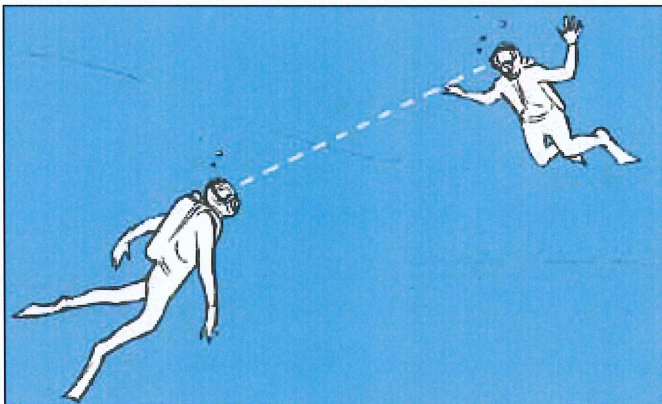
- There **must** be a safe means for divers to enter and exit the water, usually a ladder. The ladder **should** extend far enough into the water so that the diver can easily climb back onto the boat. If the ladder is too short, the diver may be injured getting aboard.



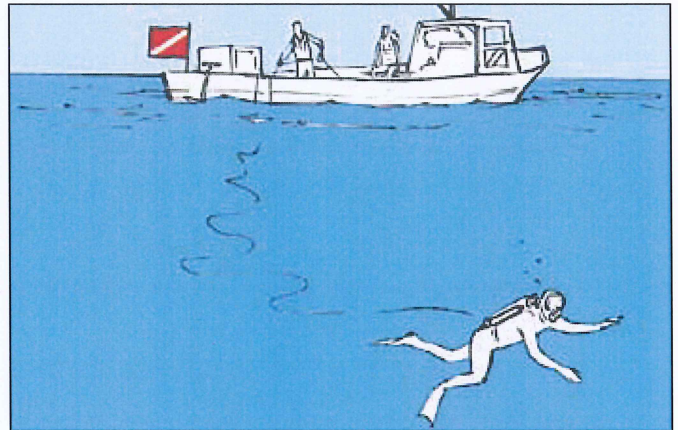
- Divers aged 40 and over **must** be examined at least once every year by a doctor knowledgeable and competent in diving medicine. Divers aged under 40 **must** be examined every two years. Divers **must** wear a medical alert tag for at least 24 hours after each dive. These tags will state that the wearer may be susceptible to diving illnesses such as decompression sickness.

Scuba diving

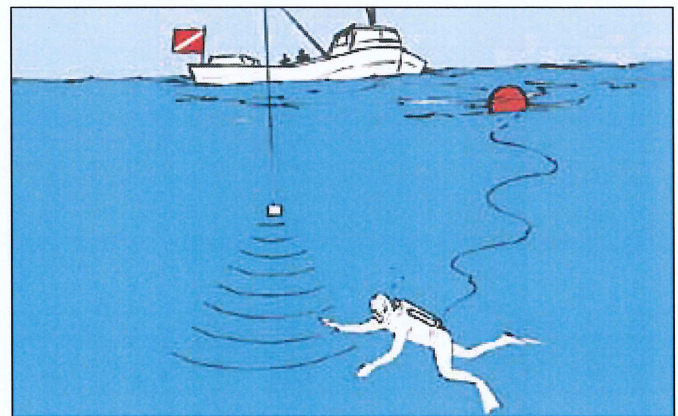
Getting trapped under water and rising too fast to the surface are among the most dangerous hazards for scuba divers. Scuba diving requirements include the following:



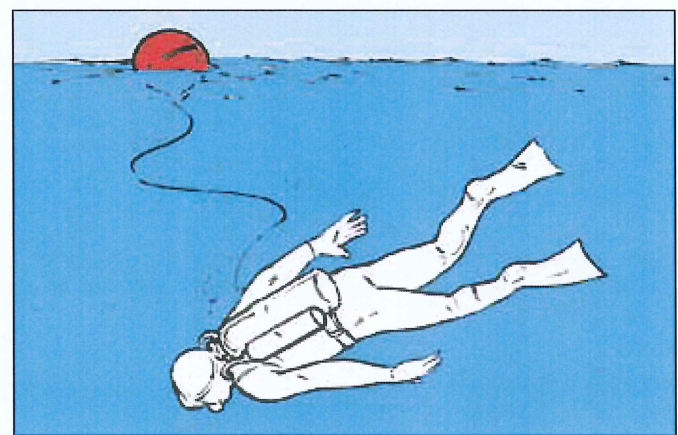
- Each diver using scuba **must** employ the buddy system and have visual communication or physical contact at all times, or



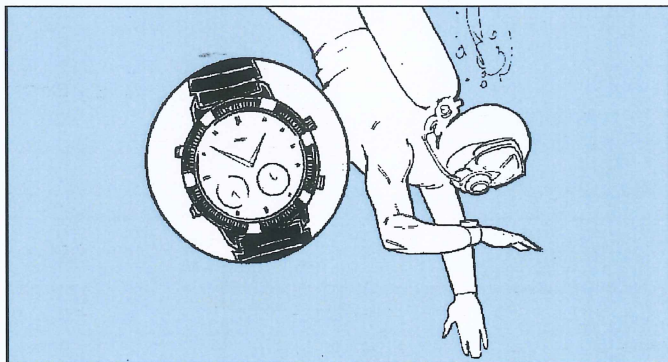
- Each diver **must** be tended on a lifeline by a diver's tender, or



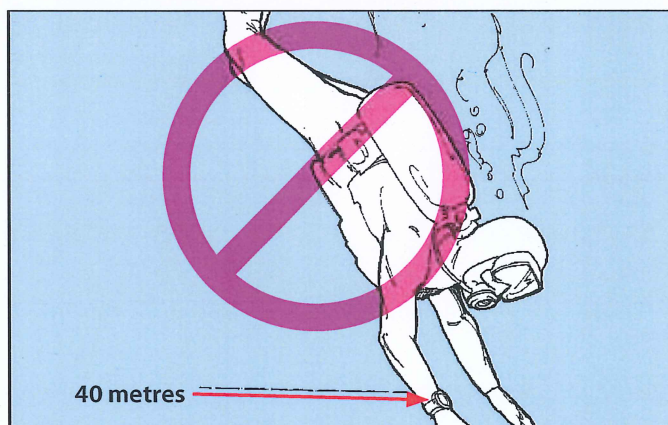
- Each diver **must** be in constant audio communication with the surface, or



- Each diver **must** be tethered to a float that is constantly visually monitored.



- Divers **must not** stay at any depth longer than the maximum time planned.



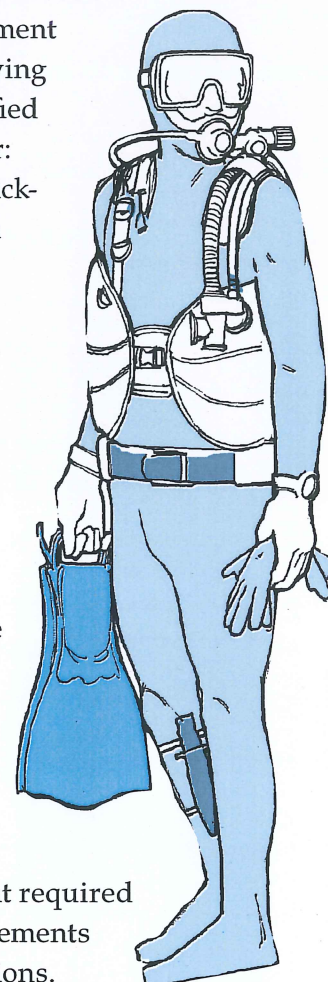
- Scuba divers **must not** dive deeper than 40 metres (130 feet).



- Scuba cylinders **must** be visually inspected internally every year. Cylinders **must** be hydrostatically tested every five years. Inspection and testing results **must** be documented in an equipment log book and **must** be available at the dive site.

At a minimum, scuba divers **must** use the following equipment as appropriate to the diving conditions and as specified by the diving supervisor:

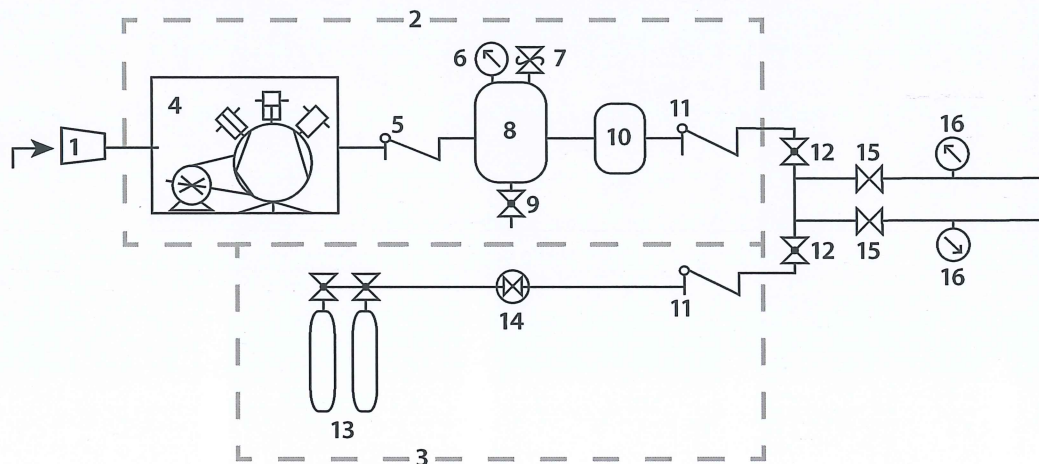
- Scuba unit with a quick-release harness and a pressure gauge
- Face mask
- Swimming fins
- Diving knife
- Depth gauge
- Exposure suit
- Inflatable buoyancy device
- Underwater watch with an elapsed-time indicator
- Weight belt with a quick release buckle



Scuba divers **must** also use any other equipment required by WorkSafeBC. Requirements vary with diving conditions.

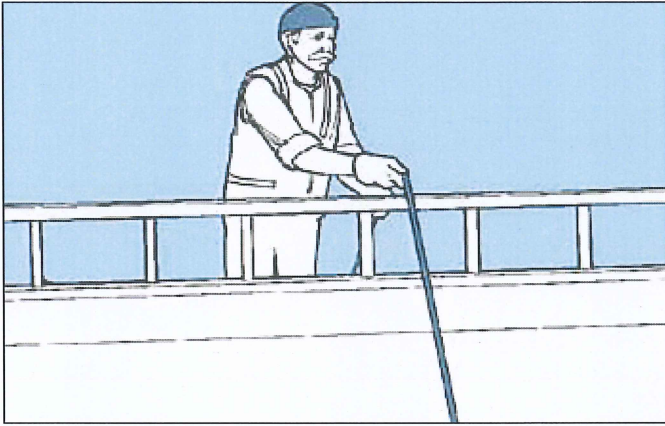
Surface-supplied diving

Like all divers, surface-supplied divers **must** know their depth and time limits to ensure safe diving. The following is a schematic of a low-pressure compressed breathing air system:

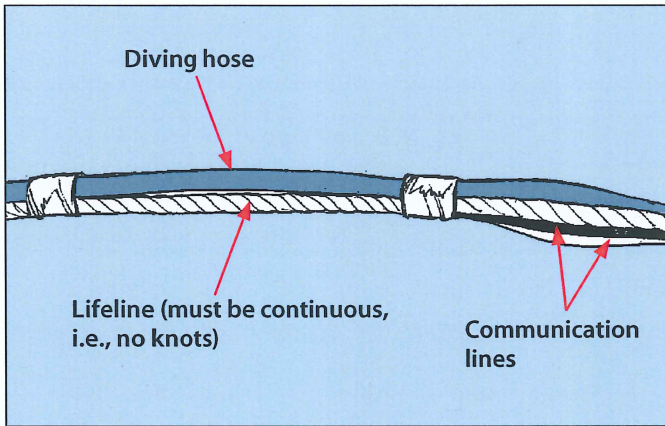


Breathing air system legend and requirements:

1	Compressor intake	Must be located so the breathing medium will not be contaminated by gasoline vapours, engine exhausts, or other impurities.
2	Primary air supply	Consists of the low pressure (LP) compressor, check valve, volume tank with pressure gauge, relief valve and drain cock, air filter, and another check valve.
3	Reserve air supply	Consists of high pressure (HP) cylinders, reducing regulator, and check valve.
4	Low pressure compressor	Supplies air to the volume tank and breathing air filter.
5	Check valve	Is fitted to the volume tank. Air from the LP compressor must be discharged through the check valve into the volume tank.
6	Pressure gauge	Is fitted to the volume tank to monitor pressure within the tank.
7	Relief valve	Is fitted to the volume tank to ensure the tank is not over pressurized.
8	Volume tank	Must have a capacity of at least 100 litres (22 imperial gallons).
9	Drain cock	Is capable of draining any excess moisture.
10	Breathing air filtration system	Consists of at least a water trap, a particulate filter, and a chemical vapour absorbent. Air supplied from a volume tank must be passed through this system.
11	Check valve	Stops the breathing supply set at a higher pressure from back pressuring the opposite breathing supply.
12	Isolation valve	Isolates the primary and reserve air supply from each other.
13	Reserve supply (high pressure air)	Must provide enough breathing mixture to enable the diver to return to the surface and undergo all "in water" decompression.
14	High pressure reducing regulator	Reduces the air pressure from HP to LP.
15	Breathing gas lines	Are attached to each diver's air or mixed gas line and must be fitted with a valve that is: <ul style="list-style-type: none"> • Readily accessible • Guarded against interference • Clearly marked to identify the diver it services • Under the care and control of the diver's supervisor or diver's tender.
16	Pressure gauge	Is fitted to each diver's air or mixed gas line and must indicate the pressure being delivered to the diver. It must be located downstream of the diver's supply valve so that the dial and figures are clearly visible to the diver's tender.



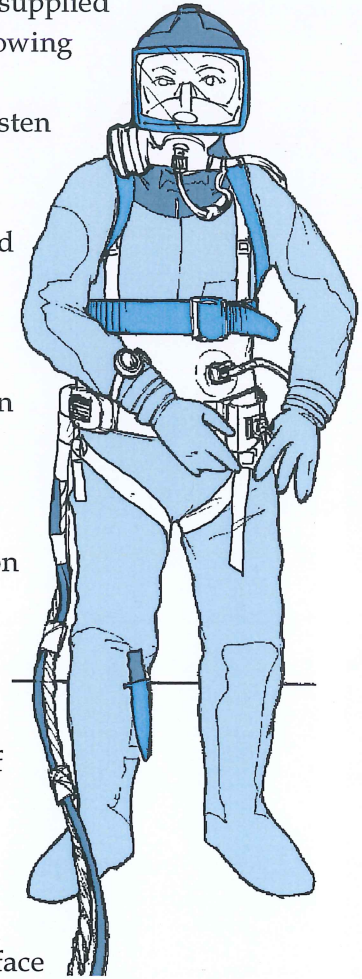
- Surface-supplied divers **must** have a diver's tender.



- Surface-supply hoses **must** be a commercially manufactured twisted bundle or attached to lifelines to prevent undue stress on the supply hose or the helmet. Lifelines **must** be 16 millimetres (5/8 inch) in diameter, and made of polypropylene or other equivalent synthetic fibre. Divers **must** use only hoses designed and suitable for surface-supplied diving.

At a minimum, surface-supplied divers **must** use the following gear and equipment:

- Boots designed to fasten securely to the foot
- Weight belt worn outside of all gear and **must** be able to be released to achieve positive buoyancy
- Non-return valves on all surface-supplied diving helmets and masks, which are checked for operation prior to each dive
- Dive compressor equipped with a non-return valve on the upstream side of the compressor
- Diving knife
- Bailout system with enough breathing gas to reach the surface



Surface-supplied divers **must** also use any other equipment required by WorkSafeBC. Requirements vary with diving conditions.

Tips from fishermen:

- Make sure flags (dive and alpha) are hoisted and visible.
- Use oversize anchor and chain, and enough chain length to keep the anchor on the bottom for diving operations.
- Always check the diver's reserve and make sure the diver can turn it on.

