

US EPA ARCHIVE DOCUMENT

**EPA Region 10 GUIDELINES FOR USING Diver Propulsion Vehicles
November 10, 2008**

Pre-Dive:

1. All divers shall read the Seasprint U/W Vehicle Instruction Manual before operating the units. Thereafter, the manual should be reviewed as necessary before operating the diver propulsion vehicles (DPVs).
2. Transport the units with the battery wires unplugged. Connect the wires when the units are placed on the boat or at the dive site.
3. Do not carry the DPVs by the side handles or via the propeller shroud; the motor switches may be accidentally engaged; instead carry the DPVs by their top handles like a SCUBA tank.
4. Never operate the motor out of the water for more than 10 seconds.
5. The diver and tender shall insure that hoses, straps, dive bags, lines, etc. have been properly stowed so as not to become fouled in the propeller.
6. Keep the motor switches locked while the units are being handled on the boat including when they are placed in the water for diver use. The diver will unlock the motor switch and lock it at the termination of the dive.
7. Charge the batteries before use to ensure maximum charge for dive operations.
8. Extra batteries and the chargers should be brought aboard the boat in case charging is needed between dives and/or battery changeout.
9. Divemaster shall remind divers that the DPV motor interferes with compass operation by as much as 30 degrees. Reliable compass readings only occur several seconds after the DPVs are off. Divers should stop intermittently to take a corrected compass bearing, or alternately follow line transects.

During the dive:

8. Never use the DPVs to ascend or descend. Always swim the units up or down.
9. A reconnaissance dive may be required if reduced in-water visibility, obstacles, potential entanglements, or other contra-indicators for using the DPVs exist at the dive site.
10. Do not descend faster than 70 ft/min or ascend faster than 30 ft/min. The diver may have to make a conscious effort to clear his/her ears and maintain normal breathing during descent and ascent.
11. A change in the sound of the motor or noticeable power reduction occurs when the battery becomes fully discharged. Do not continue to operate the DPV as this will inevitably damage the lead acid batteries.
12. Wireless communication should be set on VOX (Voice Operated Transmission) or divers must stop the DPVs while transmitting messages via push-to-talk. Wireless

communications or "tank bangers" are desirable when using DPVs as buddy separation can be problematic. A means of communication with your buddy that you have stopped significantly enhances safety. This does not replace consistent visual checks of your buddy to verify they are "ok."

13. Before handing the DPVs to the tenders after the dive, divers must lock the safety.

Post dive:

14. The main O-rings to the battery housing must be removed, lightly lubed with silicone grease, placed in a ziplock bag and stored in the battery housing. This prevents damage by ozone and o-ring compression during long term storage.

15. The propeller unit must be removed and checked for water intrusion, cleaned and dried before replacing. To remove propellers, unlock the black stops on the fin of the propeller guard, align the yellow dots on the propeller casing and the black grooved locking ring, and firmly pull the propeller from the DPV.

16. Recharge the batteries within 24 hrs of use and once every three months when not in use.