



EMERGENCY PROCEDURES FOR KIRBY MORGAN DIVING EQUIPMENT





KIRBY MORGAN DIVE SYSTEMS INCORPORATED MAINTENANCE AND REPAIR TECHNICIAN TRAINING



- Only selected Dive Lab trained Technicians are authorized to teach the Technicians Course
 - Only Dive Lab authorized Technicians may teach the KMDSI Operator/User Course
 - Course curriculum must be presented within the guidelines set-up in the repair technician's guide and slide show
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- This presentation is available at no charge from www.divelab.com for the use of Kirby Morgan Customers & users of Kirby Morgan Diving Equipment ONLY
 - **THIS MATERIAL MAY NOT BE CHANGED OR MODIFIED WITHOUT PERMISSION FROM DIVE LAB**



EMERGENCY PROCEDURES (EPs)



EPs listed are primarily intended as the diver's **first** response to a situation or event that could be life threatening if swift immediate action is not taken



EMERGENCY PROCEDURES



All emergency procedures assume that the helmet in use has:

- Two independent breathing supplies to the divers umbilical, one in use, and one in standby
- A fully functional emergency gas supply (Bail-Out) that is lined up to the side block so that only the side block emergency valve needs to be opened to supply gas to the helmet
- A surface supply system that is capable of delivering the required pressure and volume to satisfy the divers respiratory requirements



EMERGENCY PROCEDURES



All Emergency Procedures Assume That:

- Persons are professionally trained in the helmets use, set-up, adjustment procedures, as well as all applicable user level maintenance
- All persons involved in the diving operations have memorized the emergency procedures and protocols
- All topside support personnel are trained and qualified to perform the duties for which they are being employed



EMERGENCY PROCEDURES



Each organization / company should develop policy, emergency, and operational procedures for their particular supply systems in accordance with:

- Governing regulations
- Industry standards
- Consensus (ADC, IMCA)
- Manufacturer of the equipment



EMERGENCY PROCEDURES



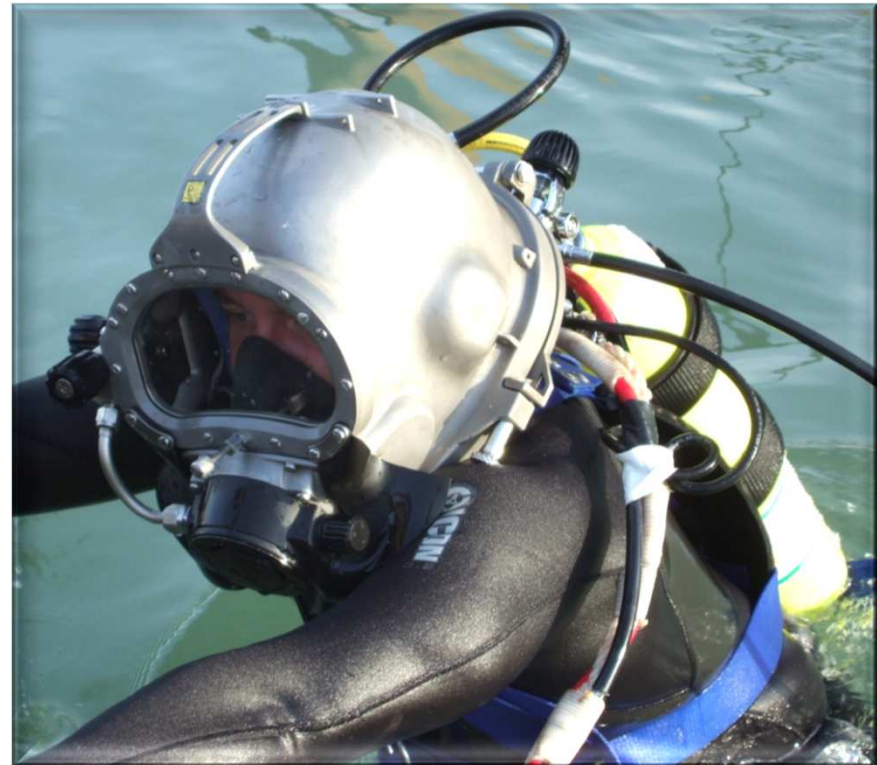
- Guidelines that dictate when or how a diver should abort the dive must be established by the organization /company
- Guidelines need to be based on governing regulations, industry and consensus guidelines
- In some cases, the diver may be the one making the decision to abort and in other cases, (i.e. deep air, mixed gas, decompression obligation) the decision might be made by the topside supervisor



EMERGENCY PROCEDURES



- All users must have a plan, protocol, and all members of the dive team must know it
- Overall responsibility rests with the Diving Supervisor





EMERGENCY PROCEDURES



The following emergency procedures list only
what the diver should do

Loss of Communications

- Revert to line-pull signals and abort the dive when directed by topside or in accordance with organizational / company protocol



EMERGENCY PROCEDURES



Loss of Umbilical Gas Supply

- Diver shifts to the man worn emergency gas system (EGS), notify topside of gas loss, if communications are still functional or use line pull signals
- Diver checks umbilical to ensure its clear, surface slowly if ascent line is available or standby to surface (IAW) organizational or company protocol
- If surface supply is restored, the diver should shift back to the primary source by closing the EGS valve on the side block, then notify topside and abort as directed



EMERGENCY PROCEDURES



Severed or Damaged Gas Supply Umbilical

- Diver opens EGS valve on the helmet side block
- If communications are functional, notify topside
- Check umbilical to ensure its clear and abort dive when directed from topside or IAW organizational or company protocol



EMERGENCY PROCEDURES



Demand Regulator Fails (no demand function)

- Crack open steady flow defogger valve 1/4 -1/2 turn, if still no air, diver opens EGS valve then and open and close steady flow as necessary, notify topside
- Back out counter clockwise 1-2 turns on regulator adjustment knob, if demand function resumes, notify topside then try the normal demand supply by securing the EGS valve and steady flow



EMERGENCY PROCEDURES



Demand Regulator Fails (no demand function)

- If normal demand mode function does not function, go back on the EGS clear the umbilical and stand by to abort
- Abort IAW instructions from topside



EMERGENCY PROCEDURES



Demand Regulator Fails (no demand function)

- If the diver has to stay on the EGS while using the steady flow, the diver should open steady flow during inhalation only and close during exhalation to conserve air
- Keep in mind, in this situation, the diver stops everything and just concentrates on getting to a place where normal breathing can be restored



EMERGENCY PROCEDURES



Severe Demand Regulator Free Flow

- Diver adjusts regulator adjustment knob in (clockwise) until free flow stops or diminishes
- Free flow does not stop: diver adjusts regulator in fully to lessen severity and augments supply as necessary using the steady flow/ defogger valve
- Notify topside, clear umbilical and abort dive (IAW) organizational or company protocol and stand by to abort dive



EMERGENCY PROCEDURES



Major Water Leakage Into the Helmet

- For all KMDSI Helmets and Band Masks except the SL 27 helmet, maintain the helmet in a face forward slight down position and use the steady flow defogger as necessary to dewater the helmet
- The SL 27 helmet has the dewatering valve on the lower left side of the helmet, the diver should tilt the his head so the left side of the helmet is lower allowing all water to pool in the lower left side, then use the steady flow defogger $\frac{1}{4}$ to $\frac{1}{2}$ turn open to dewater the helmet



EMERGENCY PROCEDURES



Major Water Leakage Into the Helmet

- Notify topside, clear umbilical and abort dive (IAW) organizational or company protocol and stand by to abort dive



EMERGENCY PROCEDURES



SUMMARY

- All surface supply systems must be capable of supplying at least two different sources of breathing gas to the diver
- The diver must always have a fully functional man worn EGS system that can get the diver to the surface or to a point where breathing supply can be re-established
- Cases where the hazard of the dive is such that the umbilical might become entangled or pinned, a spare umbilical and the proper wrenches must be available for emergency replacement by the standby diver



EMERGENCY PROCEDURES QUESTIONS

