

 <p>Delran Fire Department 900 Chester Avenue Delran New Jersey 08075</p>	<b>Standard Operating Procedures</b>	
	<b>Subject: Ice/Cold Water Rescue</b>	
	<b>SOP #: 100-2</b>	<b># of Pages: 6</b>
	<b>Effective Date: 02-03-2009</b>	<b>Revision Date:</b>
	<b>Approved By: Chief Kevin Devlin</b>	

**1.0 PURPOSE:**

- 1.1 The purpose of these procedures is to provide a guideline for conducting all ice and cold-water rescue and recovery operations safely and proficiently within the Delran Fire Department's response area and the surrounding communities in which Delran Fire Department assist.

**2.0 SCOPE:**

- 2.1 This guideline shall apply to all Delran Fire Department personnel operating in a training or rescue incident. This document establishes:
- 2.1.1 Training levels and responsibilities
  - 2.1.2 Equipment Set-up
  - 2.1.3 Rescue Operations
  - 2.1.4 Rehabilitation
  - 2.1.5 Other Rescue Considerations
  - 2.1.6 Termination of incident
  - 2.1.7 Deviation of Policy

- 3.0 PROCEDURE:** Upon receipt of an alarm for a cold water or ice rescue emergency, the Delran Fire Department will respond with all available resources, including apparatus, marine units, personnel, cold water rescue dry suits, personal flotation devices, water rescue rope, ice rescue sleds, and cold water rescue slings.

**4.0 TRAINING LEVELS AND RESPONSIBILITIES:**

- 4.1 Awareness Level- Personnel certified to the awareness level issued by an accredited training group or the Delran Fire Department have successfully completed all classroom material, indoor practical training, and completed a passing score on the final test to obtain this certification. Personnel possessing this level of certification are responsible to serve as a "tender" to prepare a technician rescuer for operations, including assisting a technician with donning a cold water rescue dry suit, properly donning a harness on the technician, and supplying any other equipment the rescuer may need. During rescue operations, personnel should monitor operations to locate any hazards or potential hazards and report them to the incident commander immediately.
- 4.2 Operations Level- Personnel certified to the operations level issued by an accredited training group or the Delran Fire Department have successfully completed all classroom material, indoor practical training, outdoor training

shore operations, and completed a passing score on the final test to obtain this certification. Personnel possessing this level of certification as responsible to serve as a "tender" to prepare a technician rescuer for operations, including assisting a technician with donning a cold water rescue dry suit, properly donning a harness on the technician, and supplying any other equipment the rescuer may need. Operations level team personnel are responsible for securing the appropriate shore tagline to the appropriate place on the rescuer depending on the type of rescue being performed. Operations level team personnel are responsible for manning the taglines at all times and monitor hand signals and orders from the rescuers. During rescue operations, personnel should monitor operations to locate any hazards or potential hazards and report them to the incident commander immediately.

- 4.3 Technician Level- Personnel certified to the technician level issued by an accredited training group or the Delran Fire Department have successfully completed all classroom material, indoor practical training, outdoor training shore operations, in-water/on-ice rescue operations and completed a passing score on the final test to obtain this certification. Yearly re-recertification training is also mandatory to remain "Technician" level in the Delran Fire Department. Technician level team personnel are responsible for donning a cold water rescue dry suit for any reported victims in any type of water during all times of the year while en route to the incident. Once the suit is donned the technician must insure that they are properly connected to a shore rope line before working around or entering any body of water or ice. The technician shall complete the rescue as safe as possible and report and problems or hazards to the incident commander as soon as possible

## **5.0 UPON ARRIVAL**

- 5.1 The first arriving apparatus or officer on the scene will be responsible for implementing the Incident Command System per the Delran Fire Department standard operating procedures. The Incident Commander should begin a size-up that includes:
  - 5.1.1 Secure any witnesses. Re-locate witnesses to a warm area such as a chiefs vehicle, fire apparatus, or ambulance. This will help in identifying victim(s) and the last known location of the victim(s).
- 5.2 Assess the need for additional resources such as personnel or equipment. If resources are needed or could be needed, command should request them immediately to prevent a delay in operations. The following shall be considered:
  - 5.2.1 Number of basic life support Units(BLS)
  - 5.2.2 Ascertain the need for advanced life support(ALS)
  - 5.2.3 Aeromedical Units
  - 5.2.4 Police units for crowd and traffic control
  - 5.2.5 Ascertain the need for a dive team.
  - 5.2.6 Marine units
  - 5.2.7 Any other services determined by the incident commander.

- 5.3 Assess the hazards. Command should assign an individual as the safety officer. The safety officer will be assigned to survey the scene and identify any hazards present and have them mitigated as soon as possible. All personnel operating on the scene shall be notified of any hazards that can not be secured. Some hazards associated with ice and water rescue include volume and velocity of water, hydraulic effects, floating debris in water, other watercrafts in water, temperature of water, and depth of water.
- 5.4 Decide if operations will be conducted in a rescue or recovery mode based on the conditions and hazards present to the rescuers and time of the initial immersion of the victim. The following recommendations listed below shall be taken into consideration but can be overturned by the incident commander of the incident.
- 5.4.1 If the water temperature is seventy(70) degrees Fahrenheit or lower, rescue efforts shall be carried out for ninety(90) minutes from the time of the initial 911 call.
  - 5.4.2 If the water temperature is above seventy(70) degrees Fahrenheit, rescue efforts shall be carried out for sixty(60) minutes from the time of the initial 911 call.
  - 5.4.3 After these time frames, switch to a recovery operation.
- 5.5 Establish an action plan as soon as possible. The plan shall be communicated to all personnel involved in the rescue operation.

## **6.0 RESCUE OPERATIONS**

- 6.1 All personnel working and operating within fifteen(15) feet of the water and/or ice shall be equipped with a United States Coast Guard(USCG) approved type III personal flotation device, hand protection, eye protection and head protection. Firefighters should not utilize turn-out gear during water operations due to the safety hazard if the turnout gear becomes submerged and becomes extremely heavy. If a jacket is worn, the personal flotation device must be secured underneath of the jacket
- 6.2 Rescue operations should be conducted from a low-risk to a high-risk order:
- 6.2.1 TALK- Talk the victim into self-rescue. Make verbal contact with the victim as soon as possible. Talking to the patient will help reassure the victim and help determine the victim's condition and level of consciousness. Due to hypothermia, a victim might not be able to communicate verbally but will be able to hear and understand orders. The victim should be asked simple questions such as, "what is your name", "how old are you", "where do you live", and "are you injured". If possible, the victim can be talked into swimming to shore or assisting the rescuers with his/her own rescue. The victim should be advised to kick their feet to keep themselves above water.
  - 6.2.2 REACH- If the victim is close enough to a shore, dock, etc, the rescuer should extend an object such as a water rescue pole or pike

pole to remove the victim from the hazard. The rescuer should be attached to land using a tagline to assure their safety.

6.2.3 THROW- If the victim is too far out in the water or ice to reach, rescuer(s) should attempt to make contact by throwing a rescue rope bag or some piece of positive flotation device. The victim can then be pulled from the hazard by rescue personnel. Rescue personnel should be positioned downstream in case water currents change the location the victim(s).

6.2.4 GO- Once all the above attempts have failed, command will initiate a plan to place rescuers in the water to perform an extrication. This is a very high-risk operation. Only rescue personnel possessing a "Technician" certification issued by Lifeguard Systems or Delran Fire Department, and has completed their mandatory yearly re-certification training, shall enter the water to perform a rescue.

### 6.3 Shore Operations:

6.3.1 All operations and awareness level personnel will assist with monitoring conditions during the rescue and report any hazards or possible hazards to the incident commander or safety officer

6.3.2 A minimum of three(3) personnel should be line tenders on each rope line that is secured to a rescuer. Tenders under no circumstances, are to leave rope lines unattended without getting relief from another tender on the rope line

6.3.3 Tenders shall monitor the rescuer progress and monitor communications given by the rescuer. The rescuer will use hand signals to communicate with tenders. These hand signals include:

6.3.3.1 Arm straight up with circling motion. This signal indicates to bring rescuer to shore. Tenders should provide even and steady tension on line while bringing rescuer and possible victims to shore or safe area.

6.3.3.2 Arm straight up with fist. This signal indicates tender to stop feeding rope

6.3.3.3 Raising and lowering arm with elbow locked. This signal indicates to give more slack to rescuer

### 6.4 On-Ice Rescue Operations:

6.4.1 Prior to rescuers entering onto the ice, an action plan should be discussed to all rescuers, including specific tasks and objectives, hazards, and alternate plans.

6.4.2 All rescuers entering onto the ice must be first secured to a safety rope. If the rescuer is entering the ice without an ice rescue sled, the rope must be attached to the harness ring on the back of the rescuer. If the rescuer is entering the ice utilizing a ice rescue sled, the rope must be secured to the tether on the bottom of the sled and the rescuer tether strap on the top must be secured to harness ring on the front of the rescuer.

- 6.4.3 An ice rescue sling will be worn by the rescuer to provide positive buoyancy for the victim once it is installed. Depending on the number of victims, many slings can be taken out onto the ice
- 6.4.4 Other equipment that should be utilized and taken with the rescuer include: Ice awls, anti-slip soles, shears, knife, whistle, and ice pole.
- 6.4.5 When entering onto the ice surface, the rescuer should sound the ice using an ice pole to insure a solid walking surface. If at any time the surface begins to become unsafe or unstable, the rescuer should resort to a kneeling or prone position and travel using the ice awls. All rescuers will be in a kneeling or prone position whenever they are within 15 feet of the victim or entry point.
- 6.4.6 While traveling out to the victim(s), the rescuer should continuously talk to the victim in order to determine their health status and possibly perform a self-rescue out of the water.
- 6.4.7 Rescuers should advance from the side of the entry point to ensure rescuer safety
- 6.4.8 Rescuer will establish positive buoyancy to all victims if possible
- 6.4.9 If there is more than one victim, the rescuer will quickly triage victims and determine the order in which they will be extricated.
- 6.4.10 Once the victim is extricated, transport immediately to EMS to provide patient care.

#### 6.5 In-Water Rescue Operations:

- 6.5.1 Prior to rescuers entering the water, an action plan should be discussed to all rescuers, including specific tasks and objectives, hazards, and alternate plans.
- 6.5.2 All rescuers entering the water must be first secured to a safety rope. The rope must be attached to the ring on the harness on the back of the rescuer
- 6.5.3 An ice rescue sling will be worn by the rescuer to provide positive buoyancy for the victim once it is installed. Depending on the number of victims, many slings can be taken into the water.
- 6.5.4 While traveling out to the victim(s), the rescuer should continuously talk to the victim in order to determine their health status and possibly perform a self-rescue out of the water.
- 6.5.5 Rescuer will establish positive buoyancy to all victims if possible
- 6.5.6 If there is more than one victim, the rescuer will quickly triage victims and determine the order in which they will be extricated.
- 6.5.7 Once the victim is extricated, transport immediately to EMS to provide patient care.

## 7.0 REHABILITATION

- 7.1 A unit assigned to rehabilitation shall be established by the EMS leader, which will provide heat and shelter to personnel operating at the scene.

7.2 Rest and medical monitoring of all personnel will be mandatory at regular intervals during the incident and declared by the EMS leader, incident commander, or safety officer.

## **8.0 OTHER RESCUE CONSIDERATIONS**

8.1 Animal rescues are at the discretion of the Incident Commander, and should only be attempted if the safety of rescuers can be assured. Whenever possible an animal snare should be used to ensure the safety of the rescuer. Animal control should be contacted when it is determined the incident involves the rescue of an animal.

8.2 All operations will be performed by trained personnel who are familiar with and physically capable of performing the duties and tasks required.

8.3 Whenever possible, a back-up team shall be established while rescuers are performing a rescue.

## **9.0 TERMINATION OF INCIDENT**

9.1 Once the victim(s) have been removed from the water and treated by EMS, command should begin incident termination. This shall include securing all equipment and apparatus used during the rescue. Command should consider activating the C.I.S.D. Team for extraordinary or extended operations.

## **10.0 DEVIATION OF POLICY**

10.1 This policy acts as a guideline to follow. If situations during the entire incident do not fit within these parameters, the incident commander of the incident shall have the authority to deviate as necessary to perform a successful outcome and ensure firefighter safety.

### **Official Approval**

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_