

Adverse Weather Operations

332.1 DEFINITION

Adverse weather is considered to be any weather conditions which create an increased risk when responding to or operating at an incident. This includes, but is not limited to: fog, heavy rain, hail, flooding, lightning, high winds, hurricanes, and tornadoes.

332.2 SCOPE

This procedure shall act as a guide for the Euless Fire Department whenever inclement weather potentially impacts the safety or efficacy of operations.

332.3 PROCEDURE

Recommended procedures vary with the type of weather conditions encountered. Heavy rain, hail, flooding, lightning, high winds, hurricane eye operations, and tornadoes are each considered. Officers should use the Risk versus Benefit model when making decisions regarding operations that expose personnel to adverse weather conditions. Officers must be prepared to alter, suspend or terminate operations should conditions change rapidly.

332.4 SEVERE WEATHER TERMS

- (a) Tornado Watch indicates that conditions are right for a tornado to develop and that the sky should be watched.
- (b) Tornado Warning indicates a tornado has been sighted or spotted on radar. Warnings will give the location of the tornado and the area immediately affected by the warning.
- (c) Flood Watch means a flood is possible in your area.
- (d) Flood Warning means flooding is already occurring or will occur soon in your area.
- (e) Flash Flood Warning means a flash flood is occurring or will occur very soon.
- (f) Thunderstorm Watch means conditions are favorable for severe weather to develop.
- (g) Thunderstorm Warning means areas where severe weather is imminent.

Extreme Temperatures:

- (a) Excessive Heat Warning: Heat Index >110 or Temperature >105(F)
- (b) Heat Advisory: Heat Index > 105 or Temperature > 103(F)

During times of extreme temperatures, outdoor activities such as training should be postponed if possible and personnel should be advised to increase fluid intake in an attempt to reduce heat related illness.

Fog - Fog is of concern mainly due to limited visibility during response to an incident, although sometimes heavy fog can contribute to slick road conditions. Apparatus operators should remember that emergency lights and apparatus will be less visible to other drivers, and should use due caution in regard to both limited visibility and slick roadways, remembering that other drivers

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may present a greater than normal hazard to responding apparatus during foggy conditions. Heavy fog which restricts visibility may also present a safety hazard during aerial operations around overhead wires or objects.

Hail - When encountering hail conditions, all personnel will wear protective clothing, including eye protection. Commanding officers should use discretion to determine if the company should seek shelter.

Flooding - Company officers must exercise considerable judgment and discretion relative to personnel safety when entering flooded areas. No one is allowed within 10 feet of swift water without a PFD. No bunker gear will be worn at a swift water emergency. In rapidly moving water more than two (2) feet deep, personnel should use a lifeline and wear Personal Flotation Devices (PFDs). In any water over two (2) feet deep, or where the water depth cannot be determined, PFDs shall be used. Particular care should be taken to avoid run-off areas, drains, open manholes, and ditches. Vehicles should not be driven into areas where water depth cannot be reliably determined. See NEFDA Swift water Tactical Guidelines: Swift Water Rescue for more information.

[See attachment: NEFDA Swiftwater SOP](#)

Lightning Storms are common in and around the North Texas area and are encountered frequently by fire rescue units. Personnel not actively involved in emergency operations should remain inside apparatus or structures during frequent local lightning. In addition, personnel should adhere to the following safety rules:

- (a) When there is no shelter, avoid the highest object in the area. If only isolated trees are nearby, the best protection is to crouch in the open, keeping twice as far away from isolated trees as the trees are high.
- (b) Aerial, ground ladder and other elevated operations (including rooftop), should be halted during lightning conditions.
- (c) Avoid hilltops, open spaces, wire fences, metal clothes lines, exposed sheds, and any electrically conductive, elevated objects.
- (d) Avoid carrying or using long or metallic tools.
- (e) Pump operators should seek shelter in a fully enclosed cab. If it is imperative to remain at the pump panel, do not lean against the apparatus and minimize physical contact with the apparatus.

Tornado - When a tornado or funnel cloud is observed in the field, companies should move away from it at right angles to its direction of travel, if possible. If proximity to the tornado prevents escape, the apparatus should be abandoned and personnel should seek shelter in a sturdy building or a ditch or culvert and keep together. If a tornado is observed from quarters, personnel should seek shelter in a predetermined "safe room" within the fire station. Fire Department

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Personnel should be prepared for citizens to request shelter at fire stations and also consider securing personal belongings in and around the fire station.

High Wind - Sustained wind conditions can be very hazardous. Personnel operating out in sustained wind conditions or gusts that are causing debris to be blown should take actions to protect themselves which may include wearing helmets, bunker coats and eye goggles for protection from flying debris.

- (a) Personnel should comply with apparatus manufacturer recommendations, if any, concerning high wind operations.
- (b) Driver-Operators and officers must recognize that wind speeds are difficult to estimate and may vary depending upon location, geography and structure density. Wind gusts may be sudden and substantially higher than sustained wind conditions. In addition to the guidelines listed above, the decision to alter, suspend or terminate operations near or below power lines or high voltage should be considered.

332.5 ADDITIONAL CONSIDERATIONS

Whenever a jurisdiction makes the determination to discontinue operations and shelter all vehicles and personnel, Dispatch shall be notified immediately.

Driver-Operators and officers must further realize that the risk to personnel increases in the presence of a combination of adverse conditions (such as high wind, lightning, localized flooding). At all times, personnel must weigh the benefits of a given operation against the risks presented by adverse weather conditions.

Any severe weather conditions encountered should be reported immediately to Dispatch, Battalion Chief and Operations Chief. Safety of personnel and members of the public must be the first priority of officers commanding units in the field. Attention to debris, downed power lines, drainage collection, and blocked accesses are required. Damage to equipment and apparatus due to weather must be document as soon as time permits.

During times of high call volume due to inclement weather the on duty Battalion Chief may invoke a modified emergency response plan. This plan would allow prioritization of pending calls to ensure that personnel are made as available as possible for higher priority emergencies.

332.6 OUTDOOR SIREN ACTIVATION PROTOCOL

Outdoor siren activation will usually be determined by the Emergency Management Division of the Police Department. However, fire personnel have the authority to activate sirens if the following criteria are met.

The following are factors to consider as minimum activation guidelines:

- (a) The National Weather Service issues a Tornado Warning or Severe Thunderstorm Warning with the phrase "Destructive winds in excess of 70 mph (or higher) are likely with this storm" for your immediate area.

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- (b) Trained storm spotters have reported a tornado in the jurisdiction, or in a neighboring jurisdiction that has the potential to affect your community. (Each community should determine satisfactory methods for verifying tornado activity reports).
- (c) Reported hail of 1.25" in diameter (half-dollar size) or greater. (1 inch may be more appropriate for areas or events where large numbers of people are outdoors).
- (d) Other emergency as directed by the community's elected officials.

Attachments

NEFDA Swiftwater SOP.pdf



Northeast Fire Department Association

Operations

Date Issued: 06/2014

Date Revised: 09/2019

Tactical Guidelines: Swift Water Rescue

Approved by: Wm Rhub

NEFDA President

I.

Purpose

The intent of this Standard Operating Procedure is to provide each NEFDA city with an understanding of the terminology, responsibilities, pre-arrival needs, and method of operation of the NEFDA Swift Water Rescue Teams.

II.

Terminology

- A. SWRT – Swift Water Rescue Team. Made up of at least 3 swift water technicians (2 of which are boat operators) and a rescue boat.
- B. Team Member – Personnel who have been assigned by their member department to the SWRT.
- C. Boat Operator- SWRT Team member that has completed Day 1 and Day 2 of swift water boat operations. Members with only day 1 of boat operations only operate boats in static water.
- D. SWRT Coordinator – responsible for the training, attendance at called meetings, and to insure post response critiques are completed.
- E. PFD – personal flotation device.
- F. Two in/Two out Rule – before a SWRT gets in the water (2 in), a second SWRT (2 out) should be operational to support the first team.
- G. Upstream – the direction from which the water is flowing.
- H. Downstream – the direction in which the water will flow.
- I. Rescue Group Safety Officer - responsible for overall incident site safety, and will notify incident command of any unsafe conditions or operations they observe. Shall be including in the decision making process on any and all operations, including SWRT briefings. Shall be responsible for time keeping of the event. Shall have the authority to stop any and all activities that he/she determines to be unsafe.
- J. Clean Water – water in which the SWRT is operating in that has not been exposed to hazardous materials.
- K. Dirty Water – water in which the SWRT is operating in that has potentially been exposed to hazardous materials including but not limited to areas of sewage contamination as well as agricultural and chemical contamination.

III.
Responsibilities of Departments with SWRT

- A.** Current NEFDA Departments that have SWRTs are: Haltom, Hurst, Bedford, & Euless
- B.** Each SWRT department shall certify those members who have satisfactorily completed the technical rescue training requirements that meet or exceed NFPA 1670 & 1006
- C.** Each SWRT department shall appoint a team member to act as the city's swift water team coordinator
- D.** Each SWRT department shall attempt to maintain a minimum number of SWRT Technicians on duty each shift. The minimum attempted shall be 3 SWRT Technicians on each shift with a minimum of 2 boat operators.

IV.
Deployment

- A.** The East response group shall consist of the cities of Bedford and Euless.
- B.** The West response group shall consist of the cities of Haltom City and Hurst.
 - 1. East Response Group (Responds to Swift water events in: Trophy Club, Grapevine, Southlake, Colleyville, Euless, Bedford and Hurst.
 - 2. West Response Group (Responds to Swift water events in: Westlake, Keller, Watauga, North Richland Hills, Richland Hills, Roanoke and Haltom City.

V.
Pre-Arrival Needs

- A.** Establish a staging area.
- B.** Establish a medical/triage group (with an MICU on scene).
- C.** If there is a possibility of hazardous materials in the water, Command should request Hazmat.

VI.
Method of Operation

- A.** SWRT will respond on NRHW 7.
- B.** SWRT will report to Command for incident briefing
- C.** SWRT will formulate an IAP that can be approved or disapproved by Command.
- D.** SWRT will operate as a Rescue Group with a Team Member as Rescue Group Leader.
- E.** Only the SWRT Rescue Group should operate in the exclusion (hot) zone.

VII. SWRT Operations

- A.** There should be at least 3 SWRT members (with two boat operators) in a boat with equipment (throw bags, air horn, rope and carabineer) stored and tied into the boat.
- B.** Rescuer safety should always be considered
 - 1. Always consider self- rescue first.
 - 2. Look out for other rescuers second.
 - 3. Rescue of victim is only after 1 and 2 have been completed.
- C.** No one is allowed within 10 feet of swift water without a PFD. No bunker gear will be worn at a swift water emergency.
- D.** Upstream spotters are in place equipped with radio and whistle before downstream operations begin. Downstream rescuers should immediately be notified of large debris coming down stream.
- E.** Downstream backups will be deployed with throw bags. A minimum of two rescuers each with throw bags, whistles and radios should be in place before upstream operations begin.
- F.** Decide on “rescue” or “recovery” based on the conditions present and the hazards associated with a rescue. Command must make the decision to operate in a rescue or recovery mode.
- G.** All SWRT members shall have the proper PPE.
- H.** Keep the rescue simple and safe and use the low to high risk options in order.
 - 1. Reach
 - 2. Throw
 - 3. Row
 - 4. Go
 - 5. Helo (helicopter)
- I.** Always have backup plans
- J.** Hand and whistle communication will be important to know. Whistle signals are the following:
 - 1. One blast – stop
 - 2. Two blasts – upstream
 - 3. Three blasts – downstream
 - 4. Series of three blasts – emergency
 - 5. One hand in air straight up – distress
 - 6. One hand on top of head – okay
- K.** Providing PFDs and helmets to the victims should be a priority. This should be completed as soon as possible to help ensure the victims safety.

Note – 9/2019 Revision only changed the East and West Team configurations to Bedford/Eules and Haltom/Hurst.