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|  | STANDARD OPERATING GUIDELINE | | | |  |
| | OPERATIONS | | | | |
| | TRENCH RESCUE | | | | |
| | Effective: 01/Jan/06 | Revised: 28/Dec/2020 | S.O.G. #: O-307 | Page: 1 of 2 | |

1.0 Objective

- 1.1 The purpose of this guideline is to establish operational procedures and parameters for Highland Park Fire Department personnel who are not certified as “Trench Rescue Specialists” by the Illinois Office of the State Fire Marshal in the event of a trench collapse with entrapment.
- 1.2 Highland Park Fire Department “Trench Rescue Specialists” will follow the “MABAS Division 3 Technical Rescue Team (TRT) Operational Guidelines for Trench Operations” in the event of an incident requiring entry of personnel into a collapsed trench.

2.0 Responsibility

- 2.1 It is the responsibility of all Highland Park Fire Department personnel to understand the guidelines set forth in this document.

3.0 Definitions



- 3.1 A trench is a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom of the trench) is not greater than 15 feet.
- 3.2 *A trench deeper than 5 feet requires a “Protective System” BEFORE worker or rescuer entry may be made. This may include sloping back of trench walls, a trench shield, or shoring.*
- 3.3 A trench greater than 20’ deep, and/or excavation greater than 15’ wide, requires the services of a “Registered Professional Engineer.”
- 3.4 *A Trench Collapse Incident* is defined as a request for emergency response due to an injury or entrapment of any person in a trench type excavation, as defined in Section 3.1 above.

4.0 Response

- 4.1 A Code 3 – Non-AFA response shall be activated to any trench collapse incident. Squad 33 shall be specially requested if not already responding. Additional ambulance(s) shall be requested so that there is at least one ALS ambulance per victim and one ALS ambulance for personnel making entry into the trench.
- 4.2 *Technical Rescue Box Alarm 33-R-80*, with MABAS Division 3 Technicians and Rescue 3, may be activated as necessary.
- 4.3 Deerfield **Squads 19 or Northbrook Squad 12** with TRT technicians. **MABAS Division 3 Air Truck** may be requested. One (1) such Squad on scene is considered to be the minimum – two such Squads are recommended.
- 4.4 A minimum of two (2) 4-gas monitors (MSA Passport, AIM, or equivalent) are to be used.

5.0 Scene Control

- 5.1 Initiating Incident Command, scene safety and control are the initial concerns in the incident management process.
- 5.2 Assign a Scene Safety Officer (an individual from the Highland Park Fire Department).
 - 5.2.1 The TRT will assign a Rescue Safety Officer (RSO) for TRT Operations.
- 5.3 Interview supervisors, co-workers, or any witnesses.
- 5.4 Set up control zones, adjusting zones as necessary. Remove unnecessary individuals from the area. Attempt to mark zones by using scene tape, rope, barriers, etc.
 - 5.4.1 Hot zone/operations: 0’ – 50’ Rescue and Operations personnel only
 - 5.4.2 Warm zone/control: 50’ – 150’ TRT & Fire Department staging
 - 5.4.3 Cold zone/exclusion: 150’ – 300’ Command, support staff, vehicles, family of victim(s), etc.
- 5.5 Use the Highland Park Police Department to keep unnecessary individuals out of the cold zone.

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5.6 *Approach from one of the ends of the trench!* Estimate its size and depth.

5.6.1 Identify the number of victims involved.

5.6.2 *Determine if you have a rescue or recovery!!!*

5.6 Shut down all unnecessary machinery, equipment and traffic within 300' of the trench. Safe guard all utilities. Perform Lock-out/Tag-out procedures, as necessary, following SOG# O-312. Notify affected utility companies of actions and/or needs.

5.7 If there is a water problem in the trench, prepare for de-watering operations (pump on scene, public works, etc.).

5.8 Use Hazardous Materials Team personnel to begin atmospheric monitoring with 4 gas meters. Begin at areas adjacent to and in the trench without physically entering the trench. Monitor and ventilate the trench as necessary.

5.9 Are Hazardous Materials involved? If so, consider activation of *Hazardous Materials Box Alarm 33-H-70*. Hazardous Materials incidents are to be handled pursuant to SOG's O-324, O-324a, O-324b, and O-324c.

6.0 **Rescue and/or Recovery**

6.1 *Do not* commit any personnel into an unprotected trench greater than 5' deep.

6.2 If trapped victim(s) are able to begin digging themselves out, lower a shovel, or whatever else may be appropriate, into the trench. Have victim tie a utility line to his person or use some other means to mark his position in the event of another collapse. Do not use the line to pull the victim out.

6.3 Place ladder(s) near the victim and every 25' in the trench.

6.4 Have personnel begin leveling the area around the trench and move the spoil pile back to 4' or more from the edge of the trench (to allow for ground pads), using extreme caution and as few personnel as is possible. Mark any fissures and note their locations.

6.5 The TRT will follow the "MABAS Division 3 TRT Operational Guidelines for Trench Operations".

7.0 **Termination of Incident**

7.1 Maintain personnel accountability and well-being.

7.2 Notify appropriate agencies (OSHA, NIOSH, Com-ED, etc.).

7.3 Secure the scene as is appropriate.

8.0 **Reference**

8.1 Highland Park Fire Department

8.2 MABAS Division 3 Standard Operating Guidelines

8.3 NFPA 1710: 4.4.3 Special Operations

Approved:  Fire Chief