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| ***REPLACE WITH YOUR MASTHEAD*** |
| **VFIS logo black JPG** | **SOG Title:** |
| **SOG Number:** |
| **Original Date:** | **Revision Date:** |
| **ABC Fire Department General Operating Guideline** |

**Trench & Excavation Collapse Incident Operational Guidelines**

***This is a sample of a standard operating guideline (SOG) on this topic. You should review the content, modify as appropriate for your organization, have it reviewed by your leadership team and if appropriate your legal counsel. Once adopted, make sure the SOG is communicated to members, implemented and performance monitored for effective implementation.***

**Purpose:**

To ensure a safe working environment during the removal of victims from underground collapses, in trench’s and excavations.

**Personal Protective Equipment (PPE):**

Shall be dictated by the scope of the incident and the hazards I atmosphere involved. At a minimum, PPE shall consist of, but not be limited to; jumpsuit, PASS device, hearing and eye protection, helmet and boots.

**Procedure:**

* Any and all vehicles responding to an incident shall park at least 100 ft. from the site.
* No personnel shall enter an unprotected trench. All trenches shall be "safe and protected, prior to entry of any emergency personnel.
* Establish a "hazard" or hot zone at least 50 ft. around the perimeter of the collapse zone. Use fire line tape/cones or other device to mark perimeter.
* Complete size-up of the scene, rescue or recovery. Have site management/supervisor remain with IC; get site plans if possible, for utilities lay out.
* Start written documentation of the incident, use work sheets.

* Realize the need for additional resources, equipment, personnel, and rehab.
* Approach the trench from the ends, never the sides. DO NOT GO TO THE EDGE OF THE TRENCH UNTIL GROUND PADS ARE IN PLACE.
* Place ground pads around the trench; walk out one ground pad to lay the next.
* Atmospheric monitoring and ventilation (PPV) shall be in place.
* Assure de-watering systems are operational (if necessary)
* Assure utilities are controlled and identified. Contact utilities
* Limit personnel at the lip and in the hot zone; establish control of access/egress
* Position safety officer at either or both ends of trench
* If a trench box is on location, and can be placed without further harm to the patient or risk of additional collapse, USE IT
* Place first panel in area of patient to offer some protection from further collapse.
* Additional panels to be placed on either side of the victim
* Ladders shall be in place at both ends, and every 12 ft.
* Personnel shall be rotated into rehab every 30 minutes, or less if conditions warrant
* While the shoring is being placed, and during the rescue, only one person per set of panels shall be in the trench. This includes the victim.
* Any digging or movement of spoil pile shall be done by hand.
* EMS will be permitted access, once the trench is safe and secure, to access and treat victim. EMS personnel will need to leave the trench to allow rescue to continue with the extrication.
* The rescue team shall continue to monitor the victim during the rescue, and report changes to EMS directly.
* Once victim is “free” they shall be packaged, removed from the trench, and turned over to EMS.
* Remove/replace struts with timbers. Remove tools and personnel. Secure the area. DO NOT RISK PERSONNEL REMOVING OR BACKING OUT WHAT WAS CONSTRUCTED. Wood is expendable. Have the sheeting and shoring removed by heavy equipment once all personnel and equipment is accounted for.

**Guidelines for Trench and Excavation Collapse - Task Performance Operational & Technical Level Training**

1. Demonstrate ability to size up and secure scene. Choose mode of operation (rescue/recovery) decide on the need for additional resources.
2. Demonstrate ability to document and disseminate information; mitigate hazards by isolation, removal or control.
3. Demonstrate ability to manage equipment cache. Provide ample lighting. Establish a cut station. Establish a panel assembly/staging area. Perform atmospheric monitoring and ventilation. Choose method of protecting the victim before rescue operations start.
4. Demonstrate ability to select and construct a load stabilization system.
5. Demonstrate ability to estimate a load and the safe and proper application of a load stabilization system
6. Demonstrate ability to communicate, via hand signals and or radio, the precision movement of heavy equipment keeping in mind the position of the rescuer and victim.
7. Demonstrate ability to place shoring or shielding systems in a non-intersecting trench up to 8ft.in depth.
8. Demonstrate ability to place shoring or shielding systems in an intersecting trench up to 8ft.in depth.
9. Demonstrate ability to apply supplemental sheeting and shoring every 2 feet down.
10. Demonstrate ability to release victim from entrapment, demonstrate proper use of tools and or rescue systems without compromising the integrity of the trench or the shoring system. Keeping in mind the medical condition of the victim
11. Demonstrate ability to package and remove victim and tum over to EMS.
12. Demonstrate ability to remove rescue systems from the trench and return equipment to service.
13. Demonstrate member decontamination after the rescue is complete.

***This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization’s needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm or damage to personnel, property and the general public. For additional information on this topic, contact your VFIS Risk Control representative.***

**References:**

King of Prussia (PA) Volunteer Fire Company SOG KP0078 Trench and Excavation Incidents Operational Guidelines