



Deep Trench Emergency Planning Safety Talk

Trench collapses happen fast and often without warning, resulting in trapping or crushing workers in seconds. Having a site-specific trench emergency action plan (EAP) is not just paperwork; it's what ensures every crew member knows exactly what to do when seconds count. Practicing that plan before digging begins can mean the difference between a close call and a fatality.

Roles and Responsibilities

- **Competent Person (CP):** Leads pre-shift checks, verifies protective systems, and triggers the EAP. The CP also stops work if conditions change and maintains the rescue equipment checklist. (Competent-person inspections are required whenever conditions change.)
- **Incident Lead (IL):** Takes command during an emergency until the responding trench-rescue authority arrives, manages accountability, establishes control zones, and designates a scribe. Guidance from trench-rescue doctrine calls for establishing hot/warm/cold zones on arrival.
- **Caller/Liaison:** Dials emergency services, provides trench location, depth, soil type if known, utilities present, number of victims, and access routes; then meets and guides the rescue team in.
- **Spotters/Lookouts:** Keep all personnel out of the trench and off the lip, control traffic and vibration sources, and maintain scene safety until rescue arrives. (Stopping vibration and heavy equipment movement near the trench is a first-in action.)
- **Equipment Custodian:** Ensures rescue-support equipment is staged, inspected, and immediately available (see below). OSHA references the ready availability of specific rescue equipment for excavations.

Rescue-Support Equipment to Stage on Trench Jobs

- **Scene Control:** Barrier tape, cones, signage, and lighting to set hot/warm/cold zones; communication boards for accountability.
- **Atmospheric Monitoring & Ventilation:** Four-gas monitor and ventilation fans/ducting ready to deploy when hazardous atmospheres are suspected (e.g., deep or adjacent to utilities). OSHA requires precautions for hazardous atmospheres in excavations.
- **Victim Access Aids (for self-rescue only):** Extension ladders staged every 25 ft and ground pads/cribbing at the lip. Place a ladder only if the victim can climb out without sending someone in.
- **Medical & Retrieval Support:** Basket stretcher, harness and lifeline attended when in use, first-aid/trauma kit, and thermal blankets—staged but not deployed by entering the trench. OSHA's excavation guide notes these items as emergency equipment.

What to do the Moment a Collapse Occurs

1. Call it and clear it. The CP/IL declares an emergency, sounds the alarm, and orders all workers away from the trench edge. No one enters an unprotected trench—rescues are performed by trained trench-rescue teams operating to NFPA technical rescue standards.
2. Control the scene. Establish hot/warm/cold zones; keep the lip unloaded; halt equipment and traffic; eliminate vibration sources within at least a couple hundred feet if possible; and secure utilities if safe to do so.
3. Size-up and relay information. Caller/Liaison provides dispatch with depth, soil/water conditions, protective system status, victim number/last-seen points, and the best access route; have a spotter meet the rescue team at the gate.
4. Support without entering. Place a ladder only if the victim can self-rescue; lay ground pads to prevent additional surcharge; begin atmospheric monitoring from the lip and set up ventilation if indicated; prepare medical gear for immediate handoff.
5. Transfer command. When the trench-rescue authority arrives, the IL provides a briefing and supports operations (traffic control, lighting, material staging). NFPA-aligned trench-rescue operations may shore, shield, or otherwise stabilize before any entry.

Training and Drills

- **Tabletop + hands-on:** Walk every crew through the EAP at mobilization, then drill it (alarm, call-down, zone setup, monitor setup) until times are predictable. CPWR and NIOSH resources emphasize planning and practice for trench emergencies.
- **Authority alignment:** Coordinate with the local trench-rescue authority on access routes, staging areas, and radio channels in advance; add that contact info to the EAP and the daily JSA.

Summary

When a trench fails, chaos is instant, but a well-drilled plan restores order. Defined roles, staged rescue gear, and strict “no entry” discipline allows trained rescue teams to take over safely and quickly. Preparation saves time, and in trench emergencies, time saves lives.

Discussion Points

1. How often does your crew review and practice the trench emergency action plan before work begins?