

Trenching and soil excavation are very common and important aspects of most construction projects. Generally, these openings in the earth are for new construction or repair purposes. When done correctly, it can be a very safe work activity. However, if done carelessly, it can be deadly. ***Fatality rates for excavation work are 112 percent higher than rates for general construction. As a result, some of the largest fines proposed by The Occupational Safety and Health Administration (OSHA) are due to excavation accidents.***

OSHA requires that workers in trenches and excavations be protected. This protection requires daily inspections of trenches and the surrounding area. Responsibility for the inspection falls upon the **competent person**. The competent person has:

- ✓ Training in soil analysis
- ✓ Training in the use of protective systems
- ✓ Knowledge of OSHA's excavation requirements
- ✓ Authority to immediately eliminate hazards

The **competent person** has the responsibility to inspect the trench and the area around the trench for any hazards, including those that could cause a cave-in. The **competent person** must also keep employees out of the trench until the safety problem has been remedied. Potential hazards may include:

- Cut, cavity, or depression of more than four feet in depth
- Fissures, tension cracks, sloughing, or undercutting
- Bulging at the bottom
- Visual and manual soil classification surface hazards (encumbrances)
- Water hazards, including seepage or accumulation in the bottom of the trench
- Atmospheric hazards (present or predicted)
- Vibration hazards from traffic or nearby equipment
- Access/egress points
- Spoil pile location
- Barricade and traffic control structure
- Location and protection of utilities and underground structures
- Integrity of the protective system (hands-on and visual)

Refer to LC1790: **Daily Excavation Inspection Checklist LC1790** for tasks that should be completed:

- ✓ Before construction begins
- ✓ Daily before each shift
- ✓ As needed throughout the shift
- ✓ Following rainstorms or other hazard-increasing events, such as a vehicle or other equipment approaching the edge of an excavation