



# Trenching and Excavation

Approximately 25 workers are killed each year due to trenching or excavation related mishaps such as cave-ins, struck-by or electrocution.

Definitions:

Trench— Type of excavation or depression in the ground that is generally deeper than it is wide.

Excavation— Process of moving things like earth, rock, or other materials with tools, equipment, or explosives.

## General Excavation/Trenching Requirements

- \* Have the area surveyed to locate any utilities that are in the area of excavation (e.g., sewer, phone, electric , water).
- \* When a utility is close to exposure in an excavation, the exact location must be found in a safe acceptable means dependent on the utility.
- \* When utilities are exposed in an excavation, they must be protected, supported or removed to protect employees.
- \* Must have a means of egress such as a stairway, ladder, ramp or another safe means of egress if an excavation is more than 4 ft. in depth, required every 25 feet of lateral distance in which employees are working.
- \* No employee is permitted to work under any load handled by lifting or digging equipment.
- \* A warning line, hand signals, or mechanical signals must be used when vision impaired vehicles are backing up to and excavation.
- \* Trenches must not be used if the excavation or trench has any water accumulation.
- \* All soil piles must be at a two feet minimum from the edge of excavation or trench.
- \* All employees and equipment must be protected from falling or rolling into any excavation or trench.
- \* Daily inspections of excavations or trenches must be done by a competent person.
  - Protective system in place
  - Evidence of possible cave-in
  - Indications of failure in protection system



## When Do You Need Trench/Excavation Protection?

- \* All trenches or excavations must be protected if a competent person classifies there is potential for cave-in.
- \* Trenches or excavations less than 5 feet do not have to be protected if a competent person indicates there is no indication of a cave-in.
- \* Excavations or trenches do not need protection if made entirely out of stable rock.