## Trenching Safety Stats and Facts



## **FACTS**

- 1. An excavation is a hole in the ground as the result of removing material. A trench is an excavation in which the depth exceeds (is bigger than) the width.
- 2. Working in trenches and excavations is hazardous to both the workers who work inside them, and to workers on the top of the trench include the following hazards:
  - Cave-ins or collapses that can trap workers.
  - Equipment or excavated soil falling on workers.
  - Falling into the trench or excavation.
  - Flooding or water accumulation.
  - Exposure to a hazardous atmosphere
  - Contact with overhead electrical lines.
  - Contact with buried service lines such as electrical, natural gas, water, sewage, telecommunications, etc.
  - Slips, trips and falls as workers climb on and off equipment, or from inappropriate access and egress methods.
  - Being struck by moving machinery, or by falling or flying objects.
  - Hazards related to materials handling (e.g., lifting, struck by, crushed between, etc.).

## **STATS**

- B.L.S. data show that about 25 workers are killed each year in trench-related mishaps. Cave-ins cause about three out of every four fatalities; the remainder are commonly due to struck-by or electrocutions.
- The main reason trenches collapse is that they are not properly protected. Protective systems were properly employed in only 24 % of the trenches. In the remainder, a protective system was either improperly used (24%), available but not in use (12%) or simply unavailable (64%).
- Environmental conditions were a contributing factor in 68 % of the fatalities, the competent person was not onsite when the fatality occurred 86 % of the time. Most of the time (65%) the employer had not identified the soil type even though soil type is a factor in trench cave-ins.
- A disproportionate number of fatalities (36%) occurred on Mondays, probably because rain or other factors changed conditions over the weekend.
- The OSHA investigations showed that schedule time was more important than safety in 88 % of the incidents. Seventy-two percent of the fatalities occurred in trenches less than nine feet deep. Only nine percent occurred deeper than 15

feet.

- Injuries and deaths associated with trenches continue to happen. There was a total of 373 trenching fatalities, with more than 80% of them in the construction industry.
- Trench collapses remain among the construction industry's most dangerous hazards. Trench collapses caused 130 deaths in the industry.
- The Bureau of Labor Statistics reports that 166 workers died in trench collapses. In 2019, OSHA reports at least 24 workers died while working on trenching and excavation projects.