BIE SAFETY ADVISOR

June's Focus - Trench Safety

The National Utility Contractors Association (NAUC) and the North American Excavation Shoring Association (NAXSA) are sponsoring the 2018 Trench Safety Stand Down, June 18-23, 2018. OSHA is officially endorsing the 2018 Trench Safety Stand Down.

The Hazard - Excavation and trenching are among the most hazardous construction operations. OSHA defines an excavation as any man-made cut, cavity, trench, or depression in the earth's surface formed by earth removal. A trench is defined as a narrow underground excavation that is deeper than it is wide, and is no wider than 15 feet (4.5 meters). Cave-ins pose the greatest risk and are much more likely than other excavation related accidents to result in worker fatalities. Other potential hazards include falls, falling loads, hazardous atmospheres, and incidents involving mobile equipment. Trench collapses cause dozens of fatalities and hundreds of injuries each year.

The Goal of the Trench Safety Stand Down is to reach out to the many workers who work in and around trenches and excavations and to provide them with information about current excavation requirements and safety procedures for working in trenches. By reaching as many workers as possible the number of fatalities and serious injuries that occur each year in the trenching industry, and make others, such as municipal and industry workers who are also exposed, aware of these serious hazards.

Who Can Participate? Anyone who wants to prevent trenching and excavation hazards in the workplace can participate in the Stand Down. Utility construction, residential, highway construction, municipalities, plumbers, military, unions, associations, educational institutes, and safety equipment manufacturers are encouraged to participate. Please visit http://www.nuca.com/tssd to find links for materials to use during the Stand Down week.

How to Conduct a Safety Stand Down? Companies can conduct a Trench Safety Stand-Down by taking a break to have a toolbox talk or another safety activity to draw attention to the specific hazards related to working in and around trenches/excavation.

Did you know? The fatality rate for excavation work is 112% higher than the rate for general construction.

Monthly Toolbox Talk

BIE Safety Advisor

Trench Safety

Working in a trench is one of the most hazardous jobs in construction. Hundreds of people die and thousands are seriously injured each year due to cave-ins. Soil weighs between 90 and 140 pounds per cubic foot. Therefore, one cubic yard (3 ft. by 3 ft. by 3 ft.) can weigh as much as a small pickup truck. If a person is buried, there is little chance of survival.

There are many things that can affect soil stability, such as the type of soil, water, and vibration. Soils saturated with water and previously disturbed soils are very dangerous to work in or around. But, don't be fooled, even hard soil and rock that appears stable can cave in.

Before entering a trench, the competent person at the jobsite must inspect the trench and the protection system to ensure that the trench is safe to enter. There are recorded incidents of people buried and killed in trenches 3- to 4-ft. deep, so even shallow trenches must be inspected by a competent person before entering.

Trench Safety Tips:

- Locate all underground utilities before digging.
- Enter only trenches that have been sloped at the proper angle, shored, or shielded.
- Never go outside the area that has been sloped, shored, or shielded, not even for a moment.
- Eliminate or control water accumulation before entering the trench.
- Stay alert when working in or near previously disturbed soil conditions.
- Do not permit vehicles near the edge of the trench.
- Check regularly for hazardous materials and oxygen levels in the trench.
- Never allow machines to run unattended.
- Use a ladder or ramp to get in and out of the trench. Place the ladder inside the protective system.
- Never climb on shoring or shields. Never ride in equipment buckets or on crane hooks.
- Wear hard hats when working in or around trenches.
- Stay out from under raised loads.

About half of the people killed each year in trenches die trying to rescue someone else who has been buried by a cave-in. **Call 911 for help**. Do not attempt a rescue, unless you have been properly trained in trench-rescue techniques.

Remember, if you are buried by a cave-in, your chance of survival is very low. Therefore, always be sure that the trench walls are sloped, shored, or shielded with a trench box and that the trench is safe before you enter.