TOOLBOX TALK #25

PREVENTING TRENCH COLLAPSES

Workers caught in trench collapses rarely survive because soil can be extremely heavy. A cubic yard of soil can weigh up to 3000 pounds – roughly the weight of a small motor vehicle, according to OSHA. In 2016, 23 workers died and 12 others were injured in trench collapses, the agency notes. However, trench deaths and injuries are preventable.

Not worth the risk

Entering an unprotected or insufficiently protected trench means putting your life at risk, the National Institute for Occupational Safety and Health (NIOSH) warns, as trenches give no warning that they're going to collapse.

Why do trench collapses occur? NIOSH cites numerous potential factors, including soil type and water content, environmental conditions, proximity to previously backfilled excavations, weight of heavy equipment or tools, and vibrations from machines and motor vehicles that can affect soil stability.

Before trench work

An abundance of safety preparation should go into planning a trenching job, NIOSH states. Employers should call 811 (Diggers Hotline) before digging to have utility lines marked. A competent person should be on hand to ensure all safety measures are in place and followed, and he or she should evaluate the soil to ensure its stable enough for a trench.

The competent person should also determine the specific type of protective system that will be needed. The job plan should be laid out in a way to identify safe spots away from the trench for spoil piles and heavy machinery routes.

During trench work

Once planning is complete and the work on the trenched jobsite begins, safety must remain the number one priority. NIOSH states that the competent person must continue to inspect the excavation site, all adjacent areas and protective systems every day before work begins, throughout the shift and after every rainstorm. Vehicles must be kept a safe distance from the excavation, and ladders and other means of exit from the trench must be no more than 25 feet away from workers at all times.