# A screen shot of a computer Description automatically generatedtrenching safety

Trenching is necessary for rural water districts to repair and install underground materials, such as water lines. However, there are many risks involved with working in and around trenches.

*The following measures should be taken to control the risk of cave-ins and other potential hazards associated with trenching operations, including:*

* Trenches 5 feet (1.5 meters) deep or greater require a protective system unless the excavation is made entirely in stable rock. If less than 5 feet deep, a competent person may determine that a protective system is not required.
* Trenches 20 feet (6.1 meters) deep or greater require that the protective system be designed by a registered professional engineer or be based on tabulated data prepared and/or approved by a registered professional engineer in accordance with 1926.652(b) and (c).
* Trenches should be inspected daily and as conditions change by a competent person before worker entry to ensure elimination of excavation hazards.
* All excavations should have safe access and egress, including ladders, steps, ramps, or other safe means of exit for employees working in trench excavations 4 feet or deeper.
* Keep heavy equipment away from trench edges.
* Identify other sources that might affect trench stability.
* Keep excavated soil (spoils) and other materials at least 2 feet from trench edges.
* Know where underground utilities are located before digging.
* Test for atmospheric hazards such as low oxygen, hazardous fumes and toxic gases when > 4 feet deep.
* Inspect trenches at the start of each shift.
* Inspect trenches following a rainstorm or other water intrusion.
* Do not work under suspended or raised loads and materials.
* Inspect trenches after any occurrence that could have changed conditions in the trench.
* Ensure that personnel wear high visibility or other suitable clothing when exposed to vehicular traffic.

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