Trenching and excavation safety toolbox talk

29 CFR 1926.652, 1926.651

Date _____ Trainer _____ Location _____

Opening question

If this trench wall started to slide right now, what would protect you, and how would you get out?

Why it matters

Soil is heavy, and a trench wall can give way with little or no warning. A cave-in can bury or crush a worker before they can react, and a coworker who jumps in to help can be caught by the next collapse. These rules keep the walls off people and give everyone a way out.

Key points

1. **No protection, no entry**
   Every worker in an excavation must be protected from cave-ins by an adequate protective system, such as sloping, benching, shoring or a trench shield. The only exceptions are excavations entirely in stable rock, or less than 5 feet deep where a competent person has examined the ground and found no sign of a possible cave-in (29 CFR 1926.652(a)(1)(i) and (ii)). Not sure it is protected? Stay out and ask.
   29 CFR 1926.652(a)(1)

2. **Find the utilities before you dig**
   Before an excavation is opened, the estimated location of underground utilities such as sewer, telephone, fuel, electric and water lines must be determined. Utility companies or owners must be asked to locate their lines before digging, and the exact location must be found by safe and acceptable means as you get close (29 CFR 1926.651(b)(2) and (b)(3)). Calling 811 connects you to the local one-call center.
   29 CFR 1926.651(b)(1)

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3 Keep the edges clear

Keep spoil piles, materials and equipment at least 2 feet back from the edge, or hold them back with retaining devices, or both. Never stand under loads handled by lifting or digging equipment (29 CFR 1926.651(e)). When mobile equipment works near the edge and the operator cannot clearly see it, a warning system such as barricades, hand or mechanical signals, or stop logs must be used (29 CFR 1926.651(f)). Workers exposed to public traffic must wear a warning vest or other high-visibility garment (29 CFR 1926.651(d)).

29 CFR 1926.651(j)(2)

4 Always have a way out

Trenches 4 feet or more deep must have a stairway, ladder, ramp or other safe way out, so no one travels more than 25 feet sideways to reach it. Move the ladder as the work moves. In a trench box, you must be protected from cave-ins while getting in and out, and no one may be inside while it is installed, removed or moved vertically (29 CFR 1926.652(g)(1)(iii) and (iv)).

29 CFR 1926.651(c)(2)

5 A competent person checks it every day

When workers will be exposed, a competent person must inspect the excavation, nearby areas and protective systems daily before work, as needed during the shift, and after every rainstorm or other hazard-increasing event. A competent person can spot existing and predictable hazards and is authorized to fix them promptly (29 CFR 1926.650(b)). If they find signs of a possible cave-in or other hazards, exposed workers must be removed until it is safe (29 CFR 1926.651(k)(2)). If you see cracks, bulging walls or water seeping in, get out and tell them.

29 CFR 1926.651(k)(1)

6 Watch for water and bad air

Do not work in an excavation with standing or rising water unless adequate precautions are in place, such as water removal, special support or shield systems, or a harness and lifeline (29 CFR 1926.651(h)(1)). Where low oxygen or a hazardous atmosphere exists or could reasonably be expected, such as in a landfill, the air must be tested before anyone enters an excavation more than 4 feet deep. Crews usually test with a gas monitor.

29 CFR 1926.651(g)(1)(i)

Scenario

Picture this: a crew is laying pipe in a chest-deep trench. The trench box is a few feet behind them, the only ladder is at the far end, and the spoil pile sits right at the edge. It rained hard overnight, and nobody has checked the walls. One worker steps out ahead of the box to grab a fitting. What is wrong, and what must happen before anyone goes back in?

Crew discussion

1. Who is our competent person today, and what do they check?
2. What protective system are we using, and where does it stop protecting us?
3. What do you do if you see cracks at the edge or water seeping in?
4. Where is the nearest ladder or ramp to your work spot?

Bottom line

Never enter an unprotected trench, keep the edges clear, and always know your way out.

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Sign-in sheet / Hoja de asistencia

Topic / Tema Trenching and excavation / Zanjas y excavaciones

Date / Fecha _____

Trainer / Instructor _____ Location / Lugar _____ Company / Empresa _____

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