



Trenching and Shoring Safety- OSHA Subpart- P Standard

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Are Municipalities required to follow OSHA Standards?

Federal OSHA has no jurisdiction over State, municipal, or volunteer fire. OSHA requirements are set by statute, standards and regulations.

Are Municipalities required to follow OSHA Standards?

- State or county prosecutors can bring local criminal charges against a municipality as an entity, or against specific municipal managers/executives. Charges typically include manslaughter, criminally negligent homicide, or reckless endangerment.
- Even in states where federal OSHA has no enforcement jurisdiction, a municipality can be held liable in a civil suit using OSHA standards.

Why do you work safe?

- I want to go home to my family.
- I don't want to get hurt.
- I've worked hard for a lot years and don't want to mess-up my plans for my retirement.
- I want to make sure all of my crew go home safely.

Trench Deaths don't just happen in other parts of the country....

- 07/13/85 Fountain/Security, CO 4-workers die in 22'deep trench and two workers rescued. (Company President; Vice-President; Forman; Excavator Operator all charged with second degree manslaughter).
- 06/14/2018 Granby, CO-The employee was working on his knees when the trench collapsed and buried the employee. (Company owner did 10-months in prison as part of his criminal charges).
- 04/16/2019 Windsor, CO-two employees were laying sewer pipe in a trench and became caught in it when the trench collapsed. Both employees suffocated and died from asphyxiation.
- 01/14/21 Greeley, CO-one employee working in drain pond 10-foot-tall dirt wall collapsed and partially buried him.
- 04/16/21 Johnstown, CO-four employee working on sewer pipe in 25' deep trench, one victim was pinned in the mud under the water.
- 09/07/21 Longmont, CO- one 87-year old worker killed in 9' deep trench replacing sewer line at a private home.

Trench Deaths don't just happen in other parts of the country....

- 11/16/21 Breckenridge, CO-one worker killed and one rescued. (Owner prison sentenced for manslaughter Nov.2023)
- 06/02/22 Pueblo, CO two workers buried under 70' from slide of coal pile.
- 07/14/22 Greeley, CO 59-year old killed in trench cave-in.
- 12/27/22 Aurora, CO 23-year old worker killed is 12' trench with no protective system.
- Unfortunately, these are just the Colorado trench deaths that I'm aware of...



Objectives

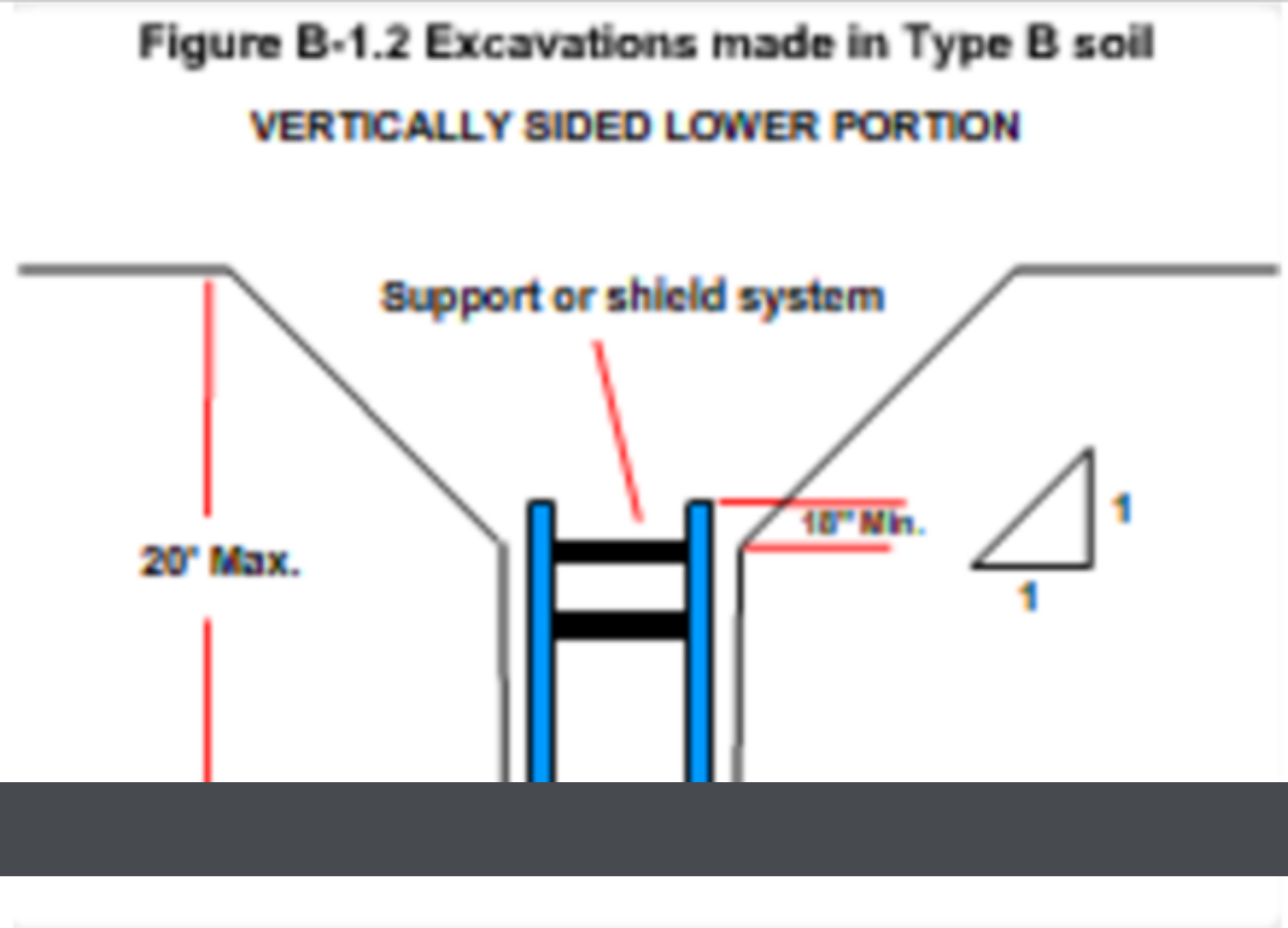
- Recognize how a **Competent Person** can check his job site for compliance.
- These simple measurement that can be verified with a tape measure.
- Understand these are the same measurements an OSHA inspector will check.

Who is the Competent Person?-T.E.A.

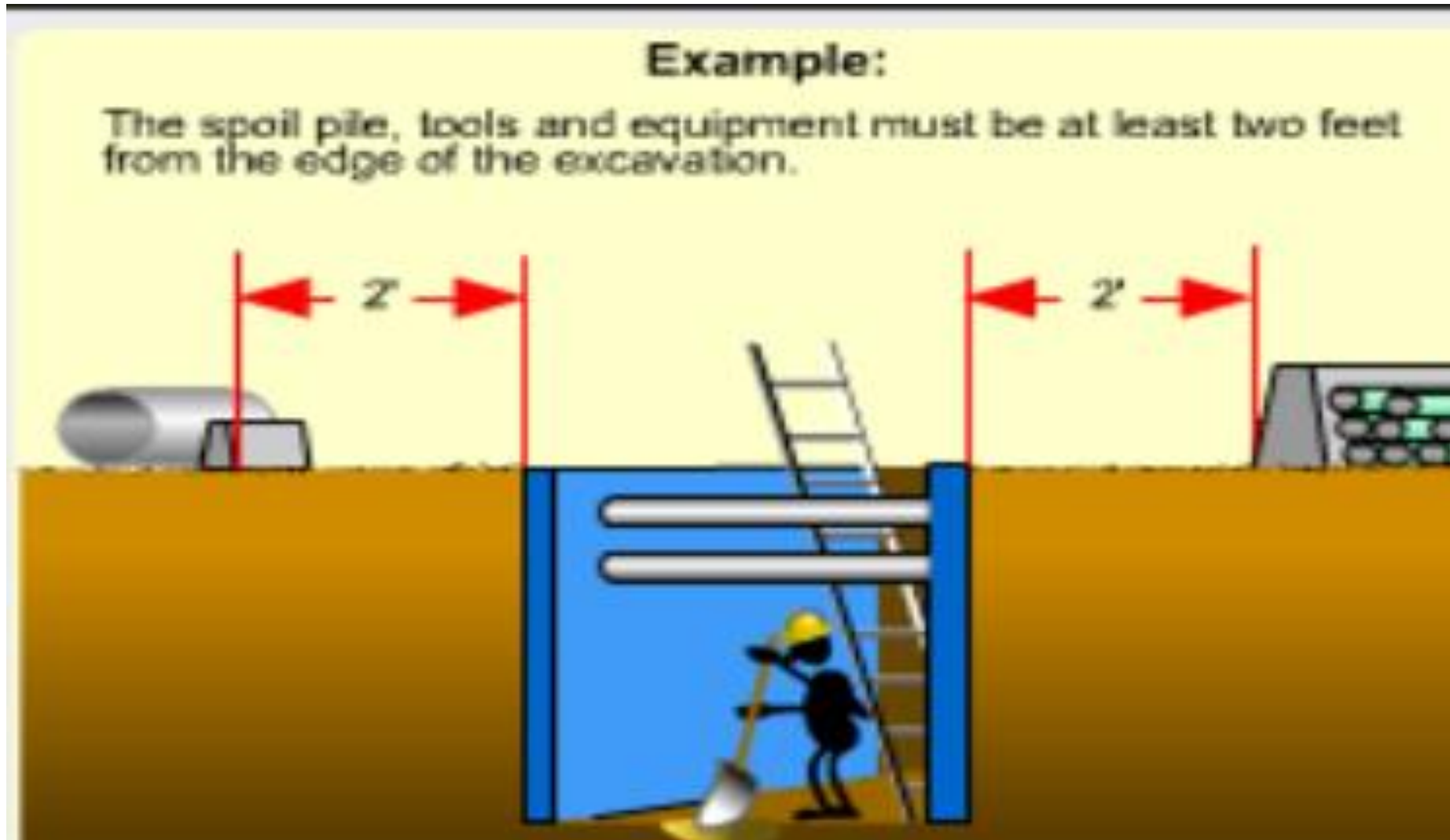
- T-Training on the standard.
- E-Experience and be able to demonstrate they know how to do the work correctly/safely.
- A-Authorization to be able to take prompt corrective action. (Authorization is from your employer)

18" Roll Off Protection

- Roll-Off Protection



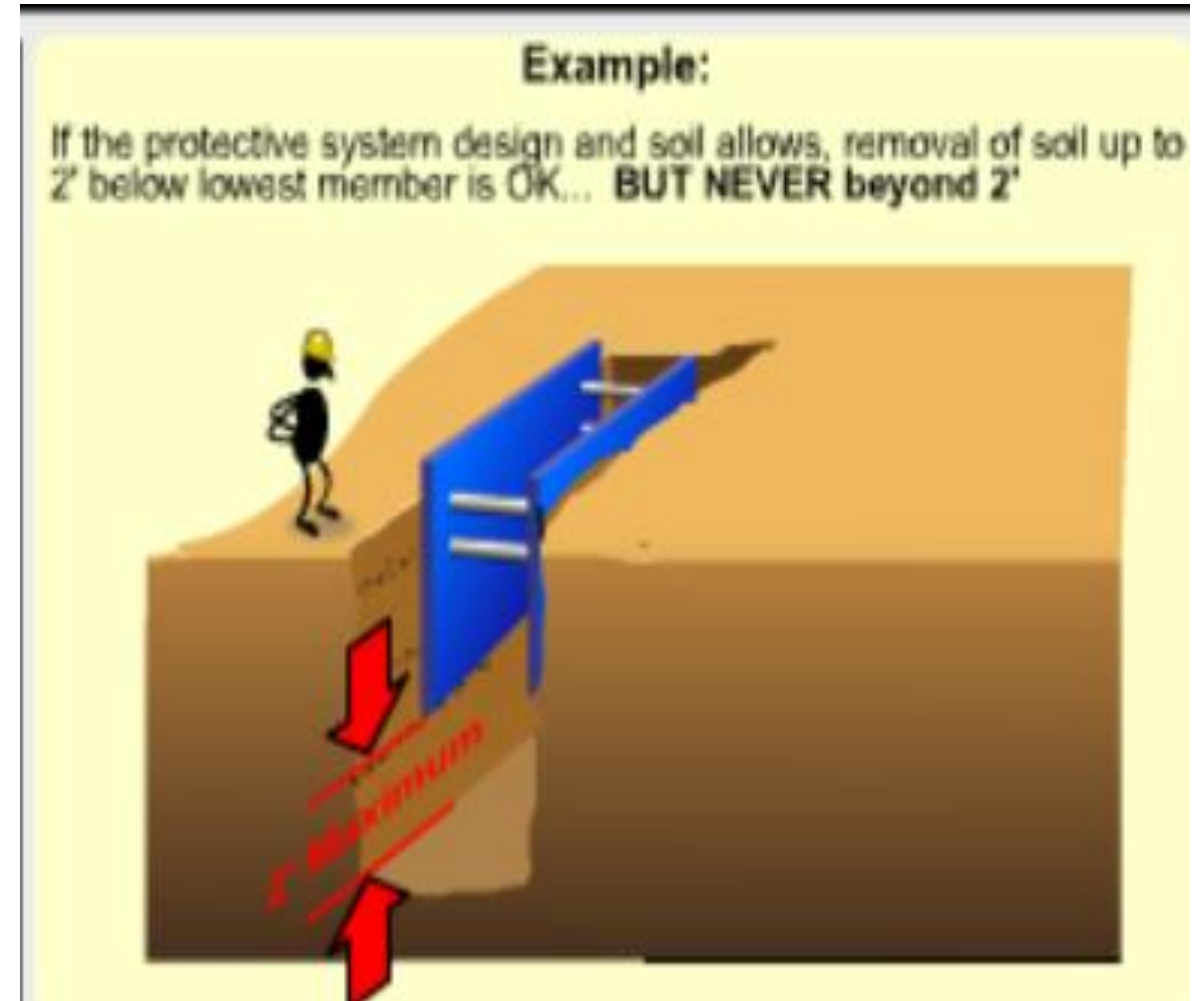
2' minimum of Set-Back of Spoil Pile and Materials



Trench Shields/Boxes maybe kept 2' off the bottom

Only as long as two provisions are met:

- No dirt or materials coming under shield.
- * Shield is rated for the full depth, including the 2' of dirt under the shield.

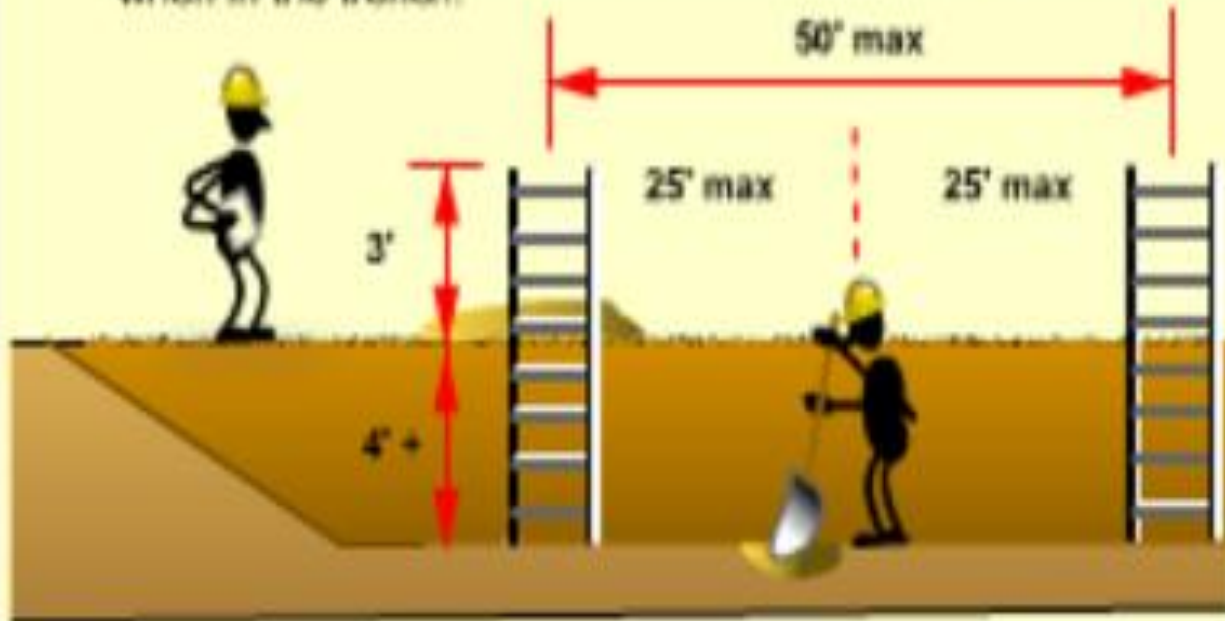


Access and Egress- 3', 4', 25'

Examples:

Remember, when using a ladder in excavations over 4' deep:

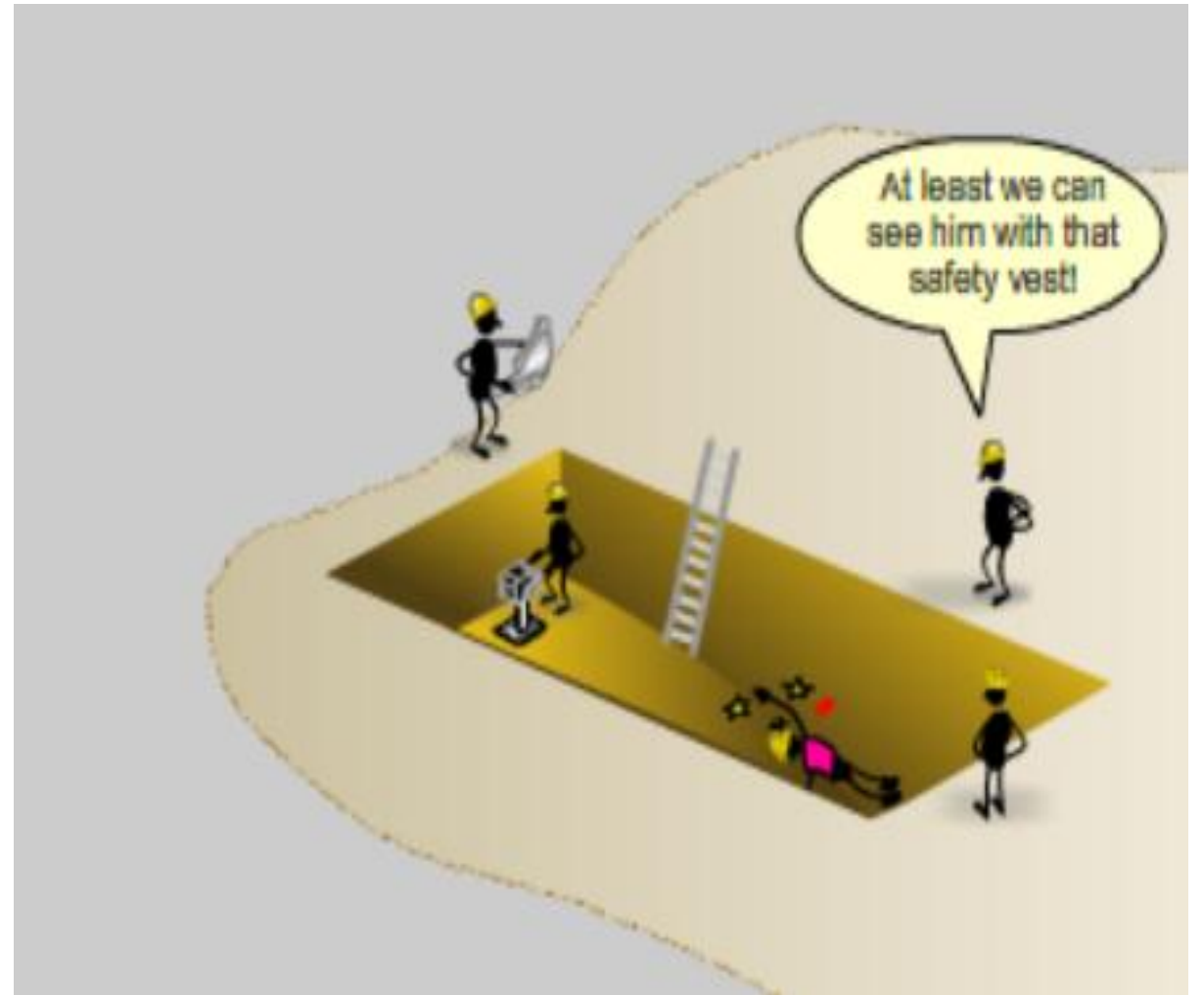
- The rungs must be at least 3 feet above the landing surface. (this is for the employee to have "grab rails" to hang on to when accessing or leaving the ladder)
- The employee shall be within 25 feet of the ladder at all times when in the trench.



A means of egress must be provided at 4' depth with the ladder extending 3' above the top of the trench and a worker must be within 25' of a means of egress

4' Atmospheric Testing

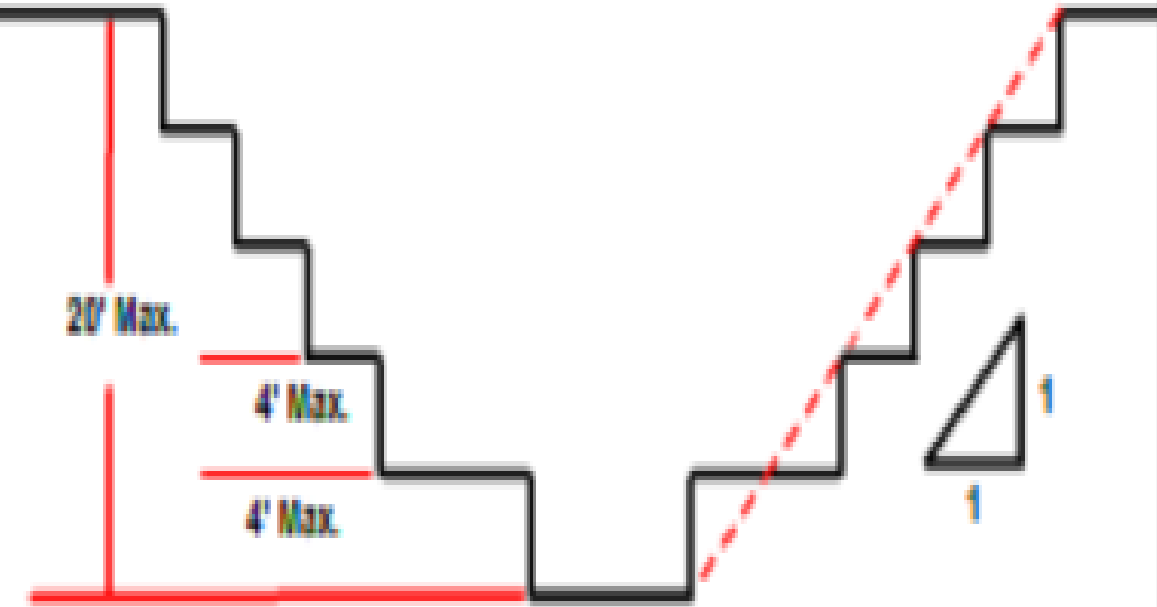
At 4' or greater, if you maybe creating or working in a hazardous atmosphere, you'll need to test.



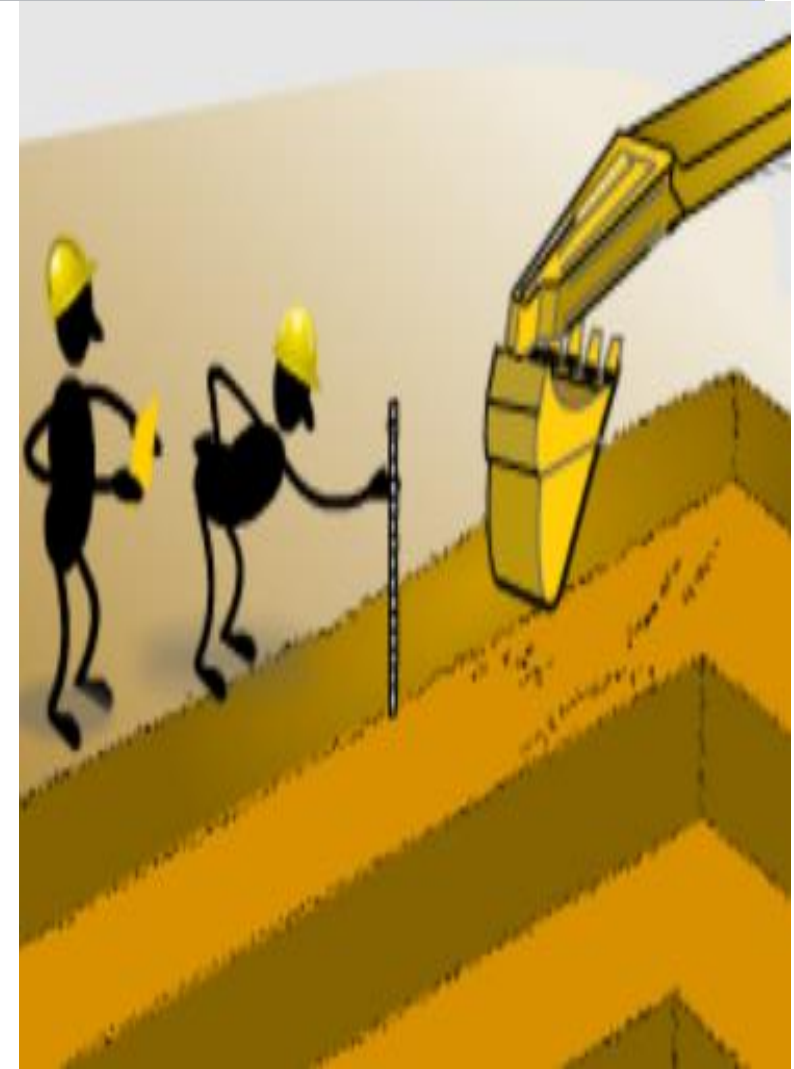
4' Maximum Vertical Cut in Trench Walls

MULTIPLE BENCHES

(This bench allowed in cohesive soil only)



Benching is only allowed in A or B-soils that are cohesive.



5' depth a protective system must be provided

Each employee shall be protected from cave-in 5' or greater, or when an examination by a competent person sees a potential for a cave-in



6' Depth-Employees or Equipment are Required to Cross



Walkways shall be provided where walkways are 6 feet or more above lower level.

(Note that a CA OSHA LOI allows an employee to cross over a 30" or less trench)

10'4" Clearance from Overhead Power Lines



Maintain 10-foot clearance from powerlines of 50,000 volts or less and add 4" more for each additional 10,000 volts.

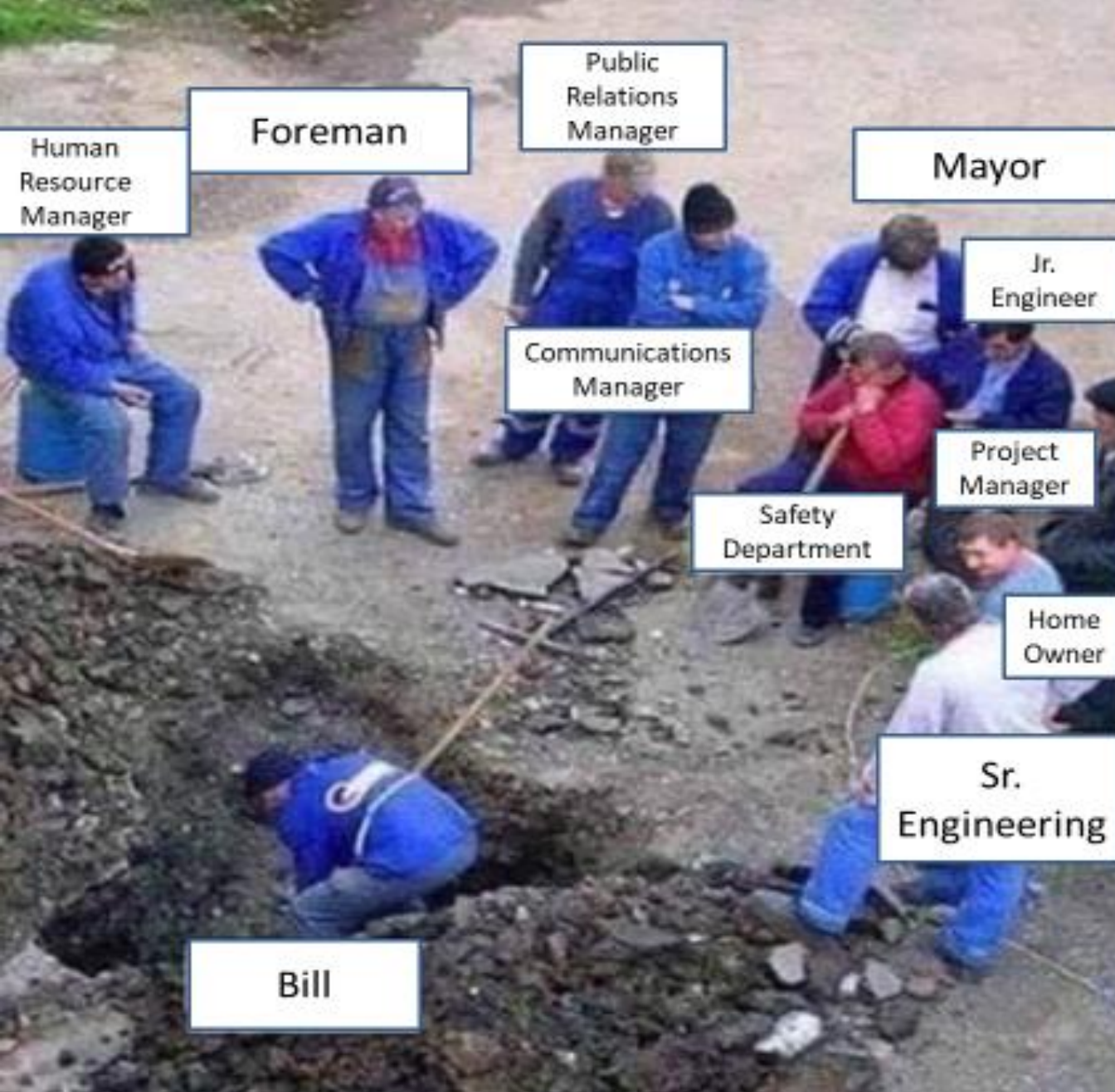
20' deep Trench or Excavation

Maximum depth OSHA charts allow for sloping, benching, wood timber shoring or hydraulic shores to be used.



Summary

- We now know how a Competent Person can check a job site for compliance.
- How simple measurements that can be verified with a tape measure.
- Understand what OSHA will check during an inspection.



Due to cut backs, we are going to have to let Bill go!

- (just kidding to anyone who's taking offense)

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Questions

