

Excavations

Cave-ins and slough-offs are a major cause of deaths in the construction industry each year. Excavations must be properly shored or cut back to an acceptable angle of repose; otherwise, there will be a constant threat of a cave-in and the associated chance of injury or loss of life. A qualified person must be involved in planning and having a safe excavation project.

Guide for Discussion

Before Excavation Review

Underground utilities located? (Checked with local utility companies or property owner.)
Any overhead hazards (i.e., falling rock, soil, or other materials or equipment)?
Will there be any heavy equipment operating in the near proximity of the excavation?
Estimated depth required for the excavation?
How many people will work inside the excavation?
Is there an escape plan for those inside the excavation to cover a possible cave-in or slide?
Has there been a soil analysis? This will help determine the type of shoring to provide or the angle of repose needed.

Steps to Take to Provide a Safe Excavating Operation

Always shore or cut back the opening adequately.
Any opening with a depth of four feet or more requires shoring or be cut back.
Never store excavated or other materials closer than two feet from the edge of the excavation.
Inspect the excavation daily. This must be done by a competent person.
Access ladders must be provided every twenty-five feet in excavations of four (4) feet or more in depth.
Review escape procedures with all personnel who may have cause to be in the excavation.

Additional Discussion Notes:

Possible gas accumulation in the excavation?

Barriers, guardrails or other safety warnings in excavation area?

WISHA requires safety compliance officers to stop and examine all open trenches.

Remember: Unlike most accidents, the cave-in of an excavation usually can be predicted if closely watched. It is, therefore, critical that a competent person keeps a close eye on any excavation. Everyone should be removed from the excavation area should it appear to be unstable.

Attendees:

NOTE: Always promote a discussion on any of the topics covered in the Tool Box Talks. Should any question arise that you cannot answer, don't hesitate to contact your Employer.