

Discussion Leader:

Attendance Sign- In:

Summary

As far as safety is concerned, trenching and excavation operations are very similar. Both expose workers to the same types of hazards. Therefore, many of the same basic safety rules apply. The main difference is that a trench allows for only restricted working space. This restriction increases the potential for injury. As just one result, the need for safety awareness is increased when compared to excavation operations.

Guide for Discussion

Pre-operations:

Locate all underground utilities.

Determine, if possible, soil conditions.

Determine if there is an overhead exposure.

Based on the depth of the trench, determine the amount of shoring needed or angle of repose.

Determine the number of access ladders needed.

Estimate the number of workers who will be working in the trench and the amount of roof needed to perform the task.

Appoint a "top man;" someone who will monitor the trenching operations.

Trenching Operations

Always maintain a "top man."

Constantly monitor the soil conditions.

Shore or slope any trench with a depth in excess of four (4) feet.

All shore or stored materials must be kept at least two (2) feet away from the edge of the trench. (Same with "spoil," the dirt removed from the excavation.)

Keep all unnecessary use of equipment away from the open trench.

Devise and practice escape routes.

Place access ladders every twenty-five (25) feet.

Never allow personnel in trenches where there is a likelihood of a cave-in or slough-off.

Review rescue techniques with all workers.

Additional Discussion Notes:

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

Remember

A safe and successful trenching operation is the result of carefully following several safety techniques and taking no short cuts. One key is to shore or properly slope all trenches. That knowledge comes from training and supervision.