FOCUS FOUR TOOLBOX TALKS

Module 3, Caught-in/between hazards, Talk Number 1

How can you prevent trench cave-ins?

[Ask the following questions and give time for answers.]

What are the hazards? Bodily or equipment entrapment in soil

What are the results? Broken or crushed limbs and bones, entrapment, suffocation, head injury, internal damage, and death

What should we look for? Stable rock and soil type (A, B, C), depth of excavation, cave-ins, water in trench, weather conditions (rain, frost), water table, protective systems, competent person, operation of heavy equipment near excavation, barricades and falling loads

[Relate this incident or better, one you know.]

Actual Incident: A general contractor was putting in a pipe at his own home. It was starting to get dark and he wanted to get done so he did not do any shoring. While on his hands and knees in the bottom of the 12-foot-deep trench, gluing the pipe ends, the trench caved in. The impact of the falling soil knocked him into a fetal position with the open end of the pipe near his face, buried under six feet of dirt for almost an hour before being rescued. He survived, but after being revived, saw the body bag they had out ready for him. After that, "I became very interested in trench safety."

[Ask the following question and ensure every item is covered.]

How do we prevent these results?

- □ A competent person must evaluate excavations daily. Excavation should be re-evaluated after events such as rain.
- □ Use safety equipment such as shoring or sloping for excavations greater than 5 feet or for any depth a competent person deems needed.
- □ Examine protective systems in accordance with manufacturer's recommendations and remove damaged systems from service.
- □ Understand soil types: A-most stable(clay, hardpan), B-next most stable (silt, loam, unstable dry-rock), C-least stable(gravel, loamy sand).

[Ask the following questions about this site and ensure every item is covered.]

Let's talk about this site now.

- □ How can you prevent cave-ins? *Shoring, sheilding and sloping.* At what depth is cave-in protection required? *5 feet.*
- □ Name three soil types and give an example of each. What soil type is on this site?
- □ Name some conditions that can increase cave-ins. *Rain, heavy equipment, etc.*
- □ Does your company have a competent person for excavation and trenching on site?

[Record questions below that you want to ask about this site.]

This material was produced under grant number SH-16591-07-06-F-11from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.