Spot The Safety Violation: Buried Alive?

Is the worker operating the bulldozer trying to bury his co-worker in the trench’ And why isn’t the man in the hat stopping him’

Trenches and excavations pose many serious safety hazards to workers working in them as well as those working near these digs. This picture illustrates a couple of those hazards.

First, if the operators of powered mobile equipment, such as the bulldozer in the picture, aren't aware of the presence of workers in a trench, they can strike their co-workers or literally bury their colleagues alive when they dump materials into the excavation. (Why the man in the hat standing next to the bulldozer isn't yelling at its operator to stop is unclear and disturbing.)

Second, the walls of the trench in the picture aren't shored or supported to prevent them from collapsing on top of the worker inside. When you remove soil to make an opening, the remaining soil 'relaxes' and increases the pressure on the walls surrounding the opening, making them unstable. And the weight of the bulldozer can put additional stress on the walls and increase the risk of a collapse.

TAKE 4 STEPS TO COMPLY WITH SHORING REQUIREMENTS

Because of the various dangers inherent in this kind of work, the OHS regulations contain specific requirements for excavations and trenches. For example, the OHS laws typically spell out detailed shoring requirements to prevent the walls of such digs from collapsing on workers. To comply with the shoring requirements, take these four steps:

Step #1: Determine if Shoring Is Required

First, determine whether shoring is required for a particular excavation'and make this determination *before* workers enter or work in it. You'll generally need to consider the following factors:

- Soil type;
- The excavation's depth;
- Sloping of the excavation's walls; and
- Conditions surrounding the excavation, such as the presence of heavy equipment like the bulldozer in the picture close to the excavation.

Step #2: Determine Appropriate Type of Shoring

If shoring *is* necessary in an excavation, determine the specific type of shoring needed and how it must be constructed. Some jurisdictions have detailed charts in their OHS regulations spelling out the minimum shoring requirements for various types of excavations. So consult your jurisdiction's OHS regulations for these specifications.

Step #3: Properly Install'and Remove'Shoring

In most cases, the installation and/or removal of shoring may need to be done or supervised by a 'competent person.' Other common requirements for installing and removing shoring components include:

- The walls of the excavation should be scaled and trimmed, where necessary, to reduce the danger of falling material;
- Shoring should be installed from the top to the bottom of an excavation in descending order and removed in the reverse order from which it was installed;
- Shoring components must be securely connected together to prevent sliding, falling, kick outs or other possible failure;
- Such components should be installed in firm contact with the walls of the excavation, which may require backfilling of the voids between the walls and the shoring;
- Components should also be installed in a manner that ensures no loss of soil from behind or below the bottom of the shoring; and
- Workers shouldn't enter an excavation to remove shoring materials if ground conditions have deteriorated so as to make entry for shoring removal unsafe.

Step #4: Implement Safe Work Procedures

Implement safe work procedures for working in excavations and trenches that cover the shoring requirements, such as the installation and removal of shoring components. These procedures should also bar workers from entering any excavation until it's been determined whether it needs shoring and from entering any part of an excavation beyond the point at which shoring has been installed.

Have a 'competent person' use this trench/excavation

inspection checklist to inspect excavations and/or trenches before workers begin working inside of them and ensure that they comply with all requirements, including those on shoring. The competent person should also keep a log or record of these inspections (see, daily trench/excavation log).