Excavation obstacles

When working around backhoes or other digging equipment, watch your back

The accident: A contractor was performing site prep and demolition for a new commercial building. During excavation, it was determined unacceptable soil had to be removed and replaced with suitable fill dirt. While the backhoe operator was placing piles of fill in the excavation, other workers were spreading and compacting the fill. In preparation for dumping a load, the backhoe operator positioned his machine at the edge of the excavation. The backhoe toppled over into the excavation. A worker who was operating a gas-powered compactor had his back to the operator and did not see the machine fall into the excavation. The backhoe bucket struck the compactor operator, killing him.

The bottom line: A post-accident investigation determined the backhoe operator moved his machine too close to the edge of the excavation, and then failed to either set the machine's parking brake or deploy outriggers to ensure stability. The worker was pronounced dead from blunt force trauma injuries.

Out of harm's way

The workers spreading the fill on this job were already in the excavation while the backhoe operator was still dumping dirt, raising the risk of coming into contact with the machine. Whether you're



working on foot in close proximity to a piece of equipment – or you're an equipment operator with pedestrian traffic on your site – take the following precautions.

Don't enter an excavation while equipment is working or positioned on the edge. OSHA regulations state that, if a piece of machinery is within 2 feet of an excavation's edge, there should be no workers inside the excavation itself. When the backhoe was ready to dump another load of fill, the workers should have exited the excavation until he moved away. If you're the equipment operator, ensure all foot traffic has left the excavation before you approach the edge.

Familiarize yourself with the results of the site inspection. Your company's competent person will conduct daily site inspections to determine new hazards that appear as the job progresses. The competent person will be able to alert you as to possible cave-ins and problems with the excavation grade that might make it easy for a piece of equipment to tip over into the excavation. Knowing what to expect will help you to keep your eyes and ears open for potential problems.

Follow the safety guidelines. If you're the equipment operator, never park your machine on the edge of an excavation. When you come to a stop, even for just a few minutes, engage the parking brake, lowering front mounted equipment to the ground, shift the transmission controls to neutral and lower stabilizers and level the machine.

Information for this Safety Watch is from an accident report, the Center for Disease Control's NIOSH Fatality Assessment and Control Evaluation program and Code of Federal Regulations, 29 CFR 1926.651 (f) and (k) (1), specific excavation requirements. It is meant for general information only.

Date of safety talk:______ Attending:______

Leader: