

High wire hazard

Moving through a partially developed residential development, the owner of a construction company maneuvered his excavator to pick up a concrete bucket. After securing the concrete bucket to the boom of the excavator with a chain, he proceeded to raise the boom to approximately 26 feet and maneuver it to another place on the jobsite.

The owner's attention was focused on the tracks of the excavator because he did not want to run over a recently poured concrete curb. But the boom of the excavator was so high it snagged a four-wire utility line carrying power, cable TV, telephone and a neutral wire.

The tension on the wires caused by the moving excavator broke the utility pole 70 feet away, bringing all the wires crashing down. The top wire was a 7,200-volt, single-phase primary distribution line. The cable TV, telephone and neutral wires fell on the excavator. The operator said he felt a tingle in his hands and let go of the controls to stop the machine.

But the 7,200-volt distribution line was live and fell on the ground near a 20-year-old worker who was approaching the excavator from the rear. He was immediately electrocuted. Witnesses said the victim staggered away from the wire and fell face down about 20 feet from the energized line. He was pronounced dead shortly afterward.

The owner told investigators he had maneuvered the machine through this area many times in the past, but only once since the lines had been installed. His company had seven employees and worked in excavation, carpentry, residential construction and landscaping. All the company's training was on-the-job, and there were no written safety procedures.



Illustration by Don Lomax

Investigators also suspect that the roof on the excavator cab may have prevented the owner from seeing the low-hanging lines.

How this accident could have been prevented

- Before getting into the cab and maneuvering equipment, operators should visually inspect the route to look for hazards.
- Employees should be trained to recognize the hazards associated with equipment, ladders or any type of operation around power lines.
- Before maneuvering a piece of equipment near hazards or power lines a signal man or guide should be posted in front of the machine to warn operators of hazards or problems.
- A hazard analysis should be conducted and results communicated to workers on every jobsite.
- Every time a change is made on the site, a hazard analysis should be updated and those updates communicated to the workers.
- Supervisors should visually inspect sites every morning to look for changes that may impact safety.

For more information go to:

www.cdc.gov/niosh/face/In-house/full8532.html



Date of safety talk: _____ Leader: _____
 Attending: _____