Summary

On December 3, 2002, a 30-year old Hispanic laborer died when an unsupported 8-foot wall of a trench collapsed on him. Three laborers were working in an unsupported trench when one side caved in, burying one laborer (decedent) and partially burying another Hispanic worker. The third laborer managed to escape the trench unharmed. Two of the laborers were Hispanic, the third was a brother to the owner of the company digging the trench. The coroner pronounced the 30-year old laborer dead at the scene due to asphyxiation.

To prevent similar incidents from occurring, Kentucky Fatality Assessment and Control Evaluation personnel suggest:

- Employers should comply with Occupational Safety and Health Act regulations on shoring trenches.
- Employees should be trained in trench and general workplace safety.
- Foreign workers should receive safety training in their native language and be informed of potentially hazardous working conditions.

Introduction and Background

Through a local newspaper on December 4, 2002, the Kentucky Fatality Assessment and Control Evaluation (FACE) program became aware of an occupational fatality, that occurred at a private residence, involving a 30-year old Hispanic male. A FACE investigator arrived at the home that morning but no one was home or available to grant access to the site. Kentucky Occupational Safety and Health Administration (OSHA) was contacted and on December 6, 2002, an interview was conducted in Spanish by the FACE investigator with the Hispanic laborer. OSHA staff was also present and had requested the joint interview since it would be conducted in
Spanish and OSHA had no Spanish translators available. One of the company owners was interviewed over the phone in January.

A homeowner had hired a local contractor to waterproof a basement. This involved the installation of footer drains around the outside walls of the home. The company was owned by two brothers. The company usually dug shallow ditches for drain lines. On this particular job one brother was working as a laborer while the other brother operated the backhoe. The work crew at this site consisted of the two brothers and the two Hispanic laborers. The decedent had been employed by the company for approximately 3 years; the other (witness) on site had been employed by the company for approximately 7 months. The decedent spoke English and translated for the other Hispanic employee. Work hours for the company were typically 8 AM to 4 PM and sometimes 8 AM to 6 PM. Routine safety training was not provided by the company. It is unknown whether or not the company had a safety program or rules.

Investigation

This particular job entailed digging a trench approximately 9 yards long that sloped from 4-feet-deep at one end of the home to 8 feet deep at the other end. No safety training had been provided, nor had instructions been given on trench safety. A backhoe was used to dig the trench after the ground was prepared by the laborers. Three laborers would first remove rocks and loosen dirt with picks and shovels in the trench. Then the backhoe was used to remove the loosened dirt and rocks from the trench to be deposited on the ground beside the trench. The ground was cold, snowy and wet from previous rains. Gloves were provided to the workers for cold weather work.

On the afternoon of the incident, the laborers had gone to lunch and had returned to the job site at approximately 3:00 PM. At approximately 3:30 PM, the owner was operating the backhoe at the deep end of the trench, the two Hispanic workers were in the deep end of the trench and the owner's brother was in the shallow end of the trench. The backhoe was to the side at the deep end of the trench. The backhoe had just deposited a load of dirt and rock onto the ground beside the trench after being loosened by the laborers. The wall of the 8-foot section collapsed, burying the decedent and trapping the other Hispanic worker up to his waist in mud. The owner’s brother managed to escape from the shallow end of the trench. For 15 minutes, the owner and the brother tried to free the buried employee. Afterward, the owner called emergency medical services. The local fire department and ambulance service responded. Rescue workers covered the witness' face with a sheet to prevent him from breathing dirt. There was no shoring in the trench so the fire department contacted the coroner's office and proceeded to shore up the sides of the trench so that responders could enter the trench safely to rescue the workers. Two representatives from the coroner's office arrived at approximately 4:20 PM followed by OSHA personnel around 5:30 PM. Rescue workers freed the witness from the mud and transported him to the emergency room of a nearby hospital. At approximately 9:30 PM, rescue workers removed the body of the decedent from the trench.

Cause of Death

The cause of death was listed as traumatic (compressive) asphyxia by the local coroner.
Recommendations with Discussions

Recommendation No. 1: Employers should comply with Occupational Safety and Health Act (OSHA) regulations on shoring trenches.

Employers are required by OSHA statute 1926.652(a)(b)(c)(d)(e) to protect employees from cave-ins while performing excavation work. This regulation also stipulates configurations for sloping sides of trenches and appropriate materials to be used in shoring walls of excavation sites. Any trench over 5 feet must be shored.

Recommendation No. 2: Employees should be trained in trench and general workplace safety.

The employees were accustomed to working in shallow ditches for drain lines. Their experience in working in deep trenches is unknown. Employers have an obligation to ensure their employees are trained in workplace safety practices and to provide a safe working environment.

Recommendation No. 3: Workers should receive safety training in their native language and be informed of hazardous and unsafe working conditions.

Local ethnic leaders and local community groups, such as churches or organizations, could consider organizing training courses for non-English speaking persons pertinent to the type of work required for that local area. These courses should include basic safety training and an explanation that all workers (legal or illegal) in the United States are protected from working in unsafe working conditions. Employers should ensure that all workers are properly trained for jobs they are to perform. When a language barrier exists, workers should be trained in their primary language and employers should ensure they understand the training received.

Key words

Trench
Cave-in

References


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