

CSI Country Wide Case Study Safety Strategy Discussion

Construction Safety Investigator



Instructions

The objective of this tool is to provide field supervisors with information to proactively engage workers and discuss safety related concerns that they may encounter. Safety discussions should not be limited to the subject above and should pertain to the activities that workers will be involved in that may have the potential for safety related exposures.

Case Day:

July 1, 2005

Accident Type:

Electrocution Accident - Overhead Powerlines

Relevant laws, rules and codes may include:

MIOSHA Part 1. General Rules, Rule 115(4), 1926.21(b)(2), 1926.20(b)(1),(2),(4), 1910.333(c)(3), 1926.451, 1926.451(f)(6), (7)

Case:

A 36-year-old brick mason was electrocuted when he attempted to insert a 20-foot 1/2-inch section of rebar down through a grouted brick wall. The rebar contacted an energized, primary 4,800-volt single-phase powerline.

Accident Detail:

The project consisted of adding space to an existing building by erecting a brick wall. This was being worked on by a 4-man crew (which included the deceased). All four workers at the job site set up the scaffolding which they were working from. The scaffold was leaning.

Due to the overhead power lines, Coworker 1 said he warned the decedent to be careful because he assumed they were “electrified”. The decedent indicated he would. Coworker 2, who was on the ground, said he personally didn’t worry about the wires, because they were “so high in the air”.

After every 5 foot vertical course of bricks, the masons on the scaffold would pour grout into the bricks and then the worker would insert rebar down through the grout to increase stability of the wall. The length of rebar the decedent would insert was 20-foot 1/2-inch long. The wall they were working on at the time was approximately 20-feet high. The rebar that the decedent was inserting into the grout was closer to the electrified power lines than the required 10 foot distance. When the rebar was lifting to be inserted through the bricks, it contacted the 4,800-volt primary electrical line, electrocuting the mason who then fell to the planks.

Reconstructive Safety Evaluation:

- What are some of the possible causes of the accident being discussed?
- What actions could have been taken that might have prevented this accident

