

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:

September 2, 2004

Accident Type:

Wood Floor Refinishing Accident

Relevant laws, rules and codes may include:

29 CFR 1926.21(b)(2), 29 CFR 1910.1200, 29 CFR 1926.20, 29 CFR 1926.57, 29 CFR 1926.24, 29 CFR 1926.150(a)(1), 29 CFR 1926.152(f)

Case:

Two 35 year-old floor sanders were fatally injured and two other floor sanders were burned when the three-family house they were working in caught fire.

Accident Detail:

A company was hired to refinish two sets of wood stairs leading up from the first floor to the third floor of a multi-family residence.

To perform the operation, the company stated that they opened the windows, extinguished the pilot lights and any other possible ignition sources prior to beginning the task. The job entailed applying floor primer to the sanded area and once the lacquer sealer was dry, applying two coats of polyurethane.

On the first day of the job, the crew arrived in the morning to begin the work. Just before noon, two more workers arrived to help apply the wood floor finishing products. As the workers on the third floor were applying the lacquer sealer, the vapors suddenly ignited, causing an explosion and creating a fireball that traveled through the two stairways down to the first floor. The explosion also resulted in a fire that engulfed the entire third floor of the multifamily house.

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 from occurring?

