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:

August 2008

Accident Type:

Excavation Accident - Utility Strike

Relevant laws, rules and codes may include:

29CFR 1926.20(a)(1), 1926.21(b)(2), 1926.651(b)

Case:

Two construction workers were seriously injured when an underground gas line was struck while excavating.

Accident Detail:

The workers were employed by a site contractor hired to install a new storm water drainage system in an area where a new building and parking lot were to be constructed.

The excavation crew had begun excavating in locations where the new system would be located. As they excavated, they would place and connect the new drainage structures and pipe and continue on until completed.

At the time of the incident, the two workers were working in the previously excavated section of the trench. As the operator began to excavate further to place another section of pipe, he unknowingly struck a buried gas line. The pipe was damaged by the machine, but not exposed as it began to leak. As the operator maneuvered the excavator to continue with the task, he again struck the line which ignited the gas trapped in the surrounding soil.

Both workers in the trench received burns as a result of the initial gas ignition but managed to climb out of the excavation and call for emergency assistance.

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?



Accident Scene Conclusion:

The investigation revealed that the site work contractor had not called in for a utility mark out prior to beginning the excavation. The locations of the excavations were determined by the drainage plans and specifications only and a visual assessment of the area by the contractor's Foreman.

Preventive Safety Measures Include:

- All operations are preplanned using a Job Safety Task Analysis (JSTA) to ensure potential safety hazards associated with an
 operation are identified and appropriate steps are taken to eliminate or control them.
- Workers should be trained in the hazards of the work they are to perform, the personal protective equipment and safe work procedures necessary to perform their assigned tasks.
- Prior to beginning any excavation, any underground utility that could reasonable be expected to be encountered during the excavation work shall be determined.
- Ensure that both public and private utility companies and owners are contacted to perform the mark out to ensure to the fullest extent possible, all potential buried utilities are identified.
- When excavating near known underground utilities, always ensure safe means and methods are used to complete the excavation and subsequent operations so as not to damage existing utilities.

Attendance Roster		

Reference: This case is fictitious, and any resemblance to any persons, living or dead, is entirely coincidental. However, the type of accident described in this case summary happens all too often on construction sites.

Chubb. Insured.[™]

Chubb is the marketing name used to refer to subsidiaries of Chubb Limited, providing insurance and related services. For a list of these subsidiaries, please visit our website, www.chubb.com. Insurance is provided by ACE American Insurance Company and its U.S. based Chubb underwriting company affiliates. All products may not be available in all states. This communication contains product summaries only. Coverage is subject to the language of the policies as actually issued. Surplus lines insurance is sold only through licensed surplus lines producers. Loss control evaluations, reports, recommendations and services are made solely to assist the insurer in underwriting and loss control and are not to be construed as an added benefit for the insured, property owner or any other party (this may not apply if loss control services are purchased separately and specifically pursuant to a service agreement). Evaluation for any hazard or condition does not imply that it is covered under any policy. Chubb is the world's largest publicly traded property and casualty insurance group. With operations in 54 countries, Chubb provides commercial and personal property and casualty insurance, personal accident and supplemental health insurance, reinsurance and life insurance to a diverse group of clients. Chubb Limited, the parent company of Chubb, is listed on the New York Stock Exchange (NYSE: CB) and is a component of the \$88 500 index.