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:

November 2009

Accident Type:

Power Tool Accident - Bench Grinder

Relevant laws, rules and codes may include:

29CFR 1926.20(a)(1), 1926.21(b)(2), Manufacturer's operating instructions and safety precautions

Case:

As the result of using a grinding wheel improperly, a construction worker lost both of his thumbs.

Accident Detail:

A contractor employed a construction maintenance mechanic to inspect and maintain the heavy equipment used on a project.

While performing routine maintenance on a piece of equipment, the worker discovered he needed to clean rust and old paint off of a short length of chain used to secure a panel door.

In order to clean the chain, he used a bench grinder with a wire brush wheel which was

mounted to a work table inside the maintenance shed. The worker was holding the chain across the grinding wheel brush when the chain became caught by the spinning wheel. The rotating wire wheel brush pulled in the chain and wrapped it around the wheel. When this occurred, the worker's hands were also pulled into the wheel and his thumbs were severed by the sudden binding of the chain he was holding.

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 the employee did not use the proper equipment to perform the task. As a result, the employee used equipment improperly by placing a flexible chain with his hands into a rotating grinding wheel brush. In addition, it was determined that the employer did not require the use of Job Safety Task Analysis (JSTA) and did not have safe work procedures established for the maintenance operations.

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.
- · Supervisors should ensure that employees have available and only use equipment appropriate for the task being performed.
- Loose flexible objects should not be used against bench grinding wheels. Secure and support the work piece using clamps and a stable work surface. Do not hold the work by hand or against your body.
- Do not wear gloves, loose clothes or jewelry. They can be caught in the moving parts.

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.[™]

2

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.