# 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:

May 2010

### **Accident Type:**

Quarry Accident - Crushed By Falling Rock

# Relevant laws, rules and codes may include:

29CFR 1926.20(a)(1), 1926.21(b)(2), 29 CFR 1910.147, Aerial Lift Manufacture's Operating Manual

#### Case:

A 30-year-old equipment operator was killed when she was crushed during quarry operations.

# **Accident Detail:**

The operator worked in a quarry running an excavator, loading rock into dump trucks that transport the material to near-by crushing operations. The operator had loaded a number of trucks prior to the incident occurring. At the time of the incident, the dump truck had driven away and the operator was alone at the location.

Since there were no witnesses to the incident, it is assumed, that the operator had begun to pre-load the bucket awaiting the next truck to arrive. As she maneuvered the excavator into the rock pile and began to elevate and remove the loaded bucket, the removal of the rock caused the rock pile to shift and an adjacent wall to crumble. The pile of rock and wall face toppled onto the cab of the excavator, crushing it and the operator inside.

The operator was pronounced dead at the scene.

# **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?



CHUBB

#### **Accident Scene Conclusion:**

The investigation revealed that no pre-work inspection of the rock spoils and adjacent high wall was conducted before the operator began to remove the rock. It is assumed that during overnight hours, fissures in the adjacent high wall formed that severely weakened the rock structure. When the operator began removing the rock from the spoil pile, it allowed the fissures to open, which eventually led to the wall collapsing onto the excavator.

# **Preventive Safety Measures Include:**

- Scaling shall be performed from a location that will not expose persons to injury from falling material, or other protection from falling material shall be provided.
- Persons experienced in examining and testing for loose ground shall be designated by the mine operator. High walls and banks shall be examined weekly or more often if changing ground conditions warrant.
- Appropriate supervisors or other designated persons shall examine and test ground conditions in areas where work is to be
  performed prior to work commencing, after blasting, and as ground conditions warrant during the work shift.

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.<sup>™</sup>

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.