# CSI Country Wide Case Study Safety Strategy Discussion

# **Construction Safety Investigator**

# Instructions

# CHUBB<sup>®</sup>

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: April 21, 2000

### Accident Type:

Work Zone Accident - Set Up/Tear Down

### Relevant laws, rules and codes may include:

29CFR 1926.20(a)(1), 1926.21(b)(2), Manual on Uniform Traffic Control Devices (MUTCD), California Code of Regulations, Vol. 9, Title 8, Sections 1597, 1598, 1599, ATSSA Standards for Work Zone Traffic Control

# Case:

A 27 year-old general laborer died when a speeding vehicle struck him as he and his co- workers picked up lane closures in an interstate highway work zone after night operations had concluded.

# Accident Detail:

The worker was part of a crew picking up traffic control devices after their night shift had ended. The work zone was approximately six miles long, consisting of three lanes closed to traffic by means of orange cones with retro-reflective sleeves and barricades with illuminated beacons and signboards.

The victim and two coworkers used a one-ton flatbed traffic control truck equipped with flashing lights, an arrow board, and man-basket attached to the rear of the bed. The victim and co-workers were all wearing orange vests with retro-reflective markings.

A co-worker backed up the truck at approximately two to three miles per hour while parallel to the traffic cones in the lane. The victim and another co-worker alternated standing in the man-basket to pick up cones and shoveling up old reflective markers.

When backing up, the driver of the truck noticed headlights coming at him in his left rear view mirror. When the driver looked in the right rear view mirror and did not see the headlights, he stopped the truck, honked his horn, and yelled the victim's name as loud as he could to warn him. The vehicle struck the rear of the truck in which the victim was working, ejecting him onto the interstate highway.

Witnesses to the incident stated the vehicle that struck the rear of the traffic control truck was traveling at speeds in excess of 70 mph, swerving erratically and hitting traffic cones for more than two miles before the impact took place.

## **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 Conclussion:

Investigation indicated that no attenuator vehicle was used to protect the workers, visibility was limited due to night operations (3:45 a.m.), three lanes were closed yet highway speeds were not lowered and law enforcement was not used.

### **Preventive Safety Measures Include:**

- Speed limits should be lowered to safe levels based on work zone conditions especially on interstate and high speed, high volume highways.
- Use impact attenuators mounted on a truck which follows behind the crew as protection.
- If possible utilize law enforcement to act as a speed deterrent.
- Use appropriate lighting systems to illuminate the work zone during nighttime operations.

#### Attendance Roster

Reference: This case was reported in the NIOSH Fatality Assessment and Control Evaluation (FACE) Program, New York Case Report 07NY080.

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