FACE Investigation 91CO020

SUBJECT: University Employee is Fatally Injured in 120-foot Fall from Roof

SUMMARY:

A 60-year-old physical plant director for a state university fell 120 feet to his death. The victim was using the roof of the campus library as an observation point to inspect campus facilities for wind damage. High wind conditions with gusts to 30 miles per hour existed at the time of the incident. Campus employees routinely used the library roof as an observation point because it was the highest structure on campus and allowed an unobstructed view of the entire campus. The victim was apparently walking around the perimeter of the roof when he tripped on a utility vent pipe located near the low parapet of the roof. The Colorado Department of Health (CDH) investigator concluded that, in order to prevent future similar occurrences, employers should:

* construct permanent railings around the perimeter of the roof;

* develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, training in fall hazard recognition.

INTRODUCTION:

On April 9, 1991 the 60-year-old physical plant director at a state university died from injuries sustained in an 120-foot fall.

A routine screening of state death certificates by the Colorado Department of Health (CDH) for work-related fatalities prompted the investigation of this fatal injury. The CDH investigator contacted university personnel and photographed the site. Reports were obtained from the campus police, county sheriff, hospital, county coroner and the state Division of Risk Management.

The university employs 450 personnel and has a full-time designated safety officer. The university safety plan did not

specifically address use of the roof as an observation point.

INVESTIGATION:

The fall occurred at approximately 1730 hours on April 9,1991. On the day of the incident, the victim had apparently gone to the roof to survey the campus for any damage caused by the high winds that had been experienced that day. The access to the roof is restricted to personnel who have a key to the locked door. Campus security and maintenance personnel routinely use the roof as an observation point as this building is the highest point on campus. There is no requirement for prior approval to access the roof.

The roof is surrounded by a 10-inch parapet and is surfaced with a tar and gravel combination. At the point from which the victim fell, a utility vent pipe protrudes 4-inches through the roof. This vent pipe is covered with tar causing it to blend in with the roof and parapet. It is thought that the victim was walking around the roof perimeter surveying the campus when he tripped on the vent pipe. Witnesses that observed the victim as he fell stated he was falling face down and his head was lower than his feet. This would be consistent with a tripping incident. The victim landed on a granite wall that was topped with concrete benches. An ambulance was called and arrived four minutes later. The victim was taken to a local hospital where he was pronounced dead at 1820 hours.

CAUSE OF DEATH:

The cause of death was determined by autopsy and listed as multiple traumatic injuries including skull fractures and internal injuries.

RECOMMENDATIONS/DISCUSSION:

Recommendation #1: Construct an approved guardrail around the perimeter of the roof.

Discussion: The employer should implement 29 CFR 1926.500 that requires that every open-sided floor or platform shall be guarded by a standard railing. This roof is routinely used by various personnel on campus as an observation post and access to the roof is required by maintenance personnel. A guardrail would provide a method of prevention for further occurrences of this type.

Recommendation #2: Employers should develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, training workers in the proper methods of fall protection.

Discussion: Employers should emphasize the safety of their employees by developing, implementing and enforcing a comprehensive safety program. The safety program should include , but not be limited to, training workers in the recognition and avoidance of fall hazards.

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