Electrician Dies in 6-foot Fall from Ladder

SUMMARY

A 51-year-old male electrician (the victim) died after falling approximately six feet to the concrete floor of a fertilizer plant. The victim had been doing electrical work while standing on an aluminum extension ladder at a switch box attached to a steel post near a rear exit of the plant. His co-worker, who was approximately 20 feet away, heard him hit the floor, but did not see him fall. The co-worker ran for help. A 911 call was placed at 8:46 am, and Emergency Medical Services (EMS) personnel arrived in three minutes. The victim was transported to the local hospital, but never regained consciousness. He was pronounced dead an hour later. To prevent similar incidents, the KY FACE investigator recommends that employers should:

- **stress to all employees the importance of exercising caution when working from ladders;**
- **develop and implement a comprehensive written safety program.**

INTRODUCTION

On February 20, 1998, KY FACE was informed by a Community Partners for Healthy Farming (CPHF) nurse that a 51-year-old electrician had died in a fall on February 17. An investigation was initiated through contact with the county coroner. On February 27, a KY FACE investigator travelled to the scene. The deputy sheriff was interviewed, as well as the manager of the plant where the victim was working at the time of the fall. Photographs of the scene were taken, and copies of the police and sheriff's reports, including diagram, were obtained. The victim's employer and the KY Occupational Safety and Health (OSH) compliance officer were later interviewed by telephone.

The employer was an electrical company consisting of an owner and four employees. The owner had begun working at the company in 1969, and had purchased it from the previous owner in 1976. The victim had worked for the company 33 years, and had been responsible for the electrical work at the fertilizer plant where the incident occurred for 25 years. The company did not have any formal written safety policies or meetings.

The victim was in relatively good health, and was not on any medications. He had experienced no previous serious injuries.

INVESTIGATION

On the day of the incident the victim and a co-worker were removing old wiring from one of the buildings of the fertilizer plant. All of the electricity had been turned off. The victim was working on an aluminum ladder, which had been extended to a length of about ten feet. The ladder was leaning against a steel post on the outside wall of the plant, near an exit door. He was working on an electrical switch box mounted on the post 128 inches above the floor. The old electrical conduit, which the victim had disconnected, was hanging from a beam approximately two feet to his left. The victim's co-worker was working on another ladder about 20 feet away, in one of the storage bins. He reported that the victim did not cry out when he fell. He heard his body hit the concrete floor and ran to his aid. A call was placed to EMS at 8:46 am. The ambulance arrived in three minutes and the victim was transported to a

local hospital. He never regained consciousness, and was pronounced dead at the hospital an hour after the incident occurred.

This incident was unwitnessed, and thus it is uncertain why the victim fell from the ladder. One theory is that he reached out to grab the hanging conduit and lost his balance. However, the plant manager reported that, since the conduit had already been disconnected, there was no need for the victim to handle it again. The KY OSH compliance officer found that the victim had been following safe work practices in that the ladder was in good condition and was being used properly. The victim was not wearing any personal protective equipment (PPE).

CAUSE OF DEATH

Preliminary autopsy results ruled out myocardial infarction. The autopsy indicated that the victim's ribs were broken, lacerating his spleen. He died of internal bleeding.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should stress to all employees the importance of exercising caution when working from ladders.

Discussion: The event was unwitnessed and there was no evidence of any malfunction of the ladder that might have been a factor. (The ladder did not fall.) Employers should constantly stress to employees the importance of exercising caution when climbing or working from ladders, and should ensure that employees adhere to 29 CFR 1910.26(c)(3)(iv), which regulates the proper use of extension ladders.

Recommendation #2: Employers should develop and implement a comprehensive written safety program.

Discussion: Enforcement of such a safety program should reduce and/or eliminate worker exposures to hazardous situations. The safety program should include, but not be limited to, ladder safety, the use of safety equipment, and the recognition and avoidance of fall hazards.

REFERENCES

29 CFR 1910.26(c)(3)(iv), Code of Federal Regulations. Washington DC: US Government Printing Office, Office of the Federal Register.

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