

F.A.C.E. INVESTIGATION REPORT

Fatality Assessment and Control Evaluation Project

FACE #94-NJ-132-01
Engineer Dies After Falling
From Stairs While Entering Plant



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TO: Division of Safety Research
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FROM: Fatality Assessment and Control Evaluation (FACE) Project
New Jersey Department of Health (NJDOH)

SUBJECT: FACE Investigation #94-NJ-132-01
Engineer Dies After Falling From Stairs While Entering Plant

DATE: February 9, 1994

SUMMARY

On September 1, 1994, a 83 year-old design engineer was critically injured after falling from the steps leading into his workplace. The incident occurred as the victim arrived for work in the morning and was climbing the three steps leading to the employee entrance. He apparently slipped on the stairs and fell on the asphalt pavement, injuring his head and arm. Although his injuries initially appeared to be minor and he was quickly given first aid and medical attention, he died of his injuries the next day. NJDOH FACE investigators concluded that, in order to prevent similar incidents in the future, these safety guidelines should be followed:

- o Employers should provide stairs with hand rails and non-slip surfaces.
- o Employers should consider installing ramps to assist employees in entering the plant.

INTRODUCTION

On September 22, 1994, NJDOH FACE personnel were informed by the county medical examiner's office of a work-related fatal fall at an electronics manufacturing plant. After contacting the employer, a FACE investigation was conducted on November 16, 1994. The FACE investigator interviewed a company representative and photographed the incident site. Additional information was obtained from the OSHA compliance officer and the medical examiner's report.

The employer was a electronics component manufacturing plant located in an industrial area. The company had been in business for 50 years and employed 238 workers at two plants. This plant had been open for 27 years and employed 134 non-unionized workers. The victim was an 83 year-old design engineer who had worked for the company for 28 years. For the past six years he had been working part-time, usually working 4 hours in the morning for a twenty hour work week.

INVESTIGATION

The incident occurred outdoors at the employee entrance to the plant. The entrance had three concrete steps leading to a concrete landing and the double glass doors to the building. Both the landing and steps were covered by an awning. The steps had a 6 inch rise leading to a 8 foot wide step with a 14 inch tread run. There was no hand rail on the steps.

There were no witnesses to the incident. The weather that morning was dry and clear. At about 8 a.m., the victim arrived for work in his car and parked about 50 feet from the employee entrance to the plant. The victim, who was said by his employer to walk slowly with a shuffling gait, walked to the stairs and fell from them to the asphalt pavement. A vendor arriving on the

site found the victim lying on the pavement in front of the stairs and went for help in the plant. Company employees found the victim conscious and brought him into the plant where he complained of a scraped elbow. As an employee gave first aid, he said he also hit the back of his head. The employee checked his head and found a bump but no other apparent injury. The victim was then transported to the company doctor who examined him and sent him to an orthopedist for his arm. Both doctors were aware of his head injury. The victim's nephew later picked up the victim and drove him to the nephew's home for the evening.

The following morning, the nephew tried to awaken the victim and found him unresponsive. The nephew called the EMS who transported him to the local hospital. The attending physician determined that the victim needed to be transferred to a trauma center and contacted the medevac helicopter to transport him. The victim died of his injuries before reaching the trauma center.

Federal OSHA inspectors inspected the stairs and found no safety violations. It was also stated by the employer that the victim had previously fallen from the same stairs while leaving the plant about two weeks prior to the the incident. The employer quoted a witness as saying the victim appeared to list and fall from the steps and said that the victim was not injured in that incident.

CAUSE OF DEATH

The county medical examiner determined that death was caused by head injuries due to a fall on stairs.

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: Employers should provide stairs with hand rails and non-slip surfaces.

Discussion: The stairs in this incident were well maintained and in compliance with OSHA standards. To provide better protection against slips and falls, the FACE project recommends that the stairs be provided with hand rails and non-slip surfacing on the edges of the steps. The company did order a guard rail prior to the FACE investigation.

Recommendation #2: Employers should consider installing ramps to assist employees in entering the plant.

Discussion: Although not disabled, the victim was an older employee with limited mobility. It may be useful for companies to install gently inclined ramps to the entrances to make it easier for older or disabled employees to enter the buildings. It should be noted that such accommodations may be required under the Americans with Disabilities Act to allow access for disabled employees.