

Colorado Fatality Assessment and Control Evaluation (FACE) Program  
and  
Colorado SENSOR

SUBJECT:

Colorado FACE Investigation 94CO040

Two workers were injured (one died and one was hospitalized with burns) when the truck-mounted conveyor they were using was raised and contacted a 7,620-volt overhead power line.

SUMMARY:

On August 1, 1994, a crew of three employees of a roofing supply company were delivering roofing materials to a one-story residential building. The materials were on a flat-bed truck equipped with a truck-mounted hydraulic-operated conveyor. The conveyor is designed to facilitate easy transport of materials directly from the truck to the rooftop. One end of the conveyor is fixed to the back of the flat-bed with the other end resting on the truck cab when the truck is in transit. On arrival at the site, the driver parked the truck under a 7,620-volt power line. He was instructed to raise the conveyor (which then is in an angled position) and rotate it to the roof edge which was behind the truck. The controls for the conveyor were located at the fixed end of the conveyor. He climbed onto the flat-bed to operate the controls. The other members of the crew stood on opposite sides of the flat-bed with their hands resting on the truck to observe the driver. As the conveyor was raised, it contacted the power line which energized the conveyor and the truck. The position of the two crew members observing the operation provided the path to ground for the electrical charge. One was fatally injured and the other received severe burns. The truck driver operating the controls was uninjured because he was not grounded. The Colorado Department of Public Health and Environment (CDPHE) investigator concluded that to prevent future similar occurrences, employers should:

- Ensure that employees request that the appropriate power company cover electrical power lines with insulating hoses or

blankets if the potential for contact with lines exists.

- Conduct a work-site survey to assess the potential safety hazards. Once an assessment has been completed, written safety rules and procedures should be developed, implemented, and enforced.

#### INVESTIGATIVE AUTHORITY:

The Colorado Department of Public Health and Environment (CDPHE) performs investigations of occupational fatalities under the authority of the Colorado Revised Statutes and Board of Health Regulations. CDPHE is authorized to establish and operate a program to monitor and investigate those conditions that affect public health and are preventable. The goal of the workplace investigation is to prevent work-related injuries in the future by study of the working environment, the worker, the task the worker was performing, the tools the worker was using, and the role of management in controlling how these factors interact.

This report is generated and distributed to fulfill the Department's duty to provide relevant education to the community on methods to prevent severe occupational injuries.

#### INVESTIGATION:

This investigation was prompted by a report to CDPHE from the county coroner. The investigation included interviews with the company owner and co-workers during a workplace investigation. The incident site and equipment were photographed. The company employs 22 workers. The company has a designated safety representative and a written safety program. The safety program did not specifically address the task being performed by the deceased. The company has been in business for twelve years. The deceased had worked for the company for eight years and had been at the incident site six days.

#### CAUSE OF DEATH:

The cause of death for the fatally injured employee as determined by autopsy and listed on the death certificate was electrocution from high voltage electricity and electrical burns of the right hand and both feet.

#### RECOMMENDATIONS/DISCUSSION:

**Recommendation #1:** Employers should ensure that employees request that the appropriate power company cover electrical power lines with insulating hoses or blankets if the potential for contact with lines exists.

Discussion: Energized power lines in proximity to a work area constitute a significant safety hazard. Extra caution must be exercised when working in the vicinity of energized power lines. The power company should be contacted and requested to place insulating hoses or blankets on any power lines in close proximity to a work area. This protects workers who are working near power lines from making inadvertent contact.

**Recommendation #2: The employer should conduct a work-site survey to assess the potential safety hazards. Once an assessment has been completed, written safety rules and procedures should be developed, implemented, and enforced.**

Discussion: According to the General Duty Clause of the Occupational Safety and Health Act (Section 5 (a) 1), employers are required to provide a safe and healthy workplace for employees. To do so, employers must regularly survey the workplace to identify hazards. All identified hazards must be adequately addressed through engineering control measures or changes in workpractices. Employers should also instruct each employee in the recognition and avoidance of unsafe conditions. In this and similar situations, the employer may need to provide additional training to ensure that employees understand the hazard and how to properly use equipment.

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