FACE INVESTIGATION

SUBJECT: A 29 year old truck driver/deliveryman was electrocuted when the aluminum pole brush he was holding came in contact with a 14,000 volt overhead transmission line

SUMMARY:

A 29 year old white male working as a truck driver/deliveryman for 1 1/2 years was electrocuted on a farm where he was delivering bonemeal. It is assumed that the victim was standing on top of the truck tank and holding an aluminum pole brush overhead when the pole brush contacted a 14,000 volt high power transmission line overhead. The victim was found within the tank (bin) by the farm owner when he arrived home. No one witnessed the incident. The weather was described as dry and sunny the day of the incident. The farmer had his son call 911 while he shut the truck off and entered the bin to try to help the victim. He was unable to pull the victim out and waited for the EMT's and the coroner. The coroner and the EMT's arrived at the same time and after rechecking that neither the truck or the auger was running and after lodging a pole in the auger as an additional precaution the coroner went into the bin and pronounced the victim dead at the scene. The Wisconsin FACE investigator concluded that in order to prevent similar occurrences, the employer should:

! Use non-conductive pole brushes when working near power lines

! Access the work area well away from existing power lines, keep a minimum of 10 feet clearance of all power lines

! Train all workers in general electrical safety procedures, lockout and tagout and hazard recognition

INTRODUCTION:

At 3:25PM on August 19, 1992, a farmer returning to his farm yard discovered a man in the bin of a animal products delivery truck. An autopsy determined that the victim had been electrocuted prior to the fall into the bin. The Wisconsin FACE director was notified of the incident on September 1, 1992 by the Wisconsin Department of Industry Labor and Human Relations. A phone call was made to the safety director of the company who reported that the truck had been returned to the business site, that OSHA had been to the site and that the company was replacing all conductive brush poles with non-conductive ones and that bins were having bars installed 8 inches apart. Drivers were being trained in lockout and tagout procedures that would be used whenever there was a need to access the bin area (augers operate within the bin). A site visit was made on May 12, 1993 to interview the safety director and see the changes made. The OSHA report, death certificate, WC claim, coroners report, county sheriff's report were obtained.

The company had been in business 111 years. The company reports that there is a safety officer who devotes 76-100 % of his time to safety issues, there are general written safety policies, though none are specific to electrical safety, and that general safety training is provided and worker competency is

measured. The victim was following standard operating procedures at the time of the incident.

INVESTIGATION:

At approximately 3:25 PM on August 19, 1992, a farmer returning to his home found that the delivery truck which had been sent to his farm to deliver a product was running but no operator was present. The farmer climbed onto the truck and saw the operator in one of the bins. He shut off the truck, had his son call for help and then went into the bin to attempt to pull the worker out. When unable to pull the operator out, the farmer waited for the rescue workers. The coroner and the rescue squad arrived at 3:50 PM and the coroner went into the bin after rechecking taht both the truck motor and the auger motor were shut off and after a steel rod had been placed in the auger. The coroner found the worker deceased in the bin. The operator had been working alone at the time of the incident, it is assumed that he was brushing the product out of a bin while standing on the truck. The aluminum brush made contact with the electrical wires overhead and the victim fell after the electrocution into the open bin. According to the company spokesperson, the pole brush the victim was using was newly purchased, the only one like it used by the company and extended longer than the poles used routinely.

CAUSE OF DEATH: Electrocution

RECOMMENDATIONS/DISCUSSION:

Recommendation #1: Conduct a jobsite survey to identify and remove all hazardous equipment and processes.

Discussion: Immediately following the incident, the company identified conductive poles and large openings of bins as hazards to worker safety. They replaced all existing poles with non-conductive pole brushes and placed bars 8 inches apart over existing bin openings where augers at the base move the product, bonemeal. The safety director developed a lockout and tagout policy and trained employees regarding lockout/tagout.

Recommendation #2: Access the work area well away from existing power lines, keep a minimum of 10 feet clearance of all power lines

Discussion: Given that deliverymen service a variety of farms, a plan should be devised at each farm where work is done well away from all existing power lines. Moving the delivery point would eliminate the electrical hazard. If unable to change the delivery point, conform to the OSHA required 10 foot clearance. The company has instituted a policy where delivermen call the safety director whenever there is any unusual circumstances that may effect their safety. All new points of delivery are assessed by the safety director prior to delivery for electrical hazards. Delivery points, old and new, that cannot be made safe for delivery are not serviced by the company.

Recommendation #3: Train all workers in electrical safety procedures and hazard recognition

Discussion: A policy entitled "Electrical Safety-Related Work Practices was written and employees were trained by the safety director following the incident.

Recommendation #4: To protect all rescue workers and officials on the scene intitute a method for locking out all moving parts prior to entry.

Dicussion: Although a steel rod was placed against the auger and both the truck motor and the auger motor were turned off, there remained energized parts that were not locked out and taged out.