

FATALGRAM 11-08

Alaska Department of Labor & Workforce Development
Division of Labor & Safety Standards
Occupational Safety & Health



Date of incident: April 28, 2011

Industry: General

Location: Bethel, AK

Summary: On April 28, 2011, an employee was installing a Grunfos in-line circulating pump in the utility room of a Community Service Building. The victim improperly wired the pump with the ground wire connected to live terminal and the live wire connected to the ground terminal causing the pump housing to be energized. The employee touched pump and was electrocuted.

Description of Accident: The victim was a maintenance employee working with another maintenance employee to replace 2 shallow - well jet pumps in the utility room of a Community Service building. The two pumps were to be replaced with in-line circulating pumps to reticulate hot water back to an adjacent building. The new pumps were of different design than the old pumps. The victim and co-worker had installed one new pump and the co-worker soldered pipe to the pump while the victim was at lunch. When the victim returned to work, the co-worker left for lunch.

No one witnessed the accident. It appears that the victim finished soldering the pipe and then connected the wiring to the pump. The new pump had a different wiring configuration from the previous pump. The victim connected the ground wire to the live terminal and the live wire to the ground terminal causing the pump's casing to become energized. The employee made contact with the pump and was electrocuted. The victim had minimal electrical training.

Alaska Occupational Safety and Health investigated the accident. Based on the investigation, it was determined that the victim was not qualified to perform electrical work without supervision by a journeyman electrician and the employer failed to ensure that lockout/tagout procedures were implemented to de-energize the electrical circuit being worked on.

Accident Prevention Recommendations:

- Ensure that employees are trained and qualified to install and work on energized equipment. The training should include possible electrical hazard scenarios when the employee is working near potentially energized electrical system.
- Ensure that a proper energy isolation (lockout/tagout) program is established and that employees are trained in the purpose and function of the energy control program.
- Ensure that each employee is trained to recognize and avoid unsafe electrical conditions.
- Ensure that all electrical circuits are de energized at the breaker and properly tested before work begins on any wiring.