

Case 424. 37-year-old concrete finisher was electrocuted when the handle of the 29-foot-long metal bull float he was using contacted an energized 7,200 volt power line.

A 37-year-old male concrete finisher was electrocuted when the handle of the 29-foot-long metal bull float he was using contacted an energized 7,200 volt power line. The decedent and his coworkers were performing concrete finishing work for a residential driveway. The utility company measured the height of the two overhead lines after the incident. The bottom neutral line was 17 feet high and the 7,200-volt primary line was 23-feet high vertically and 24 feet from the edge of the concrete forms. There were two visible impact burn points on the wire. One was a 1.5-2-inch width of the bull float pole and the second contact was approximately 2.3-3.0 feet long where the pole may have slid along the wire. The decedent was facing south, finishing the concrete driveway and the power lines were at his back (north) when the incident occurred. A line of brush was approximately 8 feet from him away under the power lines, which may have required him to elevate the bull float handle rather than pull it in a more horizontal position. The decedent was wearing non-electrical rated rubber boots, leather work boots, vinyl work gloves, hard hat and safety glasses. When the bull float handle contacted the overhead line, the decedent fell forward, letting go of the pole. Emergency response was called and the decedent was transported to a local hospital where he died.

MIOSHA Construction Safety Division issued the following Serious citations to the employer at the conclusion of its investigation.

SERIOUS: GENERAL RULES, CS PART 1, RULE 408.40115(5): Employees not specifically covered by Construction Safety Standard Part 16 Power Transmission and Distribution, Construction Safety Standard Part 17 Electrical Installations, or Construction Safety Standard Part 30 Telecommunications, as referenced in R 408.40105, shall not be allowed by the employer to work or be closer to energized electrical line, gear, or equipment exposed to contact than the minimum clearance.

Employee using equipment closer than allowable distance to 7200-volt overhead power line.

SERIOUS: CONCRETE CONSTRUCTION, CS PART 25, RULE 408.42520(3): The handle on a bull float that is used where it may contact an energized electrical conductor shall be constructed of non-conductive material or shall be insulated with a non-conductive sheath that has electrical and mechanical characteristics which provide the equivalent protection of a handle constructed of non-conductive material.

An employee was engaged in concrete finishing work, when the 29-foot aluminum handle of his bull float came in contact with a 7200-volt overhead power line.