Swimming Pool Worker Electrocuted

A 17-year-old assistant pool manager was electrocuted when she contacted an ungrounded electric motor.

The victim, an employee of a city, was told to add soda ash to the swimming pool water to maintain the pH level.

There were no witnesses to her death, but investigators reconstructed this account: The barefooted worker entered the pump room, which was below ground level, adjacent to the swimming pool. The concrete floor of the room was covered with water at the time of the incident.

She filled the plastic drum with water, plugged in the mixing motor, and placed the motor switch in the “on” position. She was apparently in the process of adding soda ash to the drum when she inadvertently contacted the mixing motor, which had developed a faulty ground and was energized. The victim, standing barefoot in water, contacted the energized motor with her left hand and created a path to ground for the electrical current, causing her electrocution.

A co-worker found the victim slumped over the drum with her face submerged in water. The co-worker summoned help and called an ambulance. Another co-worker tried to remove the victim from the drum but received an electrical shock. A broom was then used to free the victim from contact with the electrical circuit. The ambulance and police arrived, and emergency medical personnel checked the victim’s vital signs and began cardiopulmonary resuscitation. She was transported to the local hospital and was pronounced dead on arrival.

The National Electrical Code states, “Pool-associated motors shall be connected to an equipment grounding conductor.” An inspection of the pump room showed that the mixing motor was old and in poor working condition. The grounding pin on the male plug had been

removed from the power cord, resulting in a faulty electrical ground. Employers should routinely inspect and repair or replace equipment that is faulty, damaged, or presents a safety hazard. An electrical supply cord with the grounding pin intact may have prevented this fatality.

Also, all employees entering the pump room should wear insulated boots or shoes. Had the floor been dry and had the victim been wearing insulated boots or shoes, this fatality may have been prevented.

Are there any hazards similar to this in your work area? Electricity and moisture are a dangerous combination in any work setting. You should report electrical hazards immediately so they can he corrected.