

A **31 year old male** employee was **electrocuted** while performing quality assurance checks on a Crest condensing boiler. This employer manufactures industrial water heaters.

The victim was the Quality Assurance Inspector performing quality checks on the Crest products; he had been responsible for doing this task for over a year. The quality checks consisted of connecting a cord a plug electrical supply to the new unit to conduct diagnostic tests to ensure it was ready for shipment. In the event diagnostics detected a defect, the location of the defect would be identified through flashing lights and code on the diagnostics screen. At that point a multimeter would be used to help pinpoint the defect in the electrical circuitry and equipment and confirm what the diagnostics had found.

Once the defect was located the machine would be unplugged and the defective piece would be replaced. Power would then be restored through the plug and cord to ensure it was in working order. On the day of the incident, it was observed that a transformer had been replaced on the unit. Through interviews, it was determined that the this would have been a routine task performed by the victim.

There were no witnesses to the incident and no cameras were present in the area to determine exactly what happened.

Based on the information obtained; it was determined that the employees had not been provided adequate training related to working on/with live electrical components and proper PPE had not been provided to employees performing these tasks. Without adequate training the employees would not be qualified to conduct such work.

Although it is unknown what exactly the victim came in contact with while performing his job duties; it was confirmed that the victim suffered an electrocution while working with live electrical components. The autopsy reports notes that there were burn injuries to the tips of his left thumb and index finger.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

Citation 1 Item 1

Type of Violation: Serious

\$4,500

29 CFR 1910.332(b)(1): Employees had not been trained and made familiar with the safety related work practices required by 1910.331 through 1910.335 that pertain to their respective job assignments.

In that, employees, assigned to perform quality testing, had not received adequate training respective to their job assignments regarding the testing of live electrical components.

Citation 1 Item 2a **Type of Violation: Serious** **\$4,500**

29 CFR 1910.333(c)(2): Persons who were not qualified worked on electrical circuit parts or equipment that had not been de-energized under the procedures of paragraph (b) of this section. Such persons were not capable of working safely on energized circuits and were not familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials and insulated tools.

In that, employees that tested live electrical components were not qualified through classroom or on the job training that addressed live electrical components. On 09/29/21 an employee was fatally injured while testing live electrical components of Crest Condensing Boilers.

Citation 1 Item 2b **Type of Violation: Serious** **\$0**

29 CFR 1910.334(c)(I): Unqualified persons performed testing work on electric circuits or equipment.

In that, employees were allowed to use a test meter to work on live electricity without being qualified to do such work

Citation 1 Item 3 **Type of Violation: Serious** **\$4,500**

29 CFR 1910.335(a)(1)(i): Employees were not wearing protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed when working in an area where there was a potential electrical hazard.

In that, personal protective equipment to protect the employee from electrical hazards, was not required or provided to the employee for use when exposed to electrical hazards.

Electrocution--Insp # 1555603 Lochinvar LLC



