Shocking situations Working around electricity is serious business

The accident: Two heavy equipment mechanics were repairing a scraper on a construction site, using a service truck with a crane to lift scraper components. The crane's boom made contact with a 12,000-volt line that ran over the construction site, sending electrical current down the boom, through the truck and into the boom control attached to the truck. Both mechanics were electrocuted, set on fire and died.

The bottom line: A post-accident investigation determined a rental firm that leased scrapers to construction companies employed the mechanics. The company had neither a written safety program nor a formal training program. According to the rental company's representative, all of the company's training was contracted through an outside agency, but no records were found to confirm the mechanics received training.

Safe in every situation

If you perform maintenance or repairs on construction equipment, you need to ensure your own safety, no matter who employs you or where you do the work. When mechanics who primarily work in the shop are called out to construction sites, they aren't always privy to the information relayed to the operators by the company's competent person on the hazards specific to that site, and must take extra precautions.



Take a 360-degree approach. When working on sites from a service truck, you'll be subjected to a different environment than your normal scope of work. Take note of the equipment and jobsite conditions around you, making sure to recognize and evaluate what is overhead, and if anything could pose a danger. Before beginning work, ask the foreman if he has noted any conditions or hazards you should know about.

Be overly cautious. Working around electricity is not to be taken lightly, as contact with an energized high voltage power line means certain death. If possible, move the equipment to be repaired away from the power line, and position your truck so that the boom cannot move within 10 feet of the line. If the equipment cannot be moved, contact the power company and request the line either be temporarily de-energized or sleeved with line hoses.

Stay up to date on training. If you are required to repair equipment in the field using a service truck, you need to complete the same safety training as the equipment operators, as you'll be exposed to the same hazard on jobsites. Regularly revisit your safety material on cranes, the hazards associated with hoisting equipment and materials and proper positioning of service trucks to ensure clearance from obstructions.

Information for this Safety Watch is from an accident report, the Center for Disease Control's NIOSH Fatality Assessment and Control Evaluation program and the California Department of Health Services. It is meant for general information only.

Date of safety talk:______ Attending:______ Leader: