Spot The Safety Violation: What Happened to This Truck Is Shocking



Can you guess how this boom truck ended up in this condition’

Overhead power lines pose a hazard to not only workers but also equipment that comes into contact with them. According to a hazard alert from WorkSafeNB, the boom truck in this picture made contact with a 7,200-volt distribution line. The current flowed to the ground through the truck, which caught fire and was completely destroyed’costing the company the loss of equipment worth hundreds of thousands of dollars. Fortunately, no one was hurt in the incident.

When workers are operating mobile equipment such as boom trucks, cranes, hoists and backhoes, they must ensure that no part of the equipment makes contact with an overhead power line. If it does, the current could damage or destroy the equipment and hurt or kill the worker operating it or anyone touching any part of the equipment.

Example: A worker in BC was on the ground guiding a mobile crane onto a truck deck when the crane’s boom touched an overhead power line. The electrical current passed through the crane jib that the worker was holding and then passed through him to the ground. He was electrocuted.

In addition, when equipment touches a power line, the current may travel through the equipment to the ground, endangering anyone standing nearby or who tries to come to the rescue.

6 Tips for Safely Operating Equipment Around Power Lines

If your workers operate mobile equipment anywhere near overhead power lines, follow these safety tips:

- Keep mobile equipment far away from overhead power lines whenever possible.
- Assign a competent worker to act as a signaller whose sole responsibility is ensuring that mobile equipment doesn’t get too close to overhead power lines.
- Before moving mobile equipment, mark out the route it’ll follow, noting any uneven terrain that could increase the likelihood of contact with a power line.
- If workers must operate equipment within the minimum safe distance from overhead power lines under your jurisdiction’s OHS law, contact the owner of the power system and have it take appropriate safety measures, such as de-energizing or rerouting the circuit or providing guarding.
- Don’t permit workers to stand on the ground beside the equipment to operate the remote controls. And don’t permit other workers to stand near this equipment while it’s in use near power lines. If the equipment contacts a power line, the current may flow through the machine to the ground, energizing it for quite a distance’10 metres or more depending on the line’s voltage.
- If workers must operate the equipment’s controls from the ground, they should stand at least 10 metres away from the equipment and the power lines. And the remote control signal should be carried by radio or by non-conductive cable, such as fibre optics.

You should also have safe work procedures for the use of mobile equipment and powered aerial work platforms that covers using such equipment near overhead power lines.

What To Do if Equipment Contacts an Overhead Power Line

If mobile equipment *does* come into contact with overhead power lines, do the following:

- The equipment operator should stay put and warn others to stay away because the equipment, its load and surrounding ground could be electrified.
- Someone should call the power line company immediately.
- The operator should try to free the equipment from the power line by, say, lowering the crane boom or going in reverse.
- If he can’t free it, the safest course is for him to stay in the equipment until someone from the utility comes and says it’s safe for him to leave.
- If it becomes too dangerous for the operator to stay in the equipment, say, because it’s on fire, he should jump free so his body doesn’t touch the equipment and the ground at the same time. He should then take short hops or shuffling steps, keeping both feet as close together as possible, and move at least 10 metres away from the equipment.
- Once the power line company says the area and equipment are safe to access, inspect the equipment because exposure to electricity could compromise its structure and make it unsafe to use.