

Overhead Powerline Contact

Safety Alert

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Enform

Enform is the health and safety association for Canada's upstream oil and gas industry. We provide leading health and safety training, programs and services, touching the lives of hundreds of thousands of workers each year. We are dedicated to the continuous improvement of safety with a vision of eliminating work-related incidents or injuries in the upstream oil and gas industry.

An Industry Product

This document was developed by industry for industry. Working collaboratively, Enform works with the submitting organization representative in developing these documents to improve the industry's hazard awareness. Canada's leading oil and gas industry trade associations support the use of shared information to help companies of all sizes improve performance.

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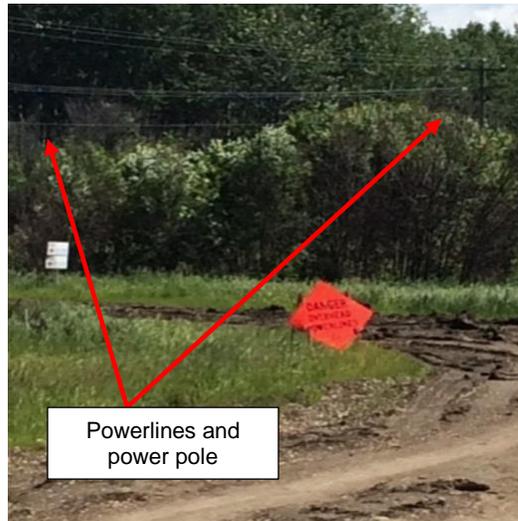
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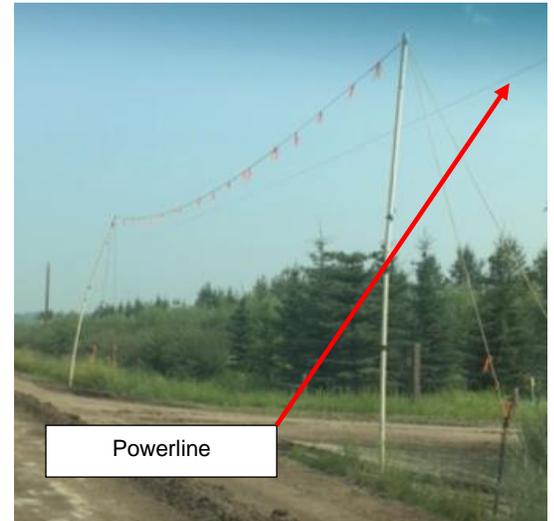
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Description of Incident:

A track hoe was being used to move matting on a pipeline worksite, when the track hoe boom made contact with a 25,000 volt overhead powerline. Electricity arced to the track hoe boom and shortly thereafter the powerline fuse blew, de-energizing the powerline. Spotters were present during the track hoe work which was being conducted during intense sunlight glare. No injuries occurred, however there was potential for a serious injury or fatality.



View of road where powerline contact occurred



View of height limit barriers installed

What Caused It?

The track hoe operator was not able to see the powerline and spotters because of glare from the sun.

Contributing Factors:

- Track hoe operator had 34 years of experience operating heavy equipment. He may have been overconfident in his abilities and complacent in understanding the risks of overhead electrical powerlines
- Track hoe operator did not stop when he could not see the powerline and the spotters
- Spotters were not equipped with air horns (as required by company procedures) or radios to alert the operator and others of imminent danger

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Corrective/Preventative Actions:

- When the equipment operator is not able to see the spotter or when sunlight or poor visibility obstructs his/her vision, stop the job and reorientate
- Scout the travel route with the equipment operator for overhead powerlines and other hazards prior to mobilizing equipment to the job site and place appropriate signage (as per investigation report appropriate signage was in place)
- Hold a pre-job safety meeting at each new worksite and prepare a site specific field level hazard assessment with the work crew to ensure that everyone understands what the hazards are and what controls are required to reduce risk. Assign different crew members to lead the safety discussion for each job site to help raise awareness and encourage communications
- Review safe work procedure and safe limit of approach distances with the crew that is conducting the specific task
- Ensure that the equipment operator and spotters are provided with two-way radios and air horns, which will enable them to communicate hazards effectively
- Install flagged safety height limit barriers (plastic goal posts) underneath overhead powerlines at worksite locations
- Remove all electronic and personal devices (iPads, cell phones, stereos, listening or gaming devices, etc.) that could cause distractions to the operator while working

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