

Diamond drill touches power line

A worker was moving a caterpillar diamond drill on a gravel road on the surface of an underground mine. The mast of the drill was raised, and the worker was driving alone. After a few minutes, the mast touched the power line and created a discharge. This cut off electricity in the mine, rendering the ventilation non-functional; the underground workers were evacuated. No workers were injured or died as a result of this incident.

Serious Incident

Date: June 19, 2013

Category: Diamond drill

Task: Moving the drill

Position: Diamond driller

Employer: Diamond drilling

Causes of the Incident

- The drill mast was not in the retracted position while the drill was in motion.
- The employer's procedure indicates that the driller assistant must follow the drill to ensure that there are no obstacles; this was not done.
- The path for the drill was not verified before it was moved.



Source photo: CSST

Preventative Measures

Train staff on the following rules for moving drill machines

There are many risks associated with moving a drill, and workers must be made aware of them.

- Before moving, survey the path for potential difficulties you might encounter, ensure proper visibility, and arrange for a guide if necessary.
- Check that equipment is in transportation position (mast is down, stabilizers are raised, tower is blocked, etc.).

Implement organizational measures

- Define specific machine traffic areas to avoid hazards.
- Install traffic signs to avoid hazards (power lines, tight spaces, bumpy roads, etc.).

Change to the drill machine

- Equip machines with a remote control (umbilical or radio control).

N.B. The umbilical remote control does not protect workers from electrocution, but it does provide better vision for certain manoeuvres.

Additional Information

Regulations

- Regulation respecting occupational health and safety, section 331
 - Available online or for purchase at <http://www.publicationsduquebec.gouv.qc.ca/store.cfm?&ckey=CA&lang=eng>

Other documents

- Commission de la santé et de la sécurité du travail, Direction régionale des Laurentides, *Rapport d'enquête d'accident grave survenu le 7 septembre 2011*. Québec: CSST, 2012 Code: EN-003920
 - Available online at <http://www.centredoc.csst.qc.ca/pdf/ed003920.pdf>
- *Machine de forage* (2011), Institut national de recherche et de sécurité (INRS), ED 6108, Section 9 PP.40-55
 - Available online at www.inrs.fr
- *Diamond Drillers* (2011), National Occupational Standards. Mining Industry Human Resources Council (MIHR/RHIM), Task A 13, subtask: B). P.15
 - Available online at <http://www.miningcertification.ca/> or for borrowing at www.centredoc.csst.qc.ca
- *Safe Methods Handbook – Surface* (2009): Canadian Diamond Drilling Association, 142 pp.
 - Available for purchase at <http://www.cdda.ca/Publications.aspx> or for borrowing at www.centredoc.csst.qc.ca

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