

## HEALTH & SAFETY NOTICE

Number 11

Mines Health, Safety and Enforcement Division: Mine.Safety@gov.bc.ca

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## **Generators: Single Conductor Plug-in**

Generators are a common source of power in mining. Generators are easier to move, quicker to install than permanent solutions, and can be used in the interim while a permanent system is in design or under construction.

All generator installations must be in compliance with section 5 of the Health, Safety and Reclamation Code for Mines in British Columbia. Generator installations that have a single conductor cabling design are not in compliance, due to their safety hazards.

The following installations provide examples of single conductor plug-in style quick connector cabling:



## Under no circumstances, either temporarily or permanently, are these cabling installations permitted in a mining application in B.C.

There are many hazards associated with these installations, included but not limited to:

- These connectors are designed to be "plug and play" requiring common or no tools to connect or disconnect, even under load or accidentally.
  - o CSA M421-16 Use of electricity in mines 4.4.2 Quick-connect cable couplers.
- These cables are typically laying on the ground and treated similarly to welding cables.
  - o CSA M421-16 Use of electricity in mines 4.3.3.4 Protection of cables.
- Additional length is accomplished by connecting another cable with quick-connect couplers in series.
  - CSA M421-16 Use of electricity in mines 4.3.3.2 Permanent splicing of cables.