



Electrical Safety

Talking Points for Walk and Talk



- 25 non-fatal electrical accidents occurred in the mining industry since October 1, 2018.
- Always lock-out and tag-out the electrical circuit yourself prior to conducting any electrical work and never rely on others to do this for you.
- Never get in a hurry when electricity is involved. Slow down and never take short cuts!
- Perform electrical tasks safely. Always protect yourself from hazardous energy.
- Train all miners including electricians on safe work practices and procedures to de-energize, lock-out and tag-out, and verify. Provide a safe means to control hazardous energy.
- Use Lock-Tag-Try whenever:
 - Placing any body part into an electrical energy zone or hazardous zone
 - Removing or bypassing a guard or other device for maintenance, repair, cleaning, or clearing
 - Placing any body part where it could be injured by moving parts or release of stored energy
- Identify and eliminate hazardous energy sources such as electrical, mechanical, hydraulic, pneumatic, gravity, chemical, and thermal before conducting any task.
- Identify proper lock-out locations for all electrical equipment on mine property. To safely service equipment, install and maintain disconnecting devices located at readily accessible points that are capable of disconnecting all ungrounded conductors from the circuit.
- Follow the steps below before entering an electrical enclosure or performing electrical work:
 - Locate the circuit breaker or load break switch away from the enclosure and open it to de-energize the incoming power cable(s) or conductors.
 - Locate the visual disconnect away from the enclosure and open it to provide evidence that the incoming power cable(s) or conductors have been de-energized.
 - Lock-out and tag-out the visual disconnect.
 - Ground the de-energized conductors.
- Before performing troubleshooting or electrical work, develop a plan and discuss the plan with others to ensure the task can be completed without creating hazards.
- Train and equip all miners to perform safely each task they are expected to perform. This includes electrical tasks. Train miners to understand the difference between electrical troubleshooting and electrical work to enable them to perform each task safely.
- During troubleshooting it is critical that all hazardous energy be controlled. Troubleshooting consists of gathering information, understanding the malfunction, understanding how the equipment is supposed to work, identifying what would help evaluate the source of the problem, isolating components, and identifying the problem.
- Clearly and specifically outline techniques to be utilized to control hazardous energy.
- Develop and use procedural steps for shutting down, isolating, blocking, securing machines or equipment to control hazardous energy
- Develop and use procedural steps for responsible placement and removal of lockout devices
- Develop and use procedural steps for testing and verifying effectiveness of lockout devices, and other energy control measures. For example, energy control measures may include electrical insulating roll blankets, protective insulating covers, arc protection blankets, clamp pins, non-conductive polycarbonate barriers, electrically rated gloves and other electrically rated equipment to eliminate personnel exposure to hazardous energy during troubleshooting.