



State of West Virginia

WV Office of Miners' Health, Safety & Training
Eugene White, Director
#7 Players Club Drive, Suite 2 • Charleston, West Virginia • 25311
Telephone 304-558-1425 • Fax 304-558-1282
www.minesafety.wv.gov

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Industry Notice COVID – 19 and Electrical Safety

Caution: Beware of Cleaning Agents and Liquids!

The pandemic has caused everyone to be more cautious. We have heard Electricity and Water do not Mix! This is almost always false, water and the elements in it conducts electricity very good in most cases. There are many factors in this, therefore it is best to never expose electrical systems, devices, or personal protective equipment to water or other conductive and / or damaging substances (liquids or solids).

Recently two employees at an underground coal mine were shocked while resetting low voltage circuit breakers. The employees reported that they had been shocked while in contact with the non-conductive circuit breaker reset handles.

During an Investigation of this accident it was found that due to the COVID – 19 pandemic a thorough cleaning had been conducted on the power center and circuit breakers. Chlorine bleach and a sprayer were reported to be the choice of disinfecting methods. Chlorine bleach is a very good conductor of electricity even after it has dried. It was determined by electrical testing that the chlorine bleach was found to be the main factor in the shock accident. Studies also show that chlorine bleach is electrically conductive with a low resistance.

Please be aware that many cleaning and other products (liquids or solids) are electrically conductive and can be damaging to electrical insulation. Do not use them when electrical safety is a factor. Make sure the product is safe for the environment and equipment where it is used. This applies to many areas such as electrical enclosures, confined spaces, ventilation systems, any area that is going to be in contact with a person's skin, eyes, respiratory system, etc.