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PROGRAM INFORMATION BULLETIN NO. P11-09

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SUBJECT: Reissue of P06-05 - Requirements of Testing High-Voltage
Gloves

Scope

Coal mine operators, miners and miners' representatives, Mine Safety and Health Administration (MSHA) enforcement personnel, and other interested parties should have this information.

Purpose

This program information bulletin (PIB) summarizes and clarifies the requirements in Title 30 of the Code of Federal Regulations (30 C.F.R.) for testing high-voltage gloves used in the surface and underground coal mines. This bulletin is also intended to promote consistent enforcement of these standards.

Information

30 C.F.R., Part 75- Mandatory Safety Standards- Underground Coal Mines specifies, addresses among other requirements, the requirements to work on trolley wires and high-voltage lines. Section 75.510 allows energized trolley wires to be repaired only by a person trained to perform electrical work and requires the mine operator to ensure that such person wears approved and tested insulated shoes and wireman's gloves. This standard does not specify requirements for the testing and the frequency of testing wireman's gloves. MSHA however, recommends that such gloves be tested every six months, in accordance with ASTM F496-97.

Additionally, Section 75.705 prohibits working on energized high-voltage lines, except for high-voltage surface lines under the prescribed conditions specified in Sections 75.705-5 through 75.705-8. One of these conditions is the requirement that the mine operator provides, tests, and maintains protective devices used in making such repairs. Under these standards each rubber protective device, including rubber gloves, is

required to have 20,000 volt dielectric strength and be tested once each month.

Section 75.705-9, which requires the person operating disconnecting or cutout switches from the ground to wear protective rubber gloves, does not address the testing or the frequency of these gloves. MSHA however, recommends that these gloves be tested every six months, in accordance with The American Society for Testing and Materials (ASTM) ASTM F496-97, "Standard Specification for In-Service Care of Insulating Gloves and Sleeves."

Section 75.818 requires that when energized high-voltage longwall cables have to be handled, insulated gloves, mitts, hooks, tongs, slings, aprons, or other personal protective equipment must be used. If gloves are used, the standard requires that they be electrically tested every six months, in accordance with ASTM F496-97.

In addition, 30 C.F.R. Part 77- Mandatory Safety Standards, Surface Coal Mines and Surface Work Areas of Underground Coal Mines addresses, among other requirements, the requirements to work on high-voltage lines. Sections 77.606 and 606-1 require that energized medium-and high-voltage trailing cables be handled only by persons wearing protective rubber gloves that are rated at 20,000 volts and tested once each month in accordance with Sections 77.704-6 through 77.704-8.

Section 77.704 prohibits working on energized high-voltage lines, except when repairs are made by a qualified person in accordance with the procedures specified in Sections 77.704-1 through 77.704-11, and the protective devices are properly tested and maintained by the operator. Section 77.704-8 requires testing rubber gloves once every month in accordance with ASTM standards, Part 28, published February 1968.

Finally, Section 77.704-9 requires that the person operating disconnecting devices and cutout switches on energized high-voltage surface lines wear protective rubber lineman's gloves, except where such switches are bonded to a metal mat as provided in Section 77.513. This standard does not specify requirements for the testing and the frequency of testing such gloves. Again, MSHA recommends that these gloves be tested every six months, in accordance with ASTM F496-97.

Summary

Standard	Testing Requirement	Frequency of Testing
75.510- Working on Trolley Wires	None*	None*
75.705-5 through 705-8-Working on H-V lines	ASTM F496-97	Once a Month

75.705-9- Operating disconnecting or Cutout switches	None*	None*
75.818- Handling LW Cables	ASTM F496-97	Every Six Months
77.606 and 606-1 -Handling Energized H-V Trailing Cables 77.606 & 606-1- Handling Energized Low-Medium-Voltage	20,000 Volts - For H-V 1,000 V-Low-and Medium Voltage	Once a Month Once a Month
77.704-6 through 704-8 Work on Energized H-V Lines	ASTM Standards	Once a Month
77.704-9	None*	None*

* MSHA recommends testing every six months in accordance with ASTM F-496-97

Note: If the glove has not been used for sometime after the date it was tested, the due date for the next testing would be based on the first time the glove has been used (a record of this date should be made available to inspectors.)

Background

There has been confusion between enforcement personnel and mine operators regarding the testing and frequency of testing requirements high-voltage gloves used to perform different tasks underground and on the surface. The standards addressing this issue are scattered throughout 30 C.F.R. and vary. This bulletin clarifies the compliance responsibilities of underground and surface coal mine operators with these standards.

Authority

Federal Mine Safety and Health Act of 1977 and 30 C.F.R., Parts 75 and 77.

Who is the MSHA contact person for this PIB?

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Internet Availability

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