Mine Safety and Health Admin., Labor § 75.833

§ 75.832 Frequency of examinations; recordkeeping.

(a) Continuous mining machine examination. At least once every 7 days, a qualified person must examine each high-voltage continuous mining machine to verify that electrical protection, equipment grounding, permissibility, cable insulation, and control devices are properly installed and maintained.

(b) Ground-fault test circuit. At least once every 7 days, and prior to tramming the high-voltage continuous mining machine, a qualified person must activate the ground-fault test circuit to verify that it will cause the corresponding circuit-interrupting device to open.

(c) Ground-wire monitor test. At least once every 7 days, and prior to tramming the high-voltage continuous mining machine, a qualified person must examine and test each high-voltage continuous mining machine ground-wire monitor circuit to verify that it will cause the corresponding circuit-interrupting device to open.

(d) Trailing cable inspections.

(1) Once each day during the shift that the continuous mining machine is first energized, a qualified person must de-energize and inspect the entire length of the high-voltage trailing cable from the power center to the continuous mining machine. The inspection must include examination of the outer jacket repairs and splices for damage, and assure guarding is provided where required.

(2) At the beginning of each shift that the continuous mining machine is energized, a person designated by the mine operator must de-energize and visually inspect the high-voltage trailing cable for damage to the outer jacket. This inspection must be conducted from the continuous mining machine to the following locations:

(i) The last open crosscut;
(ii) Within 150 feet of the working place during retreat or second mining; or
(iii) Up to 150 feet from the continuous mining machine when the machine is used in outby areas.

(e) Grounded-phase detection test. When a grounded-phase test circuit is provided on a high-voltage continuous mining machine, a person designated by the mine operator must activate the test circuit at the beginning of each production shift to assure that the detection circuit is functioning properly.

(f) Corrective action. When examinations or tests of equipment reveal a risk of fire, electrical shock, ignition, or operational hazard, the equipment must be immediately removed from service or repaired.

(g) Record of tests.

(1) At the completion of examinations and tests required under paragraphs (a), (b), and (c) of this section, the person conducting the examinations and tests must:

(i) Certify by signature and date that the examinations and tests have been conducted.

(ii) Make a record of any unsafe condition found.

(2) Any corrective action(s) must be recorded by the person taking the corrective action.

(3) The record must be countersigned by the mine foreman or equivalent mine official by the end of the mine foreman’s or the equivalent mine official’s next regularly scheduled working shift.

(4) Records must be maintained in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

(5) Certifications and records must be kept for at least 1 year and must be made available for inspection by authorized representatives of the Secretary and representatives of miners.

[75 FR 17549, Apr. 6, 2010]

§ 75.833 Handling high-voltage trailing cables.

(a) Cable handling.

(1) Miners must not handle energized trailing cables unless they are wearing high-voltage insulating gloves, which include the rubber gloves and leather outer protector gloves, or are using insulated cable handling tools that meet
the requirements of paragraph (c) or (d) of this section.

(2) Miners must not handle energized high-voltage cables with any parts of their bodies except by hand in accordance with paragraph (1) above.

(b) Availability. Each mine operator must make high-voltage insulating gloves or insulated cable handling tools available to miners handling energized high-voltage trailing cables.

(c) High-voltage insulating gloves. High-voltage insulating gloves must meet the following requirements:

(1) The rubber gloves must be designed and maintained to have a voltage rating of at least Class 1 (7,500 volts) and tested every 30 days in accordance with publication ASTM F496–02a, “Standard Specification for In-Service Care of Insulating Gloves and Sleeves” (2002). The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 522(a) and 1 CFR part 51. ASTM F496–02a may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428–2959, call 610–832–9500 or go to http://astm.org. ASTM F496–02a is available for inspection at any MSHA Coal Mine Safety and Health District office, at the MSHA Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, VA 22209–3939, 202–693–9440, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(2) The rubber glove portion must be air-tested at the beginning of each shift to assure its effectiveness.

(3) Both the leather protector and rubber insulating gloves must be visually examined before each use for signs of damage or defects.

(4) Damaged rubber gloves must be removed from the underground area of the mine or destroyed. Leather protectors must be maintained in good condition or replaced.

(d) Insulated cable handling tools. Insulated cable handling tools must be:

(1) Rated and properly maintained to withstand at least 7,500 volts;

(2) Designed and manufactured for cable handling;

(3) Visually examined before each use for signs of damage or defects; and

(4) Removed from the underground area of the mine or destroyed if damaged or defective.

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§ 75.834 Training.

In addition to existing part 48 task training, hazard training, training for qualified persons under existing § 75.153, and annual refresher training, the following specialized training shall be provided and specified in the part 48 plan:

(a) Training for miners who perform maintenance on high-voltage continuous mining machines in high-voltage safety, testing, and repair and maintenance procedures.

(b) Training for personnel who work in the vicinity of high-voltage continuous mining machines in safety procedures and precautions for moving the high-voltage machines or the trailing cables.

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