§ 75.826  High-voltage trailing cables.

High-voltage trailing cables must:

(a) Meet existing trailing cable requirements and the approval requirements of the high-voltage continuous mining machine; and

(b) Meet existing ground-check conductor requirements (§ 75.804) or have a stranded center ground-check conductor not smaller than a No. 16 A.W.G.

[75 FR 17549, Apr. 6, 2010]

§ 75.827  Guarding of trailing cables.

(a) Guarding.

(1) The high-voltage cable must be guarded in the following locations:

(i) From the power center cable coupler for a distance of 10 feet in by the power center;

(ii) From the entrance gland for a distance of 10 feet out by the last strain clamp on the continuous mining machine; and,

(iii) At any location where the cable could be damaged by moving equipment.

(2) Guarding must be constructed using nonconductive flame-resistant material or grounded metal.

(b) Suspended cables and cable crossovers. When equipment must cross any portion of the cable, the cable must be either:

(1) Suspended from the mine roof; or

(2) Protected by a cable crossover having the following specifications:

(i) A minimum length of 33 inches;

(ii) A minimum width of 17 inches;

(iii) A minimum height of 3 inches;

(iv) A minimum cable placement area of two and one half-inches (2½") high by four and one-quarter inches (4¼") wide;

(v) Made of nonconductive material;
§ 75.829 Tramming continuous mining machines in and out of the mine and from section to section.

(a) Conditions of use. Tramming the continuous mining machine in and out of the mine and from section to section must be done in accordance with movement requirements of high-voltage power centers and portable transformers (§ 75.812) and as follows:

(1) The power source must not be located in areas where permissible equipment is required;

(2) The continuous mining machine must not be used for mining or cutting purposes, unless a power center is used in accordance with §§ 75.823 through 75.828 and §§ 75.830 through 75.833;

(3) Low-, medium-, and high-voltage cables must comply with §§ 75.600–1, 75.907, and 75.826, as applicable; and

(4) The energized high-voltage cable must be mechanically secured onboard the continuous mining machine. This provision applies only when using the power sources specified in paragraphs (c)(2) and (c)(3) of this section.

(b) Testing prior to tramming. Prior to tramming the continuous mining machine,

(1) A qualified person must activate the ground-fault and ground-wire monitor test circuits of the power sources specified in paragraph (c) of this section to assure that the corresponding circuit-interrupting device opens the circuit. Corrective actions and record-keeping resulting from these tests must be in accordance with §§ 75.832(f) and (g).

(2) Where applicable, a person designated by the mine operator must activate the test circuit for the grounded-phase detection circuit on the continuous mining machine to assure that the detection circuit is functioning properly. Corrective actions resulting from this test must be in accordance with § 75.832(f).

(c) Power sources. In addition to the power center specified in § 75.825, the following power sources may be used to tram the continuous mining machine.

(1) Medium-voltage power source. A medium-voltage power source is a source that supplies 995 volts through a trailing cable (See Figure 1 of this section) to the continuous mining machine. The medium-voltage power source must—

(i) Not be used to back-feed the high-voltage circuits of the continuous mining machine; and

(ii) Meet all applicable requirements for medium-voltage circuits in 30 CFR 75.