

employing trailing cables. The energy to battery-powered equipment is carried on-board the machine with rechargeable battery assemblies, rather than being transmitted via a trailing cable from a section power center. Because of the inherent design limitations of battery-powered machines, there is no practical way to automatically remove all electrical power from battery-powered machines. Machines powered by trailing cables have circuit-interrupting devices that can be used to de-energize them, whereas most battery-powered machines rely on a plug and receptacle for de-energization. The proper procedure for removing power from a battery-powered machine is to first open the main machine disconnect device and then to disengage the plug from the receptacle. This effectively isolates the battery power from the machine.

B. Subparagraph 18.41(f)(1)

Subparagraph 30 CFR 18.41(f)(1) would retain the existing provision that a plug padlocked to the receptacle would be acceptable in lieu of an interlock provided the plug is held in place by a threaded ring or equivalent mechanical fastening in addition to the padlock. This paragraph also would retain the provision that a connector within a padlocked enclosure would be acceptable.

A padlock used on a battery plug and receptacle-type connector serves a dual purpose. It secures the threaded ring or equivalent mechanical fastening in place. A padlock is also used as a means to prevent the removal of the plug from the receptacle by unauthorized personnel. In this respect, only those persons having keys are considered authorized to remove the plug from the receptacle.

C. Subparagraph 18.41(f)(2)

Subparagraph 30 CFR 18.41(f)(2) would be a new provision which provides for an alternate method for securing the battery plug to the receptacle. The rule would provide that a plug which is held in place by a threaded ring or equivalent mechanical fastening will be acceptable provided that the threaded ring is secured in place with a device that is captive. It would also require a special tool to disengage the device and allow for the separation of the connector. It would further require a warning tag that states: "DO NOT DISENGAGE UNDER LOAD."

D. Subparagraph 18.41(f)(3)

Subparagraph 30 CFR 18.41(f)(3) would be a new provision which provides for another alternate method for securing the battery plug to the

receptacle. The rule states that a plug held in place by a spring-loaded or other locking device that maintains constant pressure against a threaded ring or equivalent mechanical fastening would be acceptable provided that it would secure the plug from accidental separation. It would further require a warning tag that states: "DO NOT DISENGAGE UNDER LOAD."

This subparagraph would allow for the use of other locking devices that may become available in the future. The Agency has included this language to allow for acceptance of equally effective devices. Devices not explicitly defined in this rulemaking must be equally effective and provide at least the same measure of protection as those incorporated under this section.

Neither of the alternatives in subparagraphs 18.41(f)(2) or (f)(3) would impose additional requirements to the 1987 MSHA policy or the granted petitions for modification.

IV. Executive Order 12866 (Regulatory Planning and Review and Regulatory Flexibility Act)

Introduction

MSHA is proposing to amend 30 CFR 18.41(f), concerning plug and receptacle-type connectors for mobile battery-powered equipment. The proposed rule would revise and update the existing regulation by allowing the use of alternate locking devices to secure battery plugs to receptacles. Two alternate locking devices are addressed in this proposed rule.

(1) Captive locking devices requiring use of a special tool. These devices have been accepted since 1987 under an MSHA policy allowing their usage.

(2) Spring loaded or other locking devices. Spring-loaded locking devices have been accepted by MSHA under the 101(c) Petition for Modification process.

The proposed rule, once promulgated, would eliminate the need to file petitions for modification (PFM) to use spring-loaded locking devices to secure battery plugs to receptacles. It would also codify the 1987 MSHA policy of allowing acceptance of captive locking devices.

Executive Order (E.O.) 12866 requires that regulatory agencies assess both the costs and benefits of intended regulations. MSHA has fulfilled this requirement for this proposed rule, and based upon its economic analysis, has determined that the proposed rule would not have an annual effect of \$100 million or more on the economy. Therefore, it would not be an economically significant regulatory

action pursuant to § 3(f)(1) of E.O. 12866.

The proposed rule would eliminate the need for mine operators of underground gassy mines, who choose to use plug and receptacle-type connectors for mobile battery-powered equipment, to file PFMs, and thereby would generate cost savings.

From 1999 to 2001, 66 petitions were filed and granted to modify the application of 30 CFR 75.503 (permissible electric face equipment; maintenance) and 30 CFR 18.41(f) (plug and receptacle-type connectors). Through November 20, 2002, 23 petitions have been filed, for a total of 89 filed petitions from 1999 to 2002. On average, 22 petitions were filed during each of the past 4 years.

Mining Sectors Affected

The proposed rule would apply to all underground gassy mines. All underground coal mines are considered gassy mines and are affected by this proposed rule. Gassy metal and nonmetal (M/NM) mines would also be affected by the proposed rule. Currently there are no battery-powered machines of the type covered by the proposed rule in any of the gassy M/NM mines. Since these devices have not been used in M/NM mines, for purposes of this economic analysis, MSHA assumes that M/NM mines would not be affected by this rule. MSHA estimates that, on average, 22 underground coal mines per year would be affected by this rule.

Benefits

MSHA has qualitatively determined that the proposed rule, which would permit use of alternate locking devices on mobile battery-powered equipment instead of using padlocks, would yield safety benefits relative to the existing rule, which does not permit use of alternate locking devices on mobile battery-powered equipment. The use of alternate locking devices in lieu of padlocks on mobile battery-powered equipment would eliminate the problems associated with difficult removal of padlocks.

Compliance Costs

Cost savings from the proposed rule would accrue to underground coal mines that choose to use spring-loaded locking devices on mobile battery-powered equipment since they would no longer have to file a PFM. Cost savings from the proposed rule are estimated to be \$9,747 per year. The cost savings are based upon the elimination of the filing of an average of 22 petitions per year. It is projected that of the 22 mines, 19 would employ 20 to