

## § 7.49

(3) After 7 days, record the condition of the samples.

(b) *Acceptable performance.* At the end of the test, the insulation shall not exhibit any blistering, discoloration, cracking, swelling, tackiness, rubberiness, or loss of bond.

[53 FR 23500, June 22, 1988, as amended at 60 FR 33723, June 29, 1995]

### § 7.49 Approval marking.

Each approved battery assembly shall be identified by a legible and permanent approval plate inscribed with the assigned MSHA approval number and securely attached to the battery box.

### § 7.50 Post-approval product audit.

Upon request by MSHA, but no more than once a year except for cause, the approval-holder shall make an approved battery assembly available for audit at no cost to MSHA.

### § 7.51 Approval checklist.

Each battery assembly bearing an MSHA approval plate shall be accompanied by a description of what is necessary to maintain the battery assembly as approved.

[53 FR 23500, June 22, 1988, as amended at 60 FR 33723, June 29, 1995]

### § 7.52 New technology.

MSHA may approve a battery assembly that incorporates technology for which the requirements of this subpart are not applicable, if the Agency determines that the battery assembly is as safe as those which meet the requirements of this subpart.

## Subpart D—Multiple-Shot Blasting Units

SOURCE: 54 FR 48210, Nov. 21, 1989, unless otherwise noted.

### § 7.61 Purpose and effective date.

This subpart establishes the specific requirements for MSHA approval of multiple-shot blasting units. It is effective January 22, 1990. Applications for approval or extensions of approval submitted after January 22, 1991 shall meet the requirements of this subpart.

## 30 CFR Ch. I (7–1–13 Edition)

### § 7.62 Definitions.

The following definitions apply in this subpart:

*Blasting circuit.* A circuit that includes one or more electric detonators connected in a single series and the firing cable used to connect the detonators to the blasting unit.

*Blasting unit.* An electric device used to initiate electric detonators.

*Normal operation.* Operation of the unit according to the manufacturer's instructions with fully-charged batteries, with electric components at any value within their specified tolerances, and with adjustable electric components set to any value within their range.

### § 7.63 Application requirements.

(a) Each application for approval of a blasting unit shall include the following:

(1) An overall assembly drawing showing the physical construction of the blasting unit.

(2) A schematic diagram of the electric circuit.

(3) A parts list specifying each electric component and its electrical ratings, including tolerances.

(4) A layout drawing showing the location of each component and wiring.

(5) The model number or other manufacturer's designation of the blasting unit.

(b) All drawings shall be titled, numbered, dated, and include the latest revision number. The drawings may be combined into one or more composite drawings.

(c) The application shall contain a list of all the drawings submitted, including drawing titles, numbers, and revisions.

(d) A detailed technical description of the operation and use of the blasting unit shall be submitted with the application.

[54 FR 48210, Nov. 21, 1989, as amended at 60 FR 33723, June 29, 1995]

### § 7.64 Technical requirements.

(a) *Energy output.* Blasting units shall meet the acceptable performance criteria of the output energy test in § 7.66.

(b) *Maximum blasting circuit resistance.* The maximum value of the resistance