

the explosive or sheathed explosive unit;

- (2) Are chemically unstable;
- (3) Show leakage;
- (4) Use aluminum clips to seal the cartridge;
- (5) Contain any combination of perchlorate and aluminum;
- (6) Contain more than 5 percent perchlorate; or
- (7) Contain any perchlorate and less than 5 percent water.

(c) *Storage.* Explosives and sheathed explosive units shall be stored in a magazine for at least 30 days before gallery tests are conducted.

§ 15.6 Issuance of approval.

(a) MSHA will issue an approval or a notice of the reasons for denying approval after completing the evaluation and testing provided for by this part.

(b) An applicant shall not advertise or otherwise represent an explosive or sheathed explosive unit as approved until MSHA has issued an approval.

§ 15.7 Approval marking.

(a) An approved explosive or sheathed explosive unit shall be marketed only under the brand or trade name specified in the approval.

(b) The wrapper of each cartridge and each case of approved explosives shall be legibly labeled with the following: the brand or trade name, "MSHA Approved Explosive", the test detonator strength, and the minimum product firing temperature.

(c) The outer covering of each sheathed explosive unit and each case of approved sheathed explosive units shall be legibly labeled with the following: the brand or trade name, "MSHA Approved Sheathed Explosive Unit", the test detonator strength, and the minimum product firing temperature.

[FR 46761, Nov. 18, 1988; 54 FR 351, Jan. 5, 1989; 54 FR 27641, June 30, 1989; 60 FR 33723, June 29, 1995]

§ 15.8 Quality assurance.

(a) Applicants granted an approval or an extension of approval under this part shall manufacture the explosive or sheathed explosive unit as approved.

(b) Applicants shall immediately report to the MSHA Approval and Cer-

tification Center, any knowledge of explosives or sheathed explosive units that have been distributed that do not meet the specifications of the approval.

[53 FR 46761, Nov. 18, 1988, as amended at 60 FR 33723, June 29, 1995]

§ 15.9 Disclosure of information.

(a) All information concerning product specifications and performance submitted to MSHA by the applicant shall be considered proprietary information.

(b) MSHA will notify the applicants of requests for disclosure of information concerning its explosives or sheathed explosive units and shall give the applicant an opportunity to provide MSHA with a statement of its position prior to any disclosure.

§ 15.10 Post-approval product audit.

(a) Approved explosives and sheathed explosive units shall be subject to periodic audits by MSHA for the purpose of determining conformity with the technical requirements upon which the approval was based. Any approved explosive or sheathed explosive unit which is to be audited shall be selected by MSHA and be representative of those distributed for use in mines. The approval-holder may obtain any final report resulting from such audit.

(b) No more than once a year, except for cause, the approval-holder, at MSHA's request, shall make one case of explosives or 25 sheathed explosive units available at no cost to MSHA for an audit. The approval-holder may observe any tests conducted during this audit.

(c) An approved explosive or sheathed explosive unit shall be subject to audit for cause at any time MSHA believes that it is not in compliance with the technical requirements upon which the approval was based.

(d) Explosives approved under regulations in effect prior to January 17, 1989, shall conform to the provisions on field samples set out in those regulations (See 30 CFR part 15, 1987 edition).

§ 15.11 Revocation.

(a) MSHA may revoke for cause an approval issued under this part if the explosive or sheathed explosive unit—

§ 15.20

(1) Fails to meet the applicable technical requirements; or

(2) Creates a hazard when used in a mine.

(b) Prior to revoking an approval, the approval-holder shall be informed in writing of MSHA's intention to revoke. The notice shall—

(1) Explain the specific reasons for the proposed revocation; and

(2) Provide the approval-holder an opportunity to demonstrate or achieve compliance with the product approval requirements.

(c) Upon request, the approval-holder shall be afforded an opportunity for a hearing.

(d) If an explosive or sheathed explosive unit poses an imminent hazard to the safety or health of miners, the approval may be immediately suspended without a written notice of the agency's intention to revoke. The suspension may continue until the revocation proceedings are completed.

Subpart B—Requirements for Approval of Explosives

§ 15.20 Technical requirements.

(a) *Chemical composition.* The chemical composition of the explosive shall be within the tolerances furnished by the applicant.

(b) *Rate-of-detonation test.* The explosive shall propagate completely in the rate-of-detonation test. The test is conducted at an ambient temperature between 68 and 86 °F. Nongelatinous explosives are initiated with a test detonator only, while gelatinous explosives are initiated with a test detonator and a 60-gram tetryl pellet booster. The test is conducted on—

(1) A 50-inch column of 1¼ inch diameter cartridges; and

(2) A 50-inch column of the smallest diameter cartridges less than 1¼ inches submitted for testing.

(c) *Air-gap sensitivity.* The air-gap sensitivity of the explosive shall be at least 2 inches at the minimum product firing temperature and 3 inches at a temperature between 68 and 86 °F, and the explosive shall propagate completely.

(1) Air-gap sensitivity of the explosive is determined in the explosion-by-influence test using the 7-inch car-

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tridge method. The air-gap sensitivity is determined for 1¼ inch diameter cartridges and each cartridge diameter smaller than 1¼ inches. Explosives are initiated with a test detonator.

(2) The 7-inch cartridge method is conducted with two 8-inch cartridges. One inch is cut off the end of each cartridge. The cartridges are placed in a paper tube, the cut ends facing each other, with the appropriate 2-inch or 3-inch air gap between them. The test is conducted at a temperature between 68 and 86 °F and at the minimum product firing temperature proposed by the applicant, or 41 °F, whichever is lower. The test temperature at which the explosive propagates completely will be specified in the approval as the minimum product firing temperature at which the explosive is approved for use.

(d) *Gallery Test 7.* The explosive shall yield a value of at least 450 grams for the lower 95 percent confidence limit (L_{95}) on the weight for 50 percent probability of ignition (W_{50}) in gallery test 7 and shall propagate completely. The L_{95} and W_{50} values for the explosive are determined by using the Bruceton up-and-down method. A minimum of 20 trials are made with explosive charges of varying weights, including wrapper and seals. Each charge is primed with a test detonator, then tamped and stemmed with one pound of dry-milled fire clay into the borehole of a steel cannon. The cannon is fired into air containing 7.7 to 8.3 percent of natural gas. The air temperature is between 68 and 86 °F.

(e) *Gallery Test 8.* The explosive shall yield a value of at least 350 grams for the weight for 50 percent probability of ignition (W_{CDG}) in gallery test 8 and shall propagate completely. The (W_{CDG}) value for the explosive is determined using the Bruceton up-and-down method. A minimum of 10 tests are made with explosive charges of varying weights, including wrapper and seals. Each charge is primed with a test detonator, then tamped into the borehole of a steel cannon. The cannon is fired into a mixture of 8 pounds of bituminous coal dust predispersed into 640 cubic feet of air containing 3.8 to 4.2 percent of natural gas. The air temperature is between 68 and 86 °F.