

### § 27.3

### 30 CFR Ch. I (7-1-07 Edition)

other underground workings, and shall include a power-shutoff component.

(d) *Methane detector* means a component for a methane-monitoring system that functions in a gassy mine, tunnel, or other underground workings to sample the atmosphere continuously and responds to the presence of methane.

(e) *Power-shutoff component* means a component of a methane-monitoring system, such as a relay, switch, or switching mechanism, that will cause a control circuit to deenergize a machine, equipment, or power circuit when actuated by the methane detector.

(f) *Flammable mixture* means a mixture of a gas, such as methane, natural gas, or similar hydrocarbon gas with normal air, that can be ignited.

(g) *Gassy mine or tunnel* means a mine, tunnel, or other underground workings in which a flammable mixture has been ignited, or has been found with a permissible flame safety lamp, or has been determined by air analysis to contain 0.25 percent or more (by volume) of methane in any open workings when tested at a point not less than 12 inches from the roof, face, or rib.

(h) *Letter of certification* means a formal document issued by MSHA stating that a methane-monitoring system or subassembly or component thereof:

(1) Has met the requirements of this part, and

(2) Is certified for incorporation in or with permissible or approved equipment that is used in gassy mines and tunnels.

(i) *Component* means a part of a methane-monitoring system that is essential to its operation as a certified methane-monitoring system.

(j) *Explosion-proof* means that a component or group of components (subassembly) is so constructed and protected by an enclosure with or without a flame arrester(s) that, if a flammable mixture of gas is ignited within the enclosure, it will withstand the resultant pressure without damage to the enclosure and/or flame arrester(s). Also the enclosure and/or flame arrester(s) shall prevent the discharge of flame from within either the enclosure or the flame arrester, or the ignition of any

flammable mixture that surrounds the enclosure and/or flame arrester.<sup>1</sup>

(k) *Normal operation* means that performance of each component as well as of the entire assembly of the methane-monitoring system is in conformance with the functions for which it was designed and for which it was tested by MSHA.

(l) *Flame arrester* means a device so constructed that it will prevent propagation of flame or explosion from within the unit of which it is part to a surrounding flammable mixture.

(m) *Intrinsically safe equipment and circuitry* means equipment and circuitry that are incapable of releasing enough electrical or thermal energy under normal or abnormal conditions to cause ignition of a flammable mixture of the most easily ignitable composition.

(n) *Fail safe* means that the circuitry of a methane-monitoring system shall be so designed that electrical failure of a component which is critical in MSHA's opinion will result in deenergizing the methane-monitoring system and the machine or equipment of which it is a part.

[31 FR 10607, Aug. 9, 1966, as amended at 39 FR 24003, June 28, 1974; 43 FR 12316, Mar. 24, 1978]

### § 27.3 Consultation.

By appointment, applicants or their representatives may visit Approval and Certification Center, RR 1, Box 251, Industrial Park Road, Triadelphia, WV 26059, to discuss with qualified MSHA personnel proposed methane-monitoring systems to be submitted in accordance with the regulations of this part. No charge is made for such consultation and no written report thereof will be made to the applicant.

[31 FR 10607, Aug. 9, 1966, as amended at 43 FR 12316, Mar. 24, 1978; 60 FR 35694, July, 11, 1995]

### § 27.4 Application procedures and requirements.

(a)(1) No investigation or testing for certification will be undertaken by

<sup>1</sup>Explosion-proof components or subassemblies shall be constructed in accordance with the requirements of Part 18 of this subchapter.

MSHA except pursuant to a written application, accompanied by all drawings, specifications, descriptions, and related materials. The application and all related matters and correspondence shall be addressed to: U.S. Department of Labor, Mine Safety and Health Administration, Approval and Certification Center, RR #1, Box 251, Industrial Park Road, Triadelphia, West Virginia 26059. Fees calculated in accordance with part 5 of this title shall be submitted in accordance with § 5.40.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(3) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to the product approval requirements under this part.

(b) Drawings, specifications, and descriptions shall be adequate in detail to identify fully all components and sub-assemblies that are submitted for investigation, and shall include wiring and block diagrams. All drawings shall include title, number, and date; any revision dates and the purpose of each revision shall also be shown on the drawing.

(c) For a complete investigation leading to certification, the applicant shall furnish all necessary components and material to MSHA. MSHA reserves the right to require more than one of each

component, subassembly, or assembly for the investigation. Spare parts and expendable components, subject to wear in normal operation, shall be supplied by the applicant to permit continuous operation during test periods. The applicant shall furnish special tools necessary to assemble or disassemble any component or sub-assembly for inspection or test.

(d) The applicant shall submit a plan of inspection of components at the place of manufacture or assembly. The applicant shall furnish to MSHA a copy of any factory-inspection form or equivalent with the application. The form shall direct attention to the points that must be checked to make certain that all components or sub-assemblies of the complete assembly are in proper condition, complete in all respects, and in agreement with the drawings, specifications, and descriptions filed with MSHA.

(e) The applicant shall furnish to MSHA complete instructions for operating the assembly and servicing components. After completion of MSHA's investigation, and before certification, if any revision of the instructions is required, a revised copy thereof shall be submitted to MSHA for inclusion with the drawings and specifications.

[31 FR 10607, Aug. 9, 1966, as amended at 43 FR 12316, Mar. 24, 1978; 60 FR 35694, July, 11, 1995; 68 FR 36421, June 17, 2003; 70 FR 46343, Aug. 9, 2005]

**§ 27.5 Letter of certification.**

(a) Upon completion of investigation of a methane-monitoring system, or component or subassembly thereof, MSHA will issue to the applicant either a letter of certification or a written notice of disapproval, as the case may require. If a letter of certification is issued, no test data or detailed results of tests will accompany it. If a notice of disapproval is issued, it will be accompanied by details of the defects, with a view to possible correction. MSHA will not disclose except to the applicant or his authorized representative, any information because of which a notice of disapproval has been issued.