

shall forward the completed application form and other data to Approval and Certification Center which shall record all pertinent data with respect to such machine and notify the applicant that the application for approval has been rejected and the reasons for the rejection.

[33 FR 4660, Mar. 19, 1968, as amended at 42 FR 8373, Feb. 10, 1977; 43 FR 12314, Mar. 24, 1978]

PART 19—ELECTRIC CAP LAMPS

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AUTHORITY: 30 U.S.C. 957, 961.

Secs. 19.1(b) and 19.7(a) also issued under 30 U.S.C. 811.

SOURCE: Schedule 6D, 4 FR 4003, Sept. 21, 1939, unless otherwise noted.

§ 19.1 Purpose.

(a) The purpose of investigations made under this part is to promote the development of electric cap lamps that may be used in mines, especially in mines that may contain dangerous concentrations of methane. Lists of such lamps will be published from time to time in order that State mine-inspection departments, compensation bureaus, mine operators, miners, and others interested in safe equipment for mines may have information in regard to available permissible electric cap lamps. This part supersedes Schedule 6C issued under date of December 21, 1935, and goes into effect August 26, 1939.

(b) Any electric cap lamp that meets the requirements set forth in this part will be termed "permissible" by MSHA and, if actively marketed, will be listed as such in publications relating to permissible electric cap lamps. MSHA will

test only electrical equipment that in the opinion of its qualified representatives is constructed of suitable materials, is of good quality workmanship, is based on sound engineering principles, and is safe for its intended use. MSHA reserves the right to modify design, construction, and test requirements to obtain the same degree of protection as provided by the tests described in this part.

(c) *Definition of permissible.* Completely assembled and conforming in every respect with the design formally approved by the MSHA under this part. (Approvals under this part are given only to equipment for use in gassy and dusty mines.)

NOTE: Paragraph (b) of this section is issued under the authority of Sec. 101 of the Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811). All other paragraphs in this section continue under the original authority.

(Sec. 101, Federal Mine Safety and Health Act of 1977, 91 Stat. 1291 (30 U.S.C. 811))

[Schd. 6D, 4 FR 4003, Sept. 21, 1939, as amended by Supp. 1, 20 FR 2718, Apr. 23, 1955; 47 FR 11369, Mar. 16, 1982]

§ 19.2 [Reserved]

§ 19.3 Applications.

Before MSHA will undertake the active investigation leading to approval of any lamp the manufacturer shall make application by letter for an investigation leading to approval of his lamp. This application, in duplicate, accompanied by a check, bank draft, or money order, payable to U.S. Mine Safety and Health Administration, to cover all the necessary fees, shall be sent to Approval and Certification Center, RR 1, Box 251, Industrial Park Road, Triadelphia, WV 26059, together with the required drawings, one complete lamp, and instructions for its operation.

[Supp. 1, 20 FR 2718, Apr. 23, 1955, as amended at 43 FR 12314, Mar. 24, 1978; 60 FR 35693, July 11, 1995]

§ 19.4 Conditions governing investigations.

(a) One complete lamp, with the assembly and detail drawings that show the construction of the lamp and the

§ 19.5

materials of which it is made, should be submitted at the time the application for test is made. This material should be sent prepaid to Approval and Certification Center, RR 1, Box 251, Industrial Park Road, Triadelphia, WV 26059.

(b) When this lamp has been inspected by MSHA, the applicant will be notified as to the amount of material that will be required for the tests. In general, the material required will be as follows: (1) Thirty complete lamps; (2) 500 bulbs; (3) 50 feet of cord; (4) a battery discharge rack for 20 batteries; and (5) a 50-bulb rack. Specifications for items (4) and (5) will be furnished by MSHA.

(c) The applicant will be notified of the date on which the tests will start and will be given an opportunity to witness them.

(d) *Observers at formal investigations and demonstrations.* No one shall be present during any part of the formal investigation conducted by MSHA which leads to approval for permissibility except the necessary Government personnel, representatives of the applicant, and such other persons as may be mutually agreed upon by the applicant and MSHA. Upon granting approval for permissibility, MSHA will announce that such approval has been granted to the device and may thereafter conduct, from time to time in its discretion, public demonstrations of the tests conducted on the approved device. Those who attend any part of the investigation, or any public demonstration, shall be present solely as observers; the conduct of the investigation and of any public demonstration shall be controlled by MSHA. Results of chemical analyses of material and all information contained in the drawings, specifications, and instructions shall be deemed confidential and their disclosure will be appropriately safeguarded by MSHA.

(e) Permissibility tests will not be made unless the lamp has been completely developed and is in a form that can be marketed.

(f) The results of the tests shall be regarded as confidential by all present at the tests and shall not be made public in any way prior to the formal approval of the lamp by MSHA.

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(g) No verbal report of approval or disapproval will be made to the applicant. After MSHA has considered the results of the tests, a formal report of the approval or disapproval will be made to the applicant in writing by Approval and Certification Center. The applicant shall not advertise the lamp as being permissible or as having passed the tests prior to receipt of formal notice of approval.

[Sched. 6D, 4 FR 4003, Sept. 21, 1939, as amended by Supp. 1, 20 FR 2718, Apr. 23, 1955; 43 FR 12314, Mar. 24, 1978; 60 FR 35693, July 11, 1996]

§ 19.5 General requirements for approval.

Electric cap lamps shall be complete units. They shall be durable in construction, practical in operation, and suitable for the conditions of underground service. They shall offer no probable explosion hazard if used in gassy or dusty mine atmospheres or bodily hazard from the spilling of the battery electrolyte. They shall exhibit, under laboratory test conditions, the various minimum performance requirements specified in this part.

§ 19.6 Specific requirements for approval.

(a) *Design.* In the determination of the adequacy of the lamp, with respect to design, the following points will be considered: (1) The materials used; (2) construction; (3) weight; (4) amount of light; (5) distribution of light; and (6) exclusion of dust from the headpiece. The suitability of the materials and the construction shall be determined by preliminary inspection, by dropping tests,¹ by durability tests of the cord and cord armor,² and by the general behavior of the lamp equipment during the investigation. The amount and distribution of the light shall be judged both by observation of the illumination

¹Batteries are dropped 3 feet, at least 20 times onto an oak floor. Headpieces are dropped 6 feet, at least 20 times, onto concrete.

²Ten cords, assembled with the cord armor and outlet of the lamp with which it is to be used, are slatted at least 100,000 times through an arc of 50 degrees at approximately 90 slattings per minute.