more than 2 readings for each percentage shall exceed the limits of error given in the table.

- (ii) The average number of determinations that may be made with an indicating detector without replacement of any part shall be not less than 30, and the average number that may be made without recharging the battery shall be not less than 15.
- (iii) The scale shall not be subdivided into smaller divisions than the general accuracy of the indicating detector warrants.
- (3) Mechanical strength. Detectors and indicating detectors shall be subjected to the following mechanical tests: Four of each of those parts or groups of assembled parts that are not normally strapped to the user shall be dropped 20 times on a wood floor from a height of 3 feet. Parts that are strapped to the user may be subjected to a jarring or bumping test to demonstrate adequate strength. The average number of times that any one of the detectors can be dropped before breakage or material distortion of essential parts shall be not less than 10.
- (e) Attachments for illumination. If detectors are provided with attachments for illuminating purposes, such attachments shall be subject to the same requirements as those applying to that type of lamp under the lamp schedule then in force.

§ 22.8 Material required for MSHA records.

In order that MSHA may know exactly what it has tested and approved, it keeps detailed records covering each investigation. These records include drawings and actual equipment as follows:

- (a) Drawings. The original drawings submitted with the application for the tests and the final drawings which the manufacturer must submit to MSHA before the approval is granted to show the details of the detector as approved, are retained. These drawings are used to identify the detector in the approval and as a means of checking the future commercial product of the manufacturer.
- (b) Actual equipment. If MSHA so desires, parts of the detectors that are used in the tests will be retained as

records of the equipment submitted. If the detector is approved, MSHA will require the manufacturer to submit one of his detectors, with the approval plate attached, as a record of his commercial product.

§22.9 How approvals are granted.

All approvals are granted by official letter from MSHA. A detector will be approved under this part only when the testing engineers have judged that it has met the requirements of the schedule and MSHA's records are complete, including drawings from the manufacturer that show the detector as it is to be commercially made. No verbal reports of the investigation will be given and no informal approvals will be granted. As soon as the manufacturer has received the formal approval, he shall be free to advertise his detector as permissible.

[Sched. 8C, Oct. 31, 1935, as amended by Supp. 1, 20 FR 2575, Apr. 19, 1955]

§ 22.10 Approval plate.

(a) Attachment to be made by manufacturers. (1) Manufacturers shall attach, stamp, or mold an approval plate on each permissible methane detector. The plate shall bear the emblem of the Mines Safety and Health Administration and be inscribed as follows:

Permissible Methane Detector (or Permissible Methane Indicating Detector) Approval No. _____ issued to the ____ Company.

- (2) When deemed necessary, an appropriate caution statement shall be added. The size and position of the approval plate shall be satisfactory to MSHA.
- (b) Purpose of approval plate. The approval plate is a label that identifies the device so that anyone can tell at a glance whether it is of the permissible type or not. By the plate, the manufacturer can point out that his detector complies with MSHA's requirements and that it has been approved for use in gassy mines.
- (c) Use of approval plate. Permission to place MSHA's approval plate on his detector obligates the manufacturer to maintain the quality of his product and to see that each detector is constructed according to the drawings that have

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been accepted by MSHA and are in MSHA's files. Detectors exhibiting changes in design that have not been approved are not permissible and must not bear MSHA's approval plate.

(d) Withdrawal of approval. MSHA reserves the right to rescind for cause at any time any approval granted under this part.

[Sched. 8C, Oct. 31, 1935, as amended at 43 FR 12315, Mar. 24, 1978]

§ 22.11 Instructions on handling future changes in design.

All approvals are granted with the understanding that the manufacturer will make the detector according to the drawings submitted to MSHA which have been considered and included in the approval. Therefore, when the manufacturer desires to make any changes in the design, the manufacturer should first obtain MSHA's approval of the change. The procedure is as follows:

(a)(1) The manufacturer must write to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, requesting an extension of the original approval and stating the change or changes desired. With this request, the manufacturer should submit a revised drawing or drawings showing changes in detail, together with one of each of the parts affected.

- (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 of changes to an approved product 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.

- (b) MSHA will consider the application and inspect the drawings and parts to determine whether it will be necessary to make any tests.
- (c) If no tests are necessary, the applicant will be advised of the approval or disapproval of the change by letter from MSHA.
- (d) If tests are judged necessary, the applicant will be advised of the material that will be required.

[Sched. 8C, Oct. 31, 1935, as amended by Supp. 1, 20 FR 2575, Apr. 19, 1955; 43 FR 12315, Mar. 24, 1978; 52 FR 17514, May 8, 1987; 60 FR 35694, July 11, 1995; 68 FR 36420, June 17, 2003]

PART 23—TELEPHONES AND SIGNALING DEVICES

sec.

23.1 Purpose.

23.2 Definitions.

23.3 Application procedures and requirements.

23.4 [Reserved]

23.5 Conditions governing investigations.

23.6 General requirements for approval.

23.7 Specific requirements for approval.

23.8 Inspection and tests.

23.9 Special requirements for complete devices.

23.10 Material required for MSHA records.

23.11 How approvals are granted.

23.12 Wording, purpose, and use of approval plate.

23.13 Withdrawal of approval.

23.14 Instructions for handling future changes in design.

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

Sec. 23.2(f) also issued under 30 U.S.C. 811.

SOURCE: Schedule 9B, 4 FR 1555, Apr. 11, 1939, unless otherwise noted.

§23.1 Purpose.

- (a) The purpose of investigations under this part is to promote the development of telephones and signaling devices that may be used safely in mines, especially in coal mines that may have gassy or dust-laden atmospheres. This schedule supersedes Schedule 9A, issued under date of December 5, 1922, and becomes effective October 18, 1938.
- (b) Telephones and signaling devices approved under the requirements of this part will be termed "permissible" by MSHA, and if actively marketed will be listed as such in publications