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- (d) The approval plate identifies the unit, to which it is attached, as permissible, and is the applicant's guarantee that the unit complies with the requirements of this part. Without an approval plate, no unit has the status of "permissible" under the provisions of this part.
- (e) Use of the approval plate obligates the applicant to whom the certificate of approval was granted to maintain the quality of each unit bearing it and guarantees that it is manufactured and assembled according to the drawings and specifications upon which a certificate of approval was based. Use of the approval plate is not authorized except on units that conform strictly with the drawings and specifications upon which the certificate of approval was based.

[Sched. 25B, 25 FR 6473, July 9, 1960, as amended at 43 FR 12317, Mar. 24, 1978]

§ 33.12 Changes after certification.

If an applicant desires to change any feature of a certified unit or system, he shall first obtain MSHA's approval of the change, pursuant to the following procedure:

- (a)(1) Application shall be made as for an original certificate, requesting that the existing certification be extended to cover the proposed changes, and shall be accompanied by drawings, specifications, and related data showing the changes in detail.
- (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 sub-

mitted to the independent laboratory by the applicant and as required by this part.

- (b) The application will be examined by MSHA to determine whether inspection and testing will be required. Testing will be necessary if there is a possibility that the modification may affect adversely the performance of the unit or system. MSHA will inform the applicant whether such testing is required and the components or materials to be submitted for that purpose.
- (c) If the proposed modification meets the requirements of this part and Part 18 of Subchapter D of this chapter (Bureau of Mines Schedule 2, revised, the current revision of which is Schedule 2F) if applicable, a formal extension of certification will be issued, accompanied by a list of new and corrected drawings and specifications to be added to those already on file as the basis for the extension of certification.

[Schedule 25B, 25 FR 6473, July 9, 1960, as amended at 52 FR 17515, May 8, 1987; 68 FR 36422, June 17, 2003]

§33.13 Withdrawal of certification.

MSHA reserves the right to rescind for cause, at any time, any certification granted under this part.

Subpart B—Dust-Collector Requirements

§ 33.20 Design and construction.

- (a) MSHA will not test or investigate any dust collector that in its opinion is not constructed of suitable materials, that evidences faulty workmanship, or that is not designed upon sound engineering principles. Since all possible designs, arrangements, or combinations of components and materials cannot be foreseen, MSHA reserves the right to modify the tests specified in this part in such manner to obtain substantially the same information and degree of protection as provided by the tests described in Subpart C of this part.
- (b) Adequacy of design and construction of a unit or system will be determined in accordance with its ability (1) to prevent the dissemination of objectionable or harmful concentrations of

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dust into a mine atmosphere, and (2) to protect against explosion and/or fire hazards of electrical equipment, except as provided in §33.38(b).

§ 33.21 Modification of test equipment.

For test purposes the unit or system may be modified, such as by attaching instruments or measuring devices, at MSHA's discretion; but such modification shall not alter its performance.

§ 33.22 Mode of use.

- (a) A unit or system may be designed for use in connection with percussion and/or rotary drilling in any combination of the following drilling positions: (1) Vertically upward, (2) upward at angles to the vertical, (3) horizontally, and (4) downward.
- (b) Dust-collector units may be designed for use with specific drilling equipment or at specific drilling speeds.

§ 33.23 Mechanical positioning of parts.

All parts of a unit that are essential to the dust-collection feature shall be provided with suitable mechanical means for positioning and maintaining such parts properly in relation to the stratum being drilled.

Subpart C—Test Requirements

§ 33.30 Test site.

Tests shall be conducted at an appropriate location determined by MSHA.

[39 FR 24005, June 28, 1974]

$\S 33.31$ Test space.

- (a) Drilling tests shall be conducted in a test space formed by two curtains suspended across a mine opening in such a manner that the volume of the test space shall be approximately 2,000 cubic feet.
- (b) No mechanical ventilation shall be provided in the test space during a drilling test, except such air movement as may be induced by operation of drilling- or dust-collecting equipment.
- (c) All parts of a unit or system shall be within the test space during a drilling test.

§33.32 Determination of dust concentration.

- (a) Concentrations of airborne dust in the test space shall be determined by sampling with a midget impinger apparatus, and a light-field microscopic technique shall be employed in determining concentrations of dust in terms of millions of particles (5 microns or less in diameter) per cubic foot of air sampled.
- (b) Before a drilling test is started the surfaces of the test space shall be wetted; the test space shall be cleared of air-borne dust insofar as practicable by mechanical ventilation or other means; and an atmospheric sample, designated as a control sample, shall be collected during a 5-minute period to determine residual airborne dust in the test space.
- (c) A sample of airborne dust, designated as a test sample, shall be collected in the breathing zone of the drill operators during the drilling of each test hole. Time consumed in changing drill steel shall not be considered as drilling time and sampling shall be discontinued during such periods.

[Sched. 25B, 25 FR 6473, July 9, 1960, as amended at 26 FR 2599, Mar. 28, 1961]

§ 33.33 Allowable limits of dust concentration.

- (a) The concentration of dust determined by the control sample shall be subtracted from the average concentration of dust determined by the test samples collected at each drill operator's position, and the difference shall be designated as the net concentration of airborne dust. Calculations of the average concentration of dust determined from the test samples shall be based upon the results of not less than 80 percent of each set of test samples.
- (b) Under each prescribed test condition, the net concentration of airborne dust at each drill operator's position shall not exceed 10 million particles (5 microns or less in diameter) per cubic foot of air when determined in accordance with the method given in §33.32(a).

[Sched. 25B, 25 FR 6473, July 9, 1960, as amended at 26 FR 2599, Mar. 28, 1961]