

Mine Safety and Health Admin., Labor

§ 70.506

mine and to report and certify the results of such tests to the Secretary and the Secretary of Health and Human Services.

(Sec. 101, 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); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (30 U.S.C. 961))

[36 FR 12739, July 7, 1971, as amended at 43 FR 40761, Sept. 12, 1978; 44 FR 52827, Sept. 11, 1979; 47 FR 28095, June 29, 1982]

§ 70.505 Noise exposure measurement equipment.

Noise exposure measurements shall be taken only with equipment which is approved by the Mine Safety and Health Administration as permissible electric face equipment under the provisions of part 18 of this chapter and which in the case of sound level meters, meets American National Standards Institute (ANSI), "Specification for Sound Level Meters," S1.4-1971 (Type S2A), or in the case of personal noise dosimeters, has been found to be acceptable by the Mine Safety and Health Administration.

(Sec. 101, 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); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (30 U.S.C. 961))

[43 FR 40761, Sept. 12, 1978; 44 FR 52827, Sept. 11, 1979]

§ 70.506 Noise exposure measurement procedures; instrument setting; calibration.

(a) Noise exposure measurements made with sound level meters shall conform to the following:

(1) Noise exposure measurements shall be made at locations where the noise is typical of that entering the ears of the miner whose exposure is under consideration.

(2) Five measurements shall be made for each type of noise exposure producing operation to which the miner under consideration is exposed.

(3) Each measurement shall be made by observing the A-scale readings for 30 seconds and recording the noise level.

(4) The average of the five noise level measurements shall be considered as

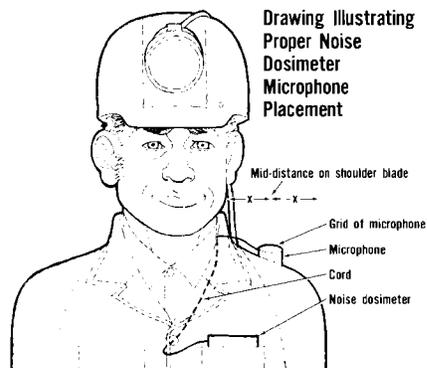
the noise level measurement which is representative of the operation.

(5) Where different and distinct noise levels occur at various phases of an operation, noise exposure measurements shall be made in accordance with this section for each distinct phase.

(6) The noise levels and the estimated length of time the miner is exposed to each level during a normal work shift shall be reported for the operation.

(b) Noise exposure measurements made with personal noise dosimeters shall conform to the following:

(1) For the miner whose noise exposure is under consideration, noise exposure measurements shall be made with the personal noise dosimeter microphone located at the top of the shoulder, midway between the neck and the end of the shoulder with the microphone pointing in a vertical upward direction in accordance with the diagram shown below:



Drawing Illustrating Proper Noise Dosimeter Microphone Placement

(2) To the extent practical, the personal noise dosimeter instrument case and microphone cable shall be positioned underneath exterior clothing so as to minimize potential safety problems and damage to the instrument. The microphone shall not be covered by clothing.

(3) The personal noise dosimeter shall be worn by the miner whose noise exposure is under consideration for an entire normal work shift and the accumulated per centum of the noise exposure shall be reported.

(c) Noise exposure measurement instruments specified in § 70.505 shall be set to operate with the A-weighted network and slow response.

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(d)(1) Sound level meters and personal noise dosimeters used by an operator in fulfilling the requirements of this subpart shall be acoustically calibrated in accordance with the manufacturer's instructions before and after each shift on which the meter is used.

(2) Sound level meters and personal noise dosimeters used by an authorized representative of the Secretary shall be acoustically calibrated in accordance with the manufacturer's instructions or by another equivalent procedure before and after each shift on which the meter is used.

(3) Personal noise dosimeters shall be recalibrated annually, including, as a minimum, the following:

(i) Visual inspection of the microphone for any foreign matter or damage,

(ii) Comparison of the dosimeter, at 1000 Hz, with a laboratory type condenser microphone of known sensitivity, and

(iii) Frequency response testing in a free or diffused field where the sound field is established using a laboratory type condenser microphone of known sensitivity.

(4) A document containing the date of the annual recalibration of each personal noise dosimeter and the names of the individual and organization performing the calibration shall be kept on file at each mine office.

(e)(1) Acoustical calibrators which are used to calibrate sound level meters and personal noise dosimeters shall be recalibrated once a year using a laboratory type condenser microphone of known sensitivity as determined by a National Bureau of Standards calibration.

(2) A document containing the date of the annual calibration of each acoustical calibrator and the names of the individual and organization performing the calibration shall be on file at each mine office.

(Sec. 101, 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); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (30 U.S.C. 961))

[43 FR 40761, Sept. 12, 1978, as amended at 43 FR 50678, Oct. 31, 1978; 44 FR 52827, Sept. 11, 1979]

30 CFR Ch. I (7-1-00 Edition)

§ 70.507 Initial noise exposure survey.

On or before June 30, 1971, each operator shall:

(a) Conduct, in accordance with this subpart, a survey of the noise levels to which each miner in the active workings of the mine is exposed during his normal work shift; and,

(b) Report and certify to the Mine Safety and Health Administration, and the Department of Health and Human Services, the results of such survey using the Coal Mine Noise Data Report, Figure 1. Reports shall be sent to:

Division of Automatic Data Processing, Mine Safety and Health Administration, Building 53, Denver Federal Center, Colo. 80225.

(Sec. 101, 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); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (30 U.S.C. 961))

[36 FR 12739, July 7, 1971, as amended at 43 FR 40762, Sept. 12, 1978; 44 FR 52827, Sept. 11, 1979; 47 FR 28095, June 29, 1982]

§ 70.508 Periodic noise exposure survey.

(a) At intervals of at least every 6 months after June 30, 1971, but in no case shall the interval be less than 3 months, each operator shall conduct, in accordance with this subpart, periodic surveys of the noise levels to which each miner in the active workings of the mine is exposed and shall report and certify the results of such surveys to the Mine Safety and Health Administration, and the Department of Health and Human Services, using the Coal Mine Noise Data Report Form. Reports shall be sent to:

Division of Automatic Data Processing, Mine Safety and Health Administration, Building 53, Denver Federal Center, Colo. 80225.

(b) Where no A-scale reading recorded for any miner during an initial or periodic noise exposure survey exceeds 90 dBA, the operator shall not be required to survey such miner during any subsequent periodic noise level survey required by this section: *Provided, however,* That the name and job position of each such miner shall be reported in every periodic survey and the operator shall certify that such miner's job duties and noise exposure levels