

## SUBCHAPTER O—COAL MINE SAFETY AND HEALTH

### PART 70—MANDATORY HEALTH STANDARDS—UNDERGROUND COAL MINES

SOURCE: 45 FR 24000, Apr. 8, 1980, unless otherwise noted.

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AUTHORITY: 30 U.S.C. 811, 813(h), 957.

SOURCE: 59 FR 8327, Feb 18, 1994, unless otherwise noted.

#### Subpart A—General

AUTHORITY: 30 U.S.C. 811 and 813(h).

#### § 70.1 Scope.

This part 70 sets forth mandatory health standards for each underground coal mine subject to the Federal Mine Safety and Health Act of 1977.

#### § 70.2 Definitions.

For the purpose of this part 70, the term:

(a) *Act* means the Federal Mine Safety and Health Act of 1977, Pub. L. 91-173, as amended by Pub. L. 95-164.

(b) *Active workings* means any place in a coal mine where miners are normally required to work or travel.

(c) *Certified person* means an individual certified by the Secretary in accordance with § 70.202 (Certified person; sampling) to take respirable dust samples required by this part or certified in accordance with § 70.203 (Certified person; maintenance and calibration) to perform the maintenance and calibration of respirable dust sampling equipment as required by this part.

(d) *Concentration* means a measure of the amount of a substance contained per unit volume of air.

(e) *Designated area*. An area of a mine identified by the operator under § 75.371(t) (Mine ventilation plan; contents) of this title and approved by the district manager.

(f) *Designated occupation* means the occupation on a mechanized mining unit that has been determined by results of respirable dust samples to have the greatest respirable dust concentration.

(g) *District Manager* means the manager of the Coal Mine Safety and Health District in which the mine is located.

(h) *Mechanized mining unit* means: (1) A unit of mining equipment including hand loading equipment used for the production of material; or (2) a specialized unit which utilizes mining equipment other than specified in § 70.207(e) (Bimonthly sampling; mechanized mining units).

(i) *MRE instrument* means the gravimetric dust sampler with a four

channel horizontal elutriator developed by the Mining Research Establishment of the National Coal Board, London, England.

(j) *MSHA* means the Mine Safety and Health Administration of the Department of Labor.

(k) *Normal production shift* means (1) a production shift during which the amount of material produced in a mechanized mining unit is at least 50 percent of the average production reported for the last set of five valid samples; or (2) a production shift during which any amount of material is produced by a new mechanized mining unit, until a set of five valid samples is taken.

(l) *Production shift* means (1) with regard to a mechanized mining unit, a shift during which material is produced, or (2) with regard to a designated area of a mine, a shift during which material is produced and routine day-to-day activities are occurring in the designated area.

(m) *Quartz* means crystalline silicon dioxide (SiO<sub>2</sub>) not chemically combined with other substances and having a distinctive physical structure.

(n) *Respirable dust* means dust collected with a sampling device approved by the Secretary and the Secretary of Health and Human Services in accordance with part 74 (Coal Mine Dust Personal Sampler Units) of this title. Sampling device approvals issued by the Secretary of the Interior and Secretary of Health, Education, and Welfare are continued in effect.

(o) *Secretary* means the Secretary of Labor or his delegate.

(p) *Valid respirable dust sample* means a respirable dust sample collected and submitted as required by this part, and not voided by MSHA.

[45 FR 24000, Apr. 8, 1980, as amended at 47 FR 28095, June 29, 1982; 57 FR 20913, May 15, 1992]

EFFECTIVE DATE NOTE: At 79 FR 24972, May 1, 2014, subpart A was revised, effective Aug. 1, 2014. For the convenience of the user, the revised text is set forth as follows:

**Subpart A—General**

**§ 70.1 Scope.**

This part 70 sets forth mandatory health standards for each underground coal mine

subject to the Federal Mine Safety and Health Act of 1977, as amended.

**§ 70.2 Definitions.**

The following definitions apply in this part.

*Act.* The Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164 and Public Law 109-236.

*Active workings.* Any place in a coal mine where miners are normally required to work or travel.

*Approved sampling device.* A sampling device approved by the Secretary and Secretary of Health and Human Services (HHS) under part 74 of this title.

*Certified person.* An individual certified by the Secretary in accordance with § 70.202 to take respirable dust samples required by this part or certified in accordance with § 70.203 to perform the maintenance and calibration of respirable dust sampling equipment as required by this part.

*Coal mine dust personal sampler unit (CMDPSU).* A personal sampling device approved under part 74, subpart B, of this title.

*Concentration.* A measure of the amount of a substance contained per unit volume of air.

*Continuous personal dust monitor (CPDM).* A personal sampling device approved under part 74, subpart C of this title.

*Designated area (DA).* A specific location in the mine identified by the operator in the mine ventilation plan under § 75.371(t) of this title where samples will be collected to measure respirable dust generation sources in the active workings; approved by the District Manager; and assigned a four-digit identification number by MSHA.

*Designated occupation (DO).* The occupation on a mechanized mining unit (MMU) that has been determined by results of respirable dust samples to have the greatest respirable dust concentration.

*District Manager.* The manager of the Coal Mine Safety and Health District in which the mine is located.

*Equivalent concentration.* The concentration of respirable coal mine dust, including quartz, expressed in milligrams per cubic meter of air (mg/m<sup>3</sup>) as measured with an approved sampling device, determined by dividing the weight of dust in milligrams collected on the filter of an approved sampling device by the volume of air in cubic meters passing through the filter (sampling time in minutes (t) times the sampling airflow rate in cubic meters per minute), and then converting that concentration to an equivalent concentration as measured by the Mining Research Establishment (MRE) instrument. When the approved sampling device is:

(1) The CMDPSU, the equivalent concentration is determined by multiplying the concentration of respirable coal mine dust by the constant factor prescribed by the Secretary.

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(2) The CPDM, the device shall be programmed to automatically report end-of-shift concentration measurements as equivalent concentrations.

*Mechanized mining unit (MMU).* A unit of mining equipment including hand loading equipment used for the production of material; or a specialized unit which uses mining equipment other than specified in § 70.206(b) or in § 70.208(b) of this part. Each MMU will be assigned a four-digit identification number by MSHA, which is retained by the MMU regardless of where the unit relocates within the mine. However, when:

(1) Two sets of mining equipment are used in a series of working places within the same working section and only one production crew is employed at any given time on either set of mining equipment, the two sets of equipment shall be identified as a single MMU.

(2) Two or more sets of mining equipment are simultaneously engaged in cutting, mining, or loading coal or rock from working places within the same working section, each set of mining equipment shall be identified as a separate MMU.

*MRE instrument.* The gravimetric dust sampler with a four channel horizontal elutriator developed by the Mining Research Establishment of the National Coal Board, London, England.

*MSHA.* The Mine Safety and Health Administration of the U.S. Department of Labor.

*Normal production shift.* A production shift during which the amount of material produced by an MMU is at least equal to 80 percent of the average production recorded by the operator for the most recent 30 production shifts or for all production shifts if fewer than 30 shifts of production data are available.

*Other designated occupation (ODO).* Other occupation on an MMU that is designated for sampling required by this part in addition to the DO. Each ODO shall be identified by a four-digit identification number assigned by MSHA.

*Production shift.* With regard to an MMU, a shift during which material is produced; with regard to a DA of a mine, a shift during which material is produced and routine day-to-day activities are occurring in the DA.

*Quartz.* Crystalline silicon dioxide (SiO<sub>2</sub>) not chemically combined with other substances and having a distinctive physical structure.

*Representative sample.* A respirable dust sample, expressed as an equivalent concentration, that reflects typical dust concentration levels and with regard to an MMU, normal mining activities in the active workings during which the amount of material produced is equivalent to a normal production shift; or with regard to a DA, mate-

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rial is produced and routine-day-to-day activities are occurring.

*Respirable dust.* Dust collected with a sampling device approved by the Secretary and the Secretary of HHS in accordance with part 74 (Coal Mine Dust Sampling Devices) of this title.

*Secretary.* The Secretary of Labor or a delegate.

*Valid respirable dust sample.* A respirable dust sample collected and submitted as required by this part, including any sample for which the data were electronically transmitted to MSHA, and not voided by MSHA.

### Subpart B—Dust Standards

**AUTHORITY:** Secs. 101 and 103(h), Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 and 1299 (30 U.S.C. 811 and 813(h)).

**SOURCE:** 45 FR 24001, Apr. 8, 1980, unless otherwise noted.

#### § 70.100 Respirable dust standards.

(a) Each operator shall continuously maintain the average concentration of respirable dust in the mine atmosphere during each shift to which each miner in the active workings of each mine is exposed at or below 2.0 milligrams of respirable dust per cubic meter of air as measured with an approved sampling device and in terms of an equivalent concentration determined in accordance with § 70.206 (Approved sampling devices; equivalent concentrations).

(b) Each operator shall continuously maintain the average concentration of respirable dust within 200 feet outby the working faces of each section in the intake airways at or below 1.0 milligrams of respirable dust per cubic meter of air as measured with an approved sampling device and in terms of an equivalent concentration determined in accordance with § 70.206 (Approved sampling devices; equivalent concentrations).

#### § 70.101 Respirable dust standard when quartz is present.

When the respirable dust in the mine atmosphere of the active workings contains more than 5 percent quartz, the operator shall continuously maintain the average concentration of respirable dust in the mine atmosphere during each shift to which each miner in the