

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.

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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_2) 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]

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 active workings is exposed at or below a concentration of respirable dust, expressed in milligrams 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), computed by dividing the percent of quartz into the number 10.

Example: The respirable dust associated with a mechanized mining unit or a designated area in a mine contains quartz in the amount of 20%. Therefore, the average concentration of respirable dust in the mine atmosphere associated with that mechanized mining unit or designated area shall be continuously maintained at or below 0.5 milligrams of respirable dust per cubic meter of air ($10/20=0.5 \text{ mg/m}^3$).