

## Mine Safety and Health Admin., Labor

## § 71.2

(3) Corrective action taken to reduce the concentration of CO and/or NO<sub>2</sub> to or below the applicable action level.

(e) As of November 25, 1997 exhaust gas monitoring shall be conducted in accordance with the requirements of this section.

[61 FR 55526, Oct. 25, 1996]

### **PART 71—MANDATORY HEALTH STANDARDS—SURFACE COAL MINES AND SURFACE WORK AREAS OF UNDERGROUND COAL MINES**

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AUTHORITY: 30 U.S.C. 811, 951, and 957.

SOURCE: 37 FR 6368, Mar. 28, 1972, unless otherwise noted.

#### **Subpart A—General**

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 80756, Dec. 5, 1980, unless otherwise noted.

##### **§ 71.1 Scope.**

This part 71 sets forth mandatory health standards for each surface coal mine and for the surface work areas of each underground coal mine subject to the Federal Mine Safety and Health Act of 1977.

##### **§ 71.2 Definitions.**

For the purpose of this part 71, 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 surface coal mine or the surface work area of an underground coal mine where miners are normally required to work or travel.

(c) *Certified person* means an individual certified by the Secretary in accordance with §71.202 (Certified person; sampling) to take respirable dust samples required by this part or certified in accordance with §71.203 (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 work position* means a work position designated under §71.208 (Bimonthly sampling; designated work positions).

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

(g) *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.

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

(i) *Normal work shift* means (1) a shift during which the regular duties of the designated work position are performed while routine day-to-day mining activities are occurring in the rest of the mine and (2) a shift during which there is no rain, or, if rain occurs, the rain does not suppress the respirable dust to the extent that sampling results will be measurably lower, in the judgment of the person certified under this part to conduct sampling.

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

(k) *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.

(l) *Secretary* means the Secretary of Labor or a delegate.

(m) *Surface area* means a specific physical portion of a surface coal mine or surface area of an underground coal mine. These areas are assigned a four digit identification number by MSHA.

(n) *Surface coal mine* means a surface area of land and all structures, facilities, machinery, tools, equipment, excavations, and other property, real or personal, placed upon or above the surface of such land by any person, used in, or to be used in, or resulting from, the work of extracting in such area bituminous coal, lignite, or anthracite from its natural deposits in the earth by any means or method, and the work of preparing the coal so extracted, including custom coal preparation facilities.

(o) *Surface installation* means any structure in which miners work at a surface coal mine or surface work area of an underground coal mine.

(p) *Surface work area of an underground coal mine* means the surface areas of land and all structures, facilities, machinery, tools, equipment, shafts, slopes, excavations, and other property, real or personal, placed in, upon or above the surface of such land by any person, used in, or to be used in, or resulting from, the work of extracting bituminous coal, lignite, or anthracite from its natural deposits underground by any means or method, and the work of preparing the coal so extracted, including custom coal preparation facilities.

(q) *Surface worksite* means any area in which miners work at a surface coal mine or surface work area of an underground coal mine.

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

(s) *Work position* means an occupation identified by an MSHA code number describing a location to which a miner is assigned in the performance of his or her normal duties.

### Subpart B—Dust Standards

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

SOURCE: 45 FR 80757, Dec. 5, 1980, unless otherwise noted.

**§ 71.100 Respirable dust standard.**

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 is exposed at or below 2.0 milligrams of respirable dust per cubic meter of air. Concentrations shall be measured with an approved sampling device and expressed in terms of an equivalent concentration determined in accordance with § 71.206 (Approved sampling devices; equivalent concentrations).

**§ 71.101 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 is exposed at or below a concentration of respirable dust computed by dividing the percent of quartz into the number 10. Concentrations shall be 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 § 71.206 (Approved sampling devices; equivalent concentrations).

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

**Subpart C—Sampling Procedures**

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

SOURCE: 45 FR 80757, Dec. 5, 1980, unless otherwise noted.

**§ 71.201 Sampling; general requirements.**

(a) Each operator shall take respirable dust samples of the concentration of respirable dust in the active workings of the mine as required by

this part with a sampling device approved by the Secretary and the Secretary of Health and Human Services under part 74 (Coal Mine Dust Personal Sampler Units) of this title.

(b) Sampling devices shall be worn or carried directly to and from the designated work position to be sampled and shall remain operational during the entire shift or for 8 hours, whichever time is less.

(c) Upon request from the District Manager, the operator shall submit the date on which collecting any respirable dust samples required by this part will begin.

(d) During the time for abatement fixed in a citation for violation of § 71.100 (Respirable dust standard) or § 71.101 (Respirable dust standard when quartz is present), the operator shall take corrective action to lower the concentration of respirable dust to within the permissible concentration and then sample each normal work shift until five valid respirable dust samples are taken.

(e) Upon written request by the operator, the District Manager may waive the rain restriction for a normal work shift as defined in § 71.2 (Definitions) for a period not to exceed two months, if the District Manager determines that:

(1) The operator will not have reasonable opportunity to complete the respirable dust sampling required by this part without the waiver because of the frequency of rain; and

(2) The operator did not have reasonable opportunity to complete the respirable dust sampling required by this part prior to requesting the waiver.

**§ 71.202 Certified person; sampling.**

(a) The respirable dust sampling required by this part shall be done by a certified person.

(b) To be certified, a person shall pass the MSHA examination on sampling of respirable coal mine dust.

(c) A person may be temporarily certified by MSHA to take respirable dust samples if the person receives instruction from an authorized representative of the Secretary in the methods of collecting and submitting samples under this rule. The temporary certification shall be withdrawn if the person does

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not successfully complete the examination conducted by MSHA on sampling of respirable coal mine dust within six months from the issue date of the temporary certification.

### § 71.203 Certified person; maintenance and calibration.

(a) Approved sampling devices shall be maintained and calibrated by a certified person.

(b) To be certified, a person shall pass the MSHA examination on maintenance and calibration procedures for respirable dust sampling equipment.

(c) A person may be temporarily certified by MSHA to maintain and calibrate approved sampling devices if the person receives instruction from an authorized representative of the Secretary in the maintenance and calibration procedures for respirable dust sampling equipment under this rule. The temporary certification shall be withdrawn if the person does not successfully complete the examination conducted by MSHA on maintenance and calibration procedures within six months from the issue date of the temporary certification.

### § 71.204 Approved sampling devices; maintenance and calibration.

(a) Approved sampling devices shall be maintained as approved under part 74 (Coal Mine Dust Personal Sampler Units) of this chapter and calibrated in accordance with MSHA Informational Report IR 1240 (1996) "Calibration and Maintenance Procedures for Coal Mine Respirable Dust Samplers (supersedes IR 1121)" by a person certified in accordance with § 71.203 (Certified person; maintenance and calibration).

(b) Approved sampling devices shall be calibrated at the flowrate of 2.0 liters of air per minute, or at a different flowrate as prescribed by the Secretary and the Secretary of Health and Human Services for the particular device, before they are put into service and at intervals not to exceed 200 hours of operating time thereafter.

(c) A calibration mark shall be placed on the flowmeter of each approved sampling device to indicate the proper position of the float when the sampler is operating at a flowrate of 2.0 liters of air per minute or other

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flowrate prescribed by the Secretary and the Secretary of Health and Human Services for the particular device. The standard to denote proper flow is when the lowest part of the float is tangent to the top of the calibration mark.

(d) Approved sampling devices shall be tested and examined immediately before each sampling shift and necessary external maintenance shall be performed to assure that the sampling devices are clean and in proper working condition by a person certified in accordance with § 71.202 (Certified person; sampling) or § 71.203 (Certified person; maintenance and calibration). This testing and examination shall include the following:

(1) Testing the voltage of each battery while under actual load to assure the battery is fully charged. The voltage for nickel cadmium cell batteries shall not be lower than the product of the number of cells in the battery pack multiplied by 1.25. The voltage for other than nickel cadmium cell batteries shall not be lower than the product of the number of cells in the battery pack multiplied by the manufacturer's nominal voltage per cell value;

(2) Examination of all components of the cyclone to assure that they are clean and free of dust and dirt;

(3) Examination of the inner surface of the cyclone on the approved sampling device to assure that it is free of scoring;

(4) Examination of the external tubing on the approved sampling device to assure that it is clean and free of leaks; and,

(5) Examination of the clamping and positioning of the cyclone body, vortex finder and cassette to assure that they are rigid, in alignment, and firmly in contact.

(e) MSHA Informational Report IR 1240 (1996) referenced in paragraph (a) of this section is incorporated-by-reference. This incorporation-by-reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected or obtained at MSHA, Coal Mine Safety and Health, 4015 Wilson Boulevard, Room 816, Arlington, VA 22203 and at each MSHA Coal Mine

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Safety and Health district and subdistrict office. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street NW., Suite 700, Washington, DC.

[45 FR 80757, Dec. 5, 1980, as amended at 64 FR 43286, Aug. 10, 1999]

### § 71.205 Approved sampling devices; operation; air flowrate.

(a) Sampling devices approved in accordance with part 74 (Coal Mine Dust Personal Sampler Units) of this title shall be operated at the flowrate of 2.0 liters of air per minute, or at a different flowrate as prescribed by the Secretary and the Secretary of Health and Human Services for the particular device.

(b) Each approved sampling device shall be examined each shift by a person certified in accordance with § 71.202 (Certified person; sampling) during the second hour after being put into operation to assure that the sampling device is operating properly and at the proper flowrate. If the proper flowrate is not maintained, necessary adjustments shall be made by the certified person.

(c) Each sampling device shall be examined each shift by a person certified in accordance with § 71.202 (Certified person; sampling) during the last hour of operation to assure that the sampling device is operating properly and at the proper flowrate. If the proper flowrate is not maintained, the respirable dust sample shall be transmitted to MSHA with a notation by the certified person on the dust data card stating that the proper flowrate was not maintained.

### § 71.206 Approved sampling devices; equivalent concentrations.

The concentration of respirable dust shall be 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 and then converting that concentration to an equivalent concentration as measured with an MRE instrument. To convert a concentration of respirable dust as measured with an approved sampling device to an equivalent concentration of respirable dust as meas-

ured with an MRE instrument, the concentration of respirable dust measured with the approved sampling device shall be multiplied by the constant factor prescribed by the Secretary for the approved sampling device used, and the product shall be the equivalent concentration as measured with an MRE instrument.

### § 71.207 [Reserved]

### § 71.208 Bimonthly sampling; designated work positions.

(a) Each operator shall take one valid respirable dust sample from each designated work position during each bimonthly period beginning with the bimonthly period of February 1, 1981. The bimonthly periods are:

February 1–March 31  
April 1–May 31  
June 1–July 31  
August 1–September 30  
October 1–November 30  
December 1–January 31

(b) When the respirable dust standard is changed in accordance with § 71.101 (Respirable dust standard when quartz is present), respirable dust sampling of designated work positions shall begin on the first normal work shift during the next bimonthly period following notification of such change from MSHA.

(c) Upon notification from MSHA that any respirable dust sample taken from a designated work position to meet the requirements of paragraph (a) or (b) of this section exceeds the applicable standard in § 71.100 (Respirable dust standard) or § 71.101 (Respirable dust standard when quartz is present), the operator shall take five valid respirable dust samples from that designated work position within 15 calendar days. The operator shall begin such sampling on the first day on which there is a normal work shift following the day of receipt of notification.

(d) Upon issuance of a citation for a violation of § 71.100 (Respirable dust standard) or § 71.101 (Respirable dust standard when quartz is present) involving a designated work position, paragraphs (a), (b), and (c) of this section shall not apply to that designated work position until the violation is

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abated in accordance with § 71.201(d) (Sampling; general requirements).

(e) The District Manager shall designate the work positions at each surface coal mine and surface work area of an underground coal mine for respirable dust sampling under this section. The District Manager shall designate for sampling each work position at the mine where an average concentration of respirable dust exceeding 1.0 milligram per cubic meter of air has been measured by one or more samples. Where the respirable dust standard is below 1.0 milligram per cubic meter of air in accordance with § 71.101 (Respirable dust standard when quartz is present), the District Manager shall designate for sampling each work position where an average concentration of respirable dust exceeding the applicable standard has been measured by one or more samples.

(f) The District Manager shall withdraw the designation of a work position for sampling upon finding that the operator is able to maintain continuing compliance with the applicable respirable dust standard under § 71.100 (Respirable dust standard) or § 71.101 (Respirable dust standard when quartz is present). This finding shall be based on the results of samples taken during at least a one-year period under this part and by MSHA.

(g) Unless otherwise directed by the District Manager, designated work position samples shall be taken by placing the sampling device as follows:

(1) Equipment operator. On the equipment operator or on the equipment within 36 inches of the operator's normal working position;

(2) Non-equipment operators. On the miner assigned to the designated work position or at a location that represents the maximum concentration of dust to which the miner is exposed.

(h) Each designated work position sample shall be taken on a normal work shift. If a normal work shift is not achieved, the respirable dust sample shall be transmitted to MSHA with a notation by the person certified in accordance with § 71.202 (Certified person; sampling) that the sample was not taken on a normal work shift. When a normal work shift is not achieved, the sample for that shift may be voided by

MSHA. However, any sample, regardless of whether a normal work shift was achieved, with a respirable dust concentration greater than 2.5 milligrams per cubic meter of air will be used to determine the average concentration for that designated work position.

### § 71.209 Respirable dust samples; transmission by operator.

(a) The operator shall transmit within 24 hours after the end of the sampling shift all samples collected to fulfill the requirements of this part in containers provided by the manufacturer of the filter cassette to: Respirable Dust Processing Laboratory, Pittsburgh Safety and Health Technology Center, Cochran Mill Road, Building 38, P.O. Box 18179, Pittsburgh, Pennsylvania 15236-0179, or to any other address designated by the District Manager.

(b) The operator shall not open or tamper with the seal of any filter cassette or alter the weight of any filter cassette before or after it is used to fulfill the requirements of this part.

(c) A person certified in accordance with § 71.202 (Certified person; sampling) shall properly complete the dust data card that is provided by the manufacturer for each filter cassette. The card shall have an identification number identical to that on the cassette used to take the sample and be submitted to MSHA with the sample. Each card shall be signed by the certified person and shall include that person's certification number. Respirable dust samples with data cards not properly completed will be voided by MSHA.

(d) All respirable dust samples collected by the operator shall be considered taken to fulfill the sampling requirements of part 70, 71 or 90 of this title, unless the sample has been identified in writing by the operator to the District Manager, prior to the intended sampling shift, as a sample to be used for purposes other than required by part 70, 71 or 90 of this title.

(e) Respirable dust samples received by MSHA in excess of those required by

this part shall be considered invalid samples.

(Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[45 FR 80756, Dec. 5, 1980, as amended at 47 FR 14696, Apr. 6, 1982; 58 FR 63529, Dec. 2, 1993; 60 FR 33723, June 29, 1995; 60 FR 35695, July 11, 1995]

**§ 71.210 Respirable dust samples; report to operator; posting.**

(a) The Secretary shall provide the operator with a report of the following data on respirable dust samples as soon as practicable:

- (1) The mine identification number;
  - (2) The designated work position at the mine from which the samples were taken;
  - (3) The concentration of respirable dust, expressed in milligrams per cubic meter of air, for each valid sample;
  - (4) The average concentration of respirable dust, expressed in milligrams per cubic meter of air, for all valid samples; and
  - (5) The reason for voiding any samples.
- (b) Upon receipt, the operator shall post this data for at least 31 days on the mine bulletin board.

**§ 71.220 Status change reports.**

(a) If there is a change in operational status that affects the respirable dust sampling requirements of this part, the operator shall report the change in operational status of the mine or designated work position to the MSHA District Office or to any other MSHA office designated by the District Manager. Status changes shall be reported in writing within 3 working days after the status change has occurred.

(b) Each specific operational status is defined as follows: (1) Underground mine: (i) Producing—has at least one mechanized mining unit producing material.

(ii) Nonproducing—no material is being produced.

(iii) Abandoned—the work of all miners has been terminated and production activity has ceased.

(2) Surface mine:

(i) Producing—normal activity is occurring and coal is being produced or processed or other material or equipment is being handled or moved.

(ii) Nonproducing—normal activity is not occurring and coal is not being produced or processed or other material or equipment is not being handled or moved.

(iii) Abandoned—the work of all miners has been terminated and all activity has ceased.

(3) Designated work position:

(i) Producing—normal activity is occurring.

(ii) Nonproducing—normal activity is not occurring.

(iii) Abandoned—the dust generating source has been withdrawn and activity has ceased.

**Subpart D—Respirable Dust Control Plans**

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

SOURCE: 45 FR 80759, Dec. 5, 1980, unless otherwise noted.

**§ 71.300 Respirable dust control plan; filing requirements.**

(a) Within 15 calendar days after the termination date of a citation for violation of § 71.100 (Respirable dust standard) or § 71.101 (Respirable dust standard when quartz is present), the operator shall submit to the District Manager for approval a written respirable dust control plan applicable to the work position identified in the citation. The respirable dust control plan and revisions thereof shall be suitable to the conditions and the mining system of the coal mine and shall be adequate to continuously maintain respirable dust within the permissible concentration at the surface work position identified in the citation.

(b) Each respirable dust control plan shall include at least the following:

(1) The mine identification number and designated work position assigned by MSHA, the operator's name, mine name, mine address, and mine telephone number and the name, address, and telephone number of the principal officer in charge of health and safety at the mine;

(2) The specific designated work position at the mine to which the plan applies;

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(3) A detailed description of the specific respirable dust control measures used to abate the violation of the respirable dust standard; and

(4) A detailed description of how each of the respirable dust control measures described in response to paragraph (b)(3) of this section will continue to be used by the operator, including at least the specific time, place and manner the control measures will be used.

### **§ 71.301 Respirable dust control plan; approval by District Manager and posting.**

(a) The District Manager will approve respirable dust control plans on a mine-by-mine basis. When approving respirable dust control plans, the District Manager shall consider whether:

(1) The respirable dust control measures would be likely to maintain compliance with the respirable dust standard; and

(2) The operator's compliance with all provisions of the respirable dust control plan could be objectively ascertained by MSHA.

(b) MSHA may take respirable dust samples to determine whether the respirable dust control measures in the operator's plan effectively maintain compliance with the respirable dust standard.

(c) The operator shall comply with all provisions of each respirable dust control plan upon notice from MSHA that the respirable dust control plan is approved.

(d) The operator shall post on the mine bulletin board a copy of each current respirable dust control plan approved by the District Manager.

(e) The operator may review respirable dust control plans and submit proposed revisions to such plans to the District Manager for approval.

## **Subpart E—Surface Bathing Facilities, Change Rooms, and Sanitary Flush Toilet Facilities at Surface Coal Mines**

### **§ 71.400 Bathing facilities; change rooms; sanitary flush toilet facilities.**

Each operator of a surface coal mine shall provide bathing facilities, clothing change rooms, and sanitary flush

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toilet facilities, as hereinafter prescribed, for the use of miners employed in the surface installations and at the surface worksites of such mine. (NOTE: Sanitary facilities at surface work areas of underground mines are subject to the provisions of § 75.1712 of this chapter et seq.)

### **§ 71.401 Location of facilities.**

Bathhouses, change rooms, and sanitary flush toilet facilities shall be in a location convenient for the use of the miners. Where these facilities are designed to serve more than one mine, they shall be centrally located so as to be convenient for the use of all miners served by the facilities.

### **§ 71.402 Minimum requirements for bathing facilities, change rooms, and sanitary flush toilet facilities.**

(a) All bathing facilities, change rooms, and sanitary flush toilet facilities shall be provided with adequate light, heat, and ventilation so as to maintain a comfortable air temperature and to minimize the accumulation of moisture and odors, and the facilities shall be maintained in a clean and sanitary condition.

(b) Bathing facilities, change rooms, and sanitary flush toilet facilities shall be constructed and equipped so as to comply with applicable State and local building codes. *However*, Where no State or local building codes apply to these facilities, or where no State or local building codes exist, the facilities shall be constructed and equipped so as to meet the minimum construction requirements in the National Building Code (1967 edition) and the plumbing requirements in the National Plumbing Code (ASA A40.8—1955) which documents are hereby incorporated by reference and made a part hereof. These documents are available for examination at the Mine Safety and Health Administration, Department of Labor, 4015 Wilson Boulevard, Arlington, Va. 22203; at every Coal Mine Health and Safety District and Subdistrict Office; at the National Institute for Occupational Safety and Health, 5600 Fishers Lane, Rockville, Md.; and at the Public Health Service Information Centers as listed in 45 CFR 5.31. Copies of the National Building Code (1967 edition) may

be purchased from the American Insurance Association, 85 John Street, New York, NY 10038, for \$2.50 per copy and copies of the National Plumbing Code (ASA A40.8—1955) may be purchased from the American National Standards Institute, Inc., 1430 Broadway, New York, N.Y. 10018, for \$6 per copy. An official historic file of the National Building Code (1967 edition) and of the National Plumbing Code (ASA A40.8—1955) will be maintained at the National Institute for Occupational Safety and Health, 5600 Fishers Lane, Rockville, Md.

(c) In addition to the minimum requirements specified in paragraphs (a) and (b) of this § 71.402, facilities maintained in accordance with § 71.400 shall include the following:

(1) *Bathing facilities.* (i) Showers shall be provided with both hot and cold water.

(ii) At least one shower head shall be provided where five or less miners use such showers.

(iii) Where five or more miners use such showers, sufficient showers shall be furnished to provide approximately one shower head for each five miners.

(iv) A suitable nonirritating cleansing agent shall be provided for use at each shower.

(2) *Sanitary flush toilet facilities.* (i) At least one sanitary flush toilet shall be provided where 10 or less miners use such toilet facilities.

(ii) Where 10 or more miners use such toilet facilities, sufficient flush toilets shall be furnished to provide approximately one sanitary flush toilet for each 10 miners.

(iii) Where 30 or more miners use toilet facilities, one urinal may be substituted for one flush toilet, however, where such substitutions are made they shall not reduce the number of toilets below a ratio of two flush toilets to one urinal.

(iv) An adequate supply of toilet paper shall be provided with each toilet.

(v) Adequate handwashing facilities or hand lavatories shall be provided in or adjacent to each toilet facility.

(3) *Change rooms.* (i) Individual clothes storage containers or lockers shall be provided for storage of miners'

clothing and other incidental personal belongings during and between shifts.

(ii) Change rooms shall be provided with sample space to permit the use of such facilities by all miners changing clothes prior to and after each shift.

[37 FR 6368, Mar. 28, 1972, as amended at 43 FR 12319, Mar. 24, 1978]

**§ 71.403 Waiver of surface facilities requirements; posting of waiver.**

(a) The Coal Mine Health and Safety District Manager for the district in which the mine is located, after consultation with the appropriate Regional Program Director, National Institute for Occupational Safety and Health, may, upon written application by the operator, and after consideration of any comments filed within 30 days after receipt of the application, waive any or all of the requirements for §§ 71.400 through 71.402 for a period not to exceed 1 year if he determines that—

(1) The operator is providing or making available, under arrangements with one or more third parties, facilities which are at least equivalent to those required by the standards, or

(2) It is impractical for the operator to meet the requirement(s) or provide the facility (facilities) for which the waiver is sought.

(b) The waiver shall be in writing and shall set forth the requirement(s) which the operator will not be required to meet or the facilities which the operator will not be required to provide and the specific reason or reasons for such waiver.

(c) Upon receipt of any waiver, the operator shall post a copy of the waiver for at least 30 days on the mine bulletin board required by section 107(a) of the Act.

(d) An extension of the waiver at the end of 1 year may be sought by the operator by filing an application pursuant to § 71.404 no later than 30 days nor more than 60 days prior to the expiration date of the waiver.

(Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[37 FR 6368, Mar. 28, 1972, as amended at 47 FR 14696, Apr. 6, 1982; 60 FR 33723, June 29, 1995]

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### § 71.404 Application for waiver of surface facilities requirements.

(a) Application for waivers of any requirements of §§ 71.400 through 71.402 shall be in writing, filed with the appropriate Coal Mine Health and Safety District Manager, and shall contain the following information:

(1) The name and address of the mine operator,

(2) The name and location of the mine, and

(3) A detailed statement of the grounds upon which the waiver is requested and the period of time for which it is requested.

(b) At the same time the application is sent to the District Manager, a copy of the application shall be forwarded to the appropriate Regional Program Director, National Institute for Occupational Safety and Health by the operator, and a copy showing the addresses of the appropriate District Manager and Regional Program Director shall be posted by the operator for at least 30 days on the mine bulletin board required by section 107(a) of the Act.

### Subpart F—Sanitary Toilet Facilities at Surface Worksites of Surface Coal Mines

#### § 71.500 Sanitary toilet facilities at surface worksites; approved sanitary toilets; installation requirements.

(a) Each operator of a surface coal mine shall provide and install at least one approved sanitary toilet, together with an adequate supply of toilet tissue, in a location convenient to each surface work site. A single approved sanitary toilet may serve two or more surface worksites in the same surface mine where the sanitary toilet is convenient to each such worksite. Where 10 or more miners use such toilet facilities, sufficient toilets shall be furnished to provide approximately one sanitary toilet for each 10 miners. (NOTE: Sanitary toilet facilities for surface work areas of underground mines are subject to the provisions of § 75.1712-3 of this chapter.)

(b) Only sanitary toilets approved by the Health Division, Coal Mine Health and Safety, Mine Safety and Health Administration, jointly with the National Institute for Occupational Safe-

ty and Health shall meet the requirements of this section.

(c) Applications for approval of sanitary toilets shall be submitted to: Health Division, Coal Mine Health and Safety, Mine Safety and Health Administration, Department of Labor, 4015 Wilson Boulevard, Arlington, Va. 22203.

(Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[37 FR 6368, Mar. 28, 1972, as amended at 43 FR 12319, Mar. 24, 1978; 47 FR 14696, Apr. 6, 1982; 60 FR 33723, June 29, 1995]

#### § 71.501 Sanitary toilet facilities; maintenance.

Sanitary toilets provided in accordance with the provisions of § 71.500 shall be regularly maintained in a clean and sanitary condition. Holding tanks shall be serviced and cleaned when full and in no case less than once each week when in use by draining or pumping or by removing them for cleaning and recharging. Transfer tanks and transfer equipment, if used, shall be equipped with suitable fittings to permit complete draining without spillage and allow for the sanitary transportation of wastes. Waste shall be disposed of in accordance with State and local laws and regulations.

### Subpart G—Drinking Water

#### § 71.600 Drinking water; general.

An adequate supply of potable water shall be provided for drinking purposes in each surface installation and at each surface worksite of the mine.

#### § 71.601 Drinking water; quality.

(a) Potable water provided in accordance with the provisions of § 71.600 shall meet the applicable minimum health requirements for drinking water established by the State or community in which the mine is located.

(b) Where no such requirements are applicable, the drinking water provided shall conform to the Public Health Service Drinking Water Standards, 42 CFR part 72, subpart J.

#### § 71.602 Drinking water; distribution.

(a) Water shall be piped or transported in sanitary containers. Water systems and appurtenances thereto

shall be constructed and maintained in accordance with State and local requirements. Where no such requirements are applicable, water systems and appurtenances shall be constructed and maintained in accordance with the National Plumbing Code (ASA A40.8—1955) which is hereby incorporated by reference and made a part hereof. (For information as to the availability of this code, see § 71.402(b).)

(b) Water transported to the site shall be carried, stored and otherwise protected in sanitary containers constructed of smooth, impervious, heavy gauge, corrosion resistant materials. The containers shall be marked with the words "Drinking Water."

**§ 71.603 Drinking water; dispensing requirements.**

(a) Water shall be dispensed through a drinking fountain or from a water storage container with an adequate supply of single service cups stored in a clean, sanitary manner. Water shall not be dipped from inside water storage containers. Use of a common drinking cup is prohibited.

(b) Water containers shall remain sealed at all times during use and shall not be refilled with water for reuse without first being cleaned and disinfected with the use of heat or sanitizers.

(c) Drinking fountains from which water is dispensed shall be thoroughly cleaned once each week.

(d) Ice used for cooling drinking water shall not be immersed or in direct contact with the water to be cooled, unless it has been handled in a sanitary manner and unless the ice is made from the same source as the drinking water or from water of a quality equal to the source of the drinking water.

**Subpart H—Airborne Contaminants**

**§ 71.700 Inhalation hazards; threshold limit values for gases, dust, fumes, mists, and vapors.**

(a) No operator of an underground coal mine and no operator of a surface coal mine may permit any person working at a surface installation or surface worksite to be exposed to air-

borne contaminants (other than respirable coal mine dust, respirable dust containing quartz, and asbestos dust) in excess of, on the basis of a time-weighted average, the threshold limit values adopted by the American Conference of Governmental Industrial Hygienists in "Threshold Limit Values of Airborne Contaminants" (1972) which is hereby incorporated by reference and made a part hereof. Excursions above the listed threshold limit values shall not be of greater magnitude than is characterized as permissible by the conference. This paragraph does not apply to airborne contaminants given a "C" designation by the conference in the document. This document is available for examination at the Mine Safety and Health Administration, Department of Labor, 4015 Wilson Boulevard, Arlington, Va. 22203; at every Coal Mine Health and Safety District and Subdistrict Office; at the National Institute for Occupational Safety and Health, 5600 Fishers Lane, Rockville, MD; and at the Public Health Service Information Centers listed in 45 CFR 5.31. Copies of the document may be purchased from the Secretary-Treasurer, American Conference of Governmental Industrial Hygienists, Post Office Box 1937, Cincinnati, OH 45202.

(b) All persons, including employees, shall be withdrawn from any area in which there is a concentration of an airborne contaminant given a "C" designation by the Conference which exceeds the threshold limit value (ceiling "C" limit) listed for that contaminant.

[37 FR 6368, Mar. 28, 1972, as amended at 39 FR 17101, May 13, 1974; 43 FR 12319, Mar. 24, 1978. Redesignated at 45 FR 80756, Dec. 5, 1980]

**§ 71.701 Sampling; general requirements.**

(a) Air samples will be taken by the Secretary and will be analyzed to determine the concentrations of noxious or poisonous gases, dusts, fumes, mists, and vapors in surface installations and at surface worksites.

(b) Upon written notification by the Secretary to the operator of an underground coal mine or of a surface coal mine, the operator shall conduct any additional air sampling tests and analyses as the Secretary may from time to

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time require in order to ensure compliance with the standards set forth in § 71.700 in each surface installation and at each surface worksite.

(c) Where concentrations of airborne contaminants in excess of the applicable threshold limit values and permissible excursions are known by the operator to exist in a surface installation or at a surface worksite, he shall immediately provide necessary control measures to assure compliance with § 71.700.

(d) Where the operator has reasonable grounds to believe that concentrations of airborne contaminants in excess of the applicable threshold limit values and permissible excursions exist, or are likely to exist, he shall promptly conduct appropriate air sampling tests to determine the concentration of any airborne contaminant which may be present and immediately provide the necessary control measures to assure compliance with § 71.700.

[37 FR 6368, Mar. 28, 1972. Redesignated at 45 FR 80756, Dec. 5, 1980]

## § 71.702 Asbestos dust standard; measurement.

(a) The 8-hour average airborne concentration of asbestos dust to which miners are exposed shall not exceed two fibers per cubic centimeter of air. Exposure to a concentration greater than two fibers per cubic centimeter of air, but not to exceed 10 fibers per cubic centimeter of air, may be permitted for a total of 1 hour each 8-hour day. As used in this subpart, the term asbestos means chrysotile, amosite, crocidolite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos but does not include nonfibrous or nonasbestiform minerals.

(b) The determination of fiber concentration shall be made by counting all fibers longer than 5 micrometers in length and with a length-to-width ratio of at least 3 to 1 in at least 20 randomly selected fields using phase contrast microscopy at 400–450 magnification.

[41 FR 10223, Mar. 10, 1976. Redesignated at 45 FR 80756, Dec. 5, 1980]

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### PART 72—HEALTH STANDARDS FOR COAL MINES

#### Subpart A—General

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72.1 Scope.

#### Subparts B—C [Reserved]

#### Subpart D—Diesel Particulate Matter—Underground Areas of Underground Coal Mines

- 72.500 Emission limits for permissible diesel-powered equipment.
- 72.501 Emission limits for nonpermissible heavy-duty diesel-powered equipment, generators and compressors.
- 72.502 Requirements for nonpermissible light-duty diesel-powered equipment other than generators and compressors.
- 72.503 Determination of emissions; filter maintenance; definition of “introduced”.
- 72.510 Miner health training.
- 72.520 Diesel equipment inventory.

#### Subpart E—Miscellaneous

- 72.610 Abrasive blasting.
- 72.620 Drill dust control at surface mines and surface areas of underground mines.
- 72.630 Drill dust control at underground areas of underground mines.
- 72.710 Selection, fit, use, and maintenance of approved respirators.

AUTHORITY: 30 U.S.C. 811, 813(h), 957, 961.

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

#### Subpart A—General

##### § 72.1 Scope.

The health standards in this part apply to all coal mines.

#### Subparts B—C [Reserved]

#### Subpart D—Diesel Particulate Matter—Underground Areas of Underground Coal Mines

SOURCE: 66 FR 5704, Jan. 19, 2001, unless otherwise noted.

##### § 72.500 Emission limits for permissible diesel-powered equipment.

(a) Each piece of permissible diesel-powered equipment introduced into an underground area of an underground