

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 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 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

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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 measured 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 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: