#### § 90.202

- (d) During the time for abatement fixed in a citation for violation of §90.100 (Respirable dust standard) or §90.101 (Respirable dust standard when quartz is present), the operator shall take corrective action and then sample the affected part 90 miner until five valid respirable dust samples are taken.
- (e) The respirable dust samples required by this part shall be collected while the part 90 miner is performing normal work duties.
- (f) Unless otherwise directed by the District Manager, the respirable dust samples required under this part shall be taken by placing the sampling device as follows:
  - (1) On the part 90 miner;
- (2) On the piece of equipment which the part 90 miner operates within 36 inches of the normal working position;
- (3) At a location that represents the maximum concentration of dust to which the part 90 miner is exposed.

#### § 90.202 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 The temporary certification shall be withdrawn if the person does not successfully complete the examination conducted by MSHA on sampling of respirable coal mine dust within six months from the issue date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.

## § 90.203 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 cali-

brate 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 The temporary certification shall be withdrawn if the person does not successfully complete the examination conducted by MSHA on maintenance and calibration procedures within six months from the issue date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.

## § 90.204 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 §90.203 (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 a 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 §90.202 (Certified person; sampling) or §90.203 (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, 1100 Wilson Blvd., Room 2424, Arlington, Virginia 22209–3939 and at each MSHA Coal Mine Safety and Health district office. Copies may be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://  $www.archives.gov/federal\_register/$ code of federal regulations/  $ibr \ \overline{locations.html}$ .

[45 FR 80769, Dec. 5, 1980, as amended at 64 FR 43286, Aug. 10, 1999; 67 FR 38386, June 4, 2002; 71 FR 16669, Apr. 3, 2006]

### § 90.205 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) Except as provided in paragraph (d) of this section, each approved sampling device shall be examined each shift by a person certified in accordance with §90.202 (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 §90.202 (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 transpirable dust sample shall be transpirable to MSHA with a notation by the certified person on the dust data card stating that the proper flowrate was not maintained.

(d) Paragraph (b) of this section shall not apply if the approved sampling device is being operated in a breast or chamber of an anthracite coal mine where the full box mining method is used.

# § 90.206 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 a constant factor prescribed by the Secretary for the approved sampling device used, and the