

## 2014 Final Dust Rule

### Part 90 Miner Monitoring Program

The final rule makes extensive changes to the existing respirable dust regulations for Part 90 miners at surface and underground coal mines. The major changes are outlined below. You should read the entire final rule to ensure familiarity with all the rule provisions.

#### **Respirable Dust Standard:**

The final rule phases in the respirable dust standard. The existing  $1.0 \text{ mg/m}^3$  respirable dust standard will be reduced to  $0.50 \text{ mg/m}^3$  24 months after effective date of the rule.

#### **Quartz Standard:**

The final rule maintains the quartz standard as a Mining Research Establishment (MRE) equivalent concentration of  $100 \text{ } \mu\text{g/m}^3$  ( $0.1 \text{ mg/m}^3$ ). MSHA will reduce the applicable respirable dust standard if an MSHA sample exceeds the  $100 \text{ } \mu\text{g/m}^3$  level, according to the formula of 10 divided by the percent quartz. This calculation will never result in a standard greater than the standard set by the rule. MSHA may cite the operator for exceeding the  $100 \text{ } \mu\text{g/m}^3$  limit if the operator fails to take actions to lower quartz exposures and require corrective actions to reduce the quartz levels present in the working atmosphere. Only MSHA samples will be used in determining quartz levels.

#### **Operator Sampling Program:**

Persons certified to perform respirable dust sampling duties will continue to be certified by MSHA. Additional requirements have been included specifying re-certification every 3 years and providing for de-certification of persons failing to perform all sampling duties as required by the rule.

On a quarterly basis, operators will collect 5 samples on consecutive normal work days for the Part 90 miner. Mine operators will continue using the approved coal mine dust personal sampling unit (CMDPSU) until 18 months after the effective date of the final rule. After 18 months, all samples collected on a Part 90 miner will be collected using an approved Continuous Personal Dust Monitor (CPDM). During the initial 18 month period when collecting samples using the CMDPSU, each sample collected will require the submittal of an additional filter cassette, pre-weighed on the same date as the filter used for sampling, as a control filter.

#### **CPDM Training:**

Operators using CPDMs shall provide initial training to all miners expected to wear a CPDM. This training shall be completed prior to a miner wearing a CPDM and then every 12 months thereafter. This training shall include the operation and functional features of the CPDM.

#### **Noncompliance Determinations:**

MSHA will make noncompliance determinations based on single full-shift samples collected by MSHA. A noncompliance determination will be made on Operator collected samples when 2 or more samples in a set of 5 required samples or the average of all required samples meet or exceed the Excessive Concentration Value (ECV). A table of Excessive Concentration Values (ECVs) provides the concentration that indicates noncompliance at each point from  $0.20 \text{ mg/m}^3$  to  $2.00 \text{ mg/m}^3$ . The ECVs are calculated to provide a level that indicates with 95% confidence, the applicable standard has been exceeded.

#### **Actions to Terminate an Excessive Dust Citation:**

Upon receipt of a citation for excessive dust, the operator must 1) make respirators available, 2) immediately take corrective actions to lower the respirable dust levels, 3) if corrective action involves reducing dust levels, implement corrective actions and begin sampling the affected miner within 8 calendar days after the date of the

citation until 5 valid samples are collected, or 4) if corrective action involves transferring the miner, notify the District Manager of the transfer and collect 5 valid samples to establish that the Part 90 miner is at or below the applicable standard, 6) upon implementation of the corrective action make a record of the action taken in a secure book.

If the above actions are taken, MSHA will terminate the citation if the equivalent concentration on all 5 samples collected is less than or equal to the applicable standard.

**Corrective Action Required:**

The final rule requires that if 1 sample out of a set of 5 samples meets or exceeds the ECV, then the operator must take action to prevent future excessive exposure. The operator must make respirators available, immediately take corrective action to reduce the concentration of respirable dust to at or below the applicable respirable dust standard and record the corrective actions in a secure book. If only 1 of the required quarterly samples exceeds the ECV and the average concentration of the 5 samples does not exceed the ECV, there is no citation for exceeding the applicable respirable dust standard.

**Sample and Data Transmission:**

If using the existing gravimetric sampler, samples must be transmitted to MSHA within 24 hours of the end of the sampled shift. The accompanying dust data card must be completed and signed by the certified sampler who performed the sample check between the first and second hour of operation and the check during the last hour of operation of the sampling shift.

If using the CPDM, the person certified in sampling shall validate, certify and transmit electronically to MSHA within 24 hours after the end of each sampling shift all sample data file information collected and stored in the CPDM. The operator must maintain a copy of the CPDM files for at least 12 months.

**Status Changes:**

The mine operator must report a change in status of a Part 90 miner within 3 days to MSHA. This notification can be in writing or electronic.

**Posting of Sample Data:**

For existing gravimetric samples; the operator must provide a copy of the MSHA-provided report to the affected Part 90 miner only. No Part 90 miner results are to be posted on the mine bulletin board.

For CPDM data; the person certified in sampling shall, print and sign the CPDM-generated dust data card. The CPDM-generated dust data card shall be given to the Part 90 miner within one hour after the start of the Part 90 miner's next work shift. The MSHA-provided report shall be given to the Part 90 miner only. The operator shall not post data on respirable dust samples for Part 90 miners on the mine bulletin board.