2014 Final Dust Rule
Surface Coal Mine Monitoring Program

The final rule makes extensive changes to the existing respirable dust regulations applicable to surface coal mines, surface areas of underground coal mines, and surface facilities. 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 2.0 mg/m^3 respirable dust standard will be reduced to a level of 1.50 mg/m^3 after 24 months. The respirable dust standard is expressed as a Mining Research Establishment (MRE) equivalent concentration.

Quartz Standard:
The final rule maintains the quartz standard as an MRE equivalent concentration of 100 $\mu g/m^3$ (0.1 mg/m^3). MSHA will reduce the applicable respirable dust standard if an MSHA sample exceeds the 100 $\mu g/m^3$ 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 $\mu g/m^3$ 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.
The operator may continue using the existing gravimetric sampling unit or after 18 months voluntarily elect to utilize the recently approved Continuous Personal Dust Monitor (CPDM) for all surface related sampling. Operators may use an approved Continuous Personal Dust Monitor (CPDM) if the operator notifies the District Manager in writing, that only an approved CPDM will be used for all DWP sampling at the mine. Operators will be required to submit one representative sample each quarter for each DWP, no matter which sampling unit they choose to use. Each sample collected with the gravimetric sampler will require the submittal of an additional filter cassette (control filter), pre-weighed on the same date as the filter used for sampling. If the one sample submitted for the quarter (gravimetric or CPDM) exceeds the applicable standard, the operator shall, within 15 calendar days of notification, sample that DWP each normal work shift until 5 valid samples are taken to determine compliance/ noncompliance for the sampling period.

Identification of sampling entities:
Work positions where Designated Work Position (DWP) samples will be collected include: 1) all highwall drill operators, 2) representative bulldozer operators, and 3) other representative work positions specified by the District Manager. Mine operators are required to provide a list of specific work positions where DWP samples will be collected: 1) for active mines, within 60 days of effective date of the rule; 2) for new mines, within 30 days of opening; and 3) within 7 days of change in operational status that increases or reduces the number of active DWPs.

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:
Noncompliance determinations will be based on a single full-shift sample collected by MSHA, or on Operator collected samples when 2 or more samples in a set of 5 required samples meet or exceed the Excessive Concentration Value (ECV), or the average of all required samples meet or exceed the ECV. The ECVs are calculated to provide a level that indicates with 95% confidence; the applicable standard has been exceeded. Specific ECV tables have been provided to cover samples collected with the current gravimetric sampler and for the CPDM unit.

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) upon implementation of the corrective action make a record of the action taken in a secure book, and 4) after implementing corrective actions sample consecutive normal production shifts until 5 valid samples are collected.

MSHA will terminate the citation 1) if the equivalent concentration on all 5 samples collected is less than or equal to the applicable standard.

Corrective Action Required:
When any sample meets or exceeds the ECV, the operator must take action to prevent future excessive exposure.
The operator must make respirators available and 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.
A citation for exceeding the applicable respirable dust standard is not issued; however corrective actions are required.

Sample and Data Transmission:
When using the existing gravimetric sampler, samples must be transmitted to MSHA within 24 hours after the end of the sampled shift. The accompanying dust data card must be signed by the certified sampler that performed the sample checks during 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 to MSHA in writing or electronically a change in operational status of the mine or a sampling entity within 3 working days.

Posting of Sample Data:
For current gravimetric samples (CMDPSU), the operator must post, on the mine bulletin board, the MSHA provided report for at least 31 days.

For CPDM data, the person certified in sampling shall, within 12 hours after the end of each sampling shift, print, sign and post on the mine bulletin board the CPDM generated dust data card. The CPDM generated dust data card shall remain posted until receipt of the MSHA respirable dust sampling report. The MSHA provided report shall be posted on the mine bulletin board for at least 31 days.