

Major Provisions and Effective Dates MSHA's Final Rule to Lower Miners' Exposure to Respirable Coal Mine Dust

Major provisions of the rule will take effect on the following dates:

August 1, 2014 (effective date):

- **Compliance is determined based on a single, full-shift sample obtained by MSHA.** A citation for noncompliance with the respirable dust standards will be issued when a single MSHA sample shows excessive levels of dust, rather than an average of samples.
- **Immediate corrective action is required** when a single, full-shift sample obtained by an operator finds an excessive level of dust.
- **The method of citing overexposures and averaging samples obtained by operators is changed.** If mine operators fail to take corrective action for any sample that finds excessive levels of dust, or if 2 out of 5 operator samples, or 3 out of 15 operator samples, or the average of all samples finds excessive levels of dust, a citation will be issued.
- **The term "normal production shift" is redefined.** Underground mine operators must collect respirable dust samples when production is at least 80% of the average production over the last 30 production shifts. Previously, underground mine operators were required to sample when production was at least 50% of the average production reported during the operator's last sampling period (i.e., last set of five valid samples).
- **Full-shift sampling is required.** The operator must collect samples for the full shift that a miner works. If a miner works a 12-hour shift, respirable dust samples must be taken for the entire work shift, rather than a maximum of 8 hours as required under the existing rule.
- **Number of positions to be sampled at surface mines increases significantly.** Mine operators must begin to identify additional work positions to be sampled for respirable dust at surface mines. The increased sampling will start October 1.
- **Training and certification strengthened for persons who conduct sampling.** Persons who perform sampling must now complete an MSHA course of instruction in addition to passing an exam. Also, the decertification process is defined by regulation for the first time.
- **Excessive Concentration Value (ECV)** is a new concept created to account for possible margins of error in sampling. Because measurements of respirable coal mine dust are subject to errors of sampling and weight, a citation will only be issued when a sample meets or exceeds the ECV, which is shown in a table in the rule.
- **Record-keeping and accountability are improved** – An on-shift exam of specific dust controls must be made, then recorded and counter-signed by a mine official. Records must also be kept of shift lengths, and of the material produced by each mechanized mining unit (MMU),

- Medical surveillance requirements are expanded. Periodic x-ray requirements for underground miners are now extended to surface miners. The requirements are also expanded beyond x-rays to include lung function (spirometry) testing, occupational history, and symptom assessment for all miners.

- Transfer rights for miners with coal workers' pneumoconiosis (Part 90 miners) are extended to surface miners. Previously only underground miners with evidence of pneumoconiosis could elect to work in less dusty atmospheres to reduce the progression of disease.

-Sampling of miners with coal workers pneumoconiosis (Part 90 miners) is increased.

February 1, 2016 (18 months after the effective date):

-The continuous personal dust monitor (CPDM) must be used to monitor underground coal mine occupations exposed to the highest respirable dust concentrations, as well as all miners with evidence of black lung (Part 90 miners). Use of the CPDM is optional for surface coal mines, non-production areas of underground coal mines, and for underground anthracite mines using certain mining methods.

-Sampling frequency in underground mines is increased for occupations most exposed to respirable dust, and a greater number of such occupations will be sampled. For those high-exposure occupations, fifteen valid samples must be obtained every quarter, instead of the five samples previously collected every two months. (See details in Sampling and Compliance fact sheet.)

-Miners will receive information on respirable dust levels more quickly – Operators must post results of CPDM sampling for all but Part 90 miners on the mine bulletin board within 12 hours of the sampled shift. Part 90 miners must be given a copy of the sample data within the first hour of the miner's next work shift.

August 1, 2016 (24 months after the effective date):

Concentration Limits for Respirable Coal Mine Dust are reduced. The overall respirable dust standard in coal mines is reduced from 2.0 to 1.5 milligrams per cubic meter of air. The standard for Part 90 miners and for air used to ventilate places where miners work is reduced from 1.0 to 0.5 milligrams per cubic meter of air.