From: Rice, Carol (ricech) [mailto:ricech@ucmail.uc.edu]
Sent: Sunday, May 01, 2011 2:39 PM
To: zzMSHA-Standards - Comments to Fed Reg Group
Subject: RIN 1219--AB64

2011 MAY -2 P 2:00

To Whom it May Concern,

Please see attached, my comments on the above referenced proposal.

Carol Rice

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AB64-COMM-35

TO: The public record
FR: Carol Rice, PhD, CIH
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Department of Environmental Health
RE: RIN 1219-AB64
Mine Safety and Health Administration
Lowering Miners' Exposure to Respirable Coal Mine Dust, including Continuous Personal Monitoring
DA: 1 May 2011

I am writing as an occupational hygienist with substantial experience in addressing exposure-response among industrial workers and a member of the 1996 Dust Advisory Committee that submitted a report to MSHA and USDOL. First, let me note that it is gratifying after 15 years to see some action on the labors of the committee. Moreover, as I reviewed the material assembled by MSHA for this proposed regulation, it is striking that not only has the science we reviewed in 1995-1996 been sustained, it has been strengthened by still more studies indicating that miners continue to suffer adverse health effects.

Technology for exposure assessment has advanced in the past decade and a half, and now continuous, personal dust sampling is possible. Last year, I saw these units in operation at the Dotiki Mine, where an operator showed us the various metrics that he can access while working. This is a substantial advantage to those on a working unit, as they can now take actions to find and remediate factors that could contribute to a full-shift exposure exceedance.

I applaud Department of Labor and MSHA leadership for formulating this proposal to reduce lung disease.

The following specific comments are offered:

Support for a more protective coal dust standard: The data to support the move to a 1 mg/m^3 is overwhelming, as detailed in the October 19, 2010 Federal Register justification for the proposed rule. Including some time to achieve full compliance is understandable, but given that the value was well justified in 1995, two more years stretches the actual implementation (once enacted) to two decades. Those companies that achieve compliance prior to the deadline should be recognized by MSHA and labor for their leadership.

The use of one sample as evidence of non-compliance is justified, as shown in the Federal Register.

Equivalent Concentration, Adjustment for shifts exceeding 8 hours; Weekly Accumulated Exposure: This detailed action by MSHA advances occupational hygiene, by leading the way in codifying how the exposure should be reduced for longer shifts and to consider the full work week.

The determination 'normal production' is a continuation of current practice. This is reasonable, given the introduction of equivalent concentration and weekly accumulated exposure. Sharing these values with the miners will be particularly important as they continue to hone skills in the use of the continuous personal monitor to improve dust control.

The NIOSH work done to document performance of the continuous personal dust monitor (CPDM) under actual mining conditions is impressive, and further underscores the value of the instrumentation.

Differentiation between citation and action is a commendable approach in the new rules. A 'confidence level' is included to assure that the measurement is a violation; however, action is required when any measurement exceeds the standard. This is consistent with accepted compliance practice and professional practice to assure a healthy work environment.

CPDM use training: The cost of these units, and the substantial value to improved health afforded by skilled use and improved dust control requires a high level of knowledge among the miners. While training is the responsibility of mine personnel, it is recommended that MSHA consider allowing companies to meet the annual training requirement in segments that include use of the data, soon after a shift where the CPDM results triggered a change in work practices or dust control. This more contemporary use of information would facilitate continuously improving skills to reduce exposure. There are few studies of the optimal duration for refresher training. (See Wollaard M, et al. 2006. Optimal refresher training intervals for AED and CPR skills: a randomized controlled trial. Resuscitation. 71:237-47 showing the advantages of six months, compared with 12 months.)

Observations made by miners and results of actions taken in response to high readings during a shift should be incorporated into the Plan, 70.206 (8). This listing of activities requires periodic review (based on data) and updating if needed.

Dust sampling personnel training: In 1996, the Dust Advisory Committee recommended refresher training. In continue to believe that some refresher programming is needed, to assure that the personnel maintain focus on the

purpose, problems and troubleshooting needed. This again is the responsibility of the mine management, but might include 'Year in review', 'What can be done to improve data quality next quarter or this quarter?', 'How can we avoid deviations from the Plan next quarter?' exercises. Skill documentation every three years, as proposed appears reasonable; taking the course again would only be needed upon failure of the recertification exam.

Dust monitoring Plan: A well thought-out plan is extremely important to assure coverage of needed sampling sites/persons. As part of proposed 70.206(b)(7), MSHA has asked for comment regarding the frequency of monitoring during sampling. In the complex mining environment, rigid dictates are unlikely to provide the quality assurance that is desired. It is more critical that those who know the designated mine and production schedule describe a plan that allows for assurance that the equipment is checked for integrity with a frequency that achieves the goal. The factors cited by MSHA as guidance are appropriate. In order to assure that the Plan does result in the identification of changes or disruptions to planned production and sampling equipment failures, the Plan might include the notation of these observations and an estimate of time of occurrence to compare with the last observation event. This would give mine personnel data to modify the Plan.

Respiratory training record retention: Due to the constantly evolving nature of respiratory protection, and changes in facial features that affect fit, a two year time frame is likely adequate. Retention for longer time periods provides little value to the mine operator.

Overall, I continue to support the recommendations of the 1996 Dust Advisory Committee. I understand that some items have not been incorporated into the new proposal. The proposed rules extend important parts of the Committee report and implementation will substantially reduce exposure and the disease caused by that exposure.

Nearly a generation has passed since the Dust Advisory Committee report. More years of delay must not be tolerated.

Thank you.