September 8, 2023

Mine Safety and Health Administration
Office of Standards, Regulations, and Variances
201 12th Street South
Suite 4E401
Arlington, VA 22202

Re: RIN 1219–AB36
Written Comments on MSHA Proposed Silica Rule: MINERS CLINIC OF COLORADO

The Miners Clinic of Colorado welcomes the opportunity to provide written comments on the Mine Safety and Health Administration (MSHA) Proposed Rule for "Lowering Miners' Exposure: Respirable Crystalline Silica and Improving Respiratory Protection." The Miners Clinic of Colorado at National Jewish Health in Denver, CO has provided medical surveillance, diagnosis and treatment for occupational diseases affecting western miners for over 35 years. Our team of occupational pulmonologists, epidemiologists and coordinators have personally witnessed the devastating impact that progressive, untreatable and completely preventable dust diseases (silicosis, coal workers' pneumoconiosis and their complications) have had on our patients, their loved ones, and western communities. The following comments highlight both the Miners Clinic of Colorado's support for and concerns about the Proposed Rule.

The Miners Clinic of Colorado supports a number of key features in the Proposed Rule:

We support the proposed Permissible Exposure Limit (PEL) for respirable crystalline silica (RCS) of 50 mcg/m3 in coal mines and in metal/nonmetal (MNM) mines.
We concur with MSHA's proposal for a standalone PEL for RCS in coal mines that would replace the current approach to sampling. MSHA's Preliminary Risk Analysis shows substantial risk for severe coal mine dust lung disease from exposure to RCS at the current level of 100 mcg/m3. Based on extensive clinical and research evidence (much of which is cited in the Preamble), there is compelling proof of the role of RCS exposure in causing severe lung disease in contemporary coal miners. Moreover, MSHA's analysis of previous silica data shows the feasibility of achieving levels below the proposed PEL of 50 mcg/m3.

The Proposed Rule also provides a Preliminary Risk Analysis showing the impact of controlling RCS exposure in MNM mines. Using 15 years of MNM silica data from 2005-2019, the Proposed Rule estimates that 736 lifetime deaths would be avoided over 60 years among MNM miners with the promulgation of a PEL of 50 mcg/m3.

Data from the Miners Clinic of Colorado further supports the need for better control of exposure to RCS in metal/nonmetal mines. Over the past 20 years, our clinic has provided medical surveillance for nearly 400 MNM miners. Of these, 62% report having spent over half of their mining tenure in MNM or at least 10 years as a MNM miner. Of those who reported this substantial MNM mining work, 26% had pneumoconiosis based on a positive chest radiograph B reading.

In summary, while information on silicosis disease rates among MNM miners are less readily available than those for coal miners (largely because of the central tracking systems available for coal miners), there is no doubt that MNM miners are at risk for progressive and potentially disabling work-related lung disease.

We support the Proposed Medical Surveillance for Metal and Nonmetal (MNM) miners. Given the lung health risks from mineral dust exposures to MNM miners, the proposed MNM health surveillance program is long overdue and an important step in assuring detection of lung disease early enough to reduce further dust exposure and to mitigate risks for life-threatening silica-related chronic diseases.

It is essential that results of medical surveillance examinations be communicated directly and in writing to the miner and that the results be kept confidential. Employers should be notified if follow up testing is recommended, similar to the approach used in the OSHA Silica Standard. Further, MNM miners should be given medical removal protection options similar to those for which coal miners are entitled under 30 CFR Part 90.

The Miners Clinic of Colorado also has a number of concerns about the Proposed Rule:

Flaws in Proposed Exposure Monitoring**:**
Overall, the dust sampling approach in the Proposed Rule appears to lack sufficient direct involvement by MSHA.

The Proposed Rule allocates authority to the operator to decide whether miners may be exposed to high amounts of silica that exceed the PEL. ***That determination should be made by MSHA, not the operators.***

Rather than requiring routine sampling, the proposed rule only requires one-time sampling, and allows mine operators to determine whether or not to conduct periodic silica sampling. ***The decision about periodic silica sampling should be in the hands of MSHA, not mine operators.***

The proposed rule will let mine operators decide whether or not miners should be sampled for silica. Since silica dust exposure can cause pneumoconiosis, it is critical that mining activities that generate silica dust be subject to sampling. Although the proposed rule indicates that all "typical mining activities" are to be sampled, it is vague on what constitutes typical mining activity. ***The proposed rule should require that MSHA review and approve an operator's plan for which miners to sample.***

Flaws in Proposed MNM Medical Surveillance:
There is no central reporting structure to assure adequate quality of medical testing and to track chest radiograph and breathing test results over time to assess for worsening lung disease.

The proposed rule describes no processes to assure quality testing or longitudinal trend tracking for MNM miners' medical surveillance. This is in contrast to the regulatory requirements for coal miners, whose chest x-rays and breathing tests are sent to the National Institute for Occupational Safety and Health (NIOSH) for evaluation. NIOSH's role as a central clearinghouse for test results has been essential in monitoring the resurgence of Black Lung in U.S. coal miners linked to excessive exposure to respirable crystalline silica. Further, the Proposed Rule's requirement that operators keep medical surveillance information for the duration of a miner's employment plus 6 months is inadequate for purposes of tracking of disease prevalence and progression that may occur with substantial latency after cessation of exposure.

To address these issues of quality assurance for testing, the need for disease trend tracking, and the assurance of appropriate management of abnormal findings, the Proposed Rule:

- ***needs to identify mechanisms for central reporting and management of medical surveillance findings in MNM miners to assure early disease detection and appropriate exposure management for both the benefit of individual miners and the population of MNM miners.***
- ***require MNM operators to use facilities that have shown that they meet quality standards for medical surveillance examinations (similar to what is currently required for coal mine operators).***
- ***include diffusion capacity testing along with spirometry and chest radiographs to improve early disease detection.***

Flaws in the use of respirators:

The proposed rule permits the use of respirators to protect miners for an unspecified period of time pending implementation of engineering and administrative controls to better control dust levels. Reliance on respirators when silica levels are high is a major step backwards. Respirators are the least effective method of protection against inhaled hazards, and the least effective approach on the hierarchy of prevention. Challenges with inadequate respirator fit, storage, training and use limit their utility. Respirators may provide a false sense of security that a miner is protected from silica exposure. ***Miners should not be forced to work when silica levels are known to be above safe levels -- even if they have respirators, which are difficult to wear for extended periods and interfere with communication.***

Summary:

MSHA's proposed silica rule is vital to protect coal and metal/nonmetal miners who are at risk for work-related pneumoconiosis. Reducing the Permissible Exposure Limit using engineering controls rather than relying on respirators is key to prevention of silicosis in U.S. miners. The personal importance to individual miner's health as well as the public health importance of a high quality medical surveillance program cannot be overstated. However, the Proposed Rule's deficiencies in central oversight for both medical surveillance findings and workplace silica sampling results require further modification to assure that miners are adequately protected.