October 28, 2019

Re: RIN 1219-AB36

Docket No. MSHA 2016-0013

We are grateful for the opportunity to comment on the MSHA Request for Information on Respirable Silica (Quartz). The National Coalition of Black Lung and Respiratory Disease Clinics (the Coalition) is a coalition of nearly 60 black lung clinic sites in 15 states. Our clinics serve 13,000 former coal miners annually. Our members are on the front lines of the trends and developments of black lung disease. Since the late 1990s, we have witnessed firsthand the progressively worsening toll that black lung disease has taken on our patients, their families, and our communities. We have witnessed younger patients coming in sicker, and more patients have progressed to lung transplants than ever.[1] With the downturn in the coal industry in recent years, we have all encountered more miners coming to be evaluated, who then find that they have advanced disease, such as progressive massive fibrosis (PMF), one of the most severe forms of black lung disease. It is then with great interest and concern that we provide these comments on this important issue of protecting the respiratory health of miners.

We wish to provide input on a selection of the requests for information made by MSHA:

2. Please provide any information on how engineering controls, administrative controls, and personal protective equipment can be used, either alone or concurrently, to protect miners from exposure to silica dust.

Our Coalition emphasizes that personal protective equipment cannot and should not be relied upon to limit respirable silica dust exposure by miners. PPE, as noted in the RFI, is inferior to engineering controls as a means to protect miners from respiratory hazards, and this includes silica. PPE interferes with breathing during the performance of strenuous labor, and this discomfort is made worse when the environmental conditions are hot or humid. Under these conditions, adherence to PPE use cannot be expected. Obtaining a proper fit with a respirator is often challenging, and an improperly fitting respirator allows a miner to continue to work, all the while continuing to inhale silica and other hazardous exposures. Also, PPE interferes with communication between miners in often noisy environments, a potentially life-threatening situation.

We emphasize that dependence upon PPE to limit silica dust exposure irresponsibly shifts the burden of providing safe working conditions to the miner. It is notable that a miner has no realistic means to assess the effectiveness of their PPE use. It is therefore absolutely imperative that engineering controls be the predominant focus of controlling silica dust in the mine atmosphere. Given the absence of clear evidence of a lower limit below which silica does not cause respiratory disease, PPE should, at best, be

considered an adjunct to further limit a worker's exposure to silica within a mine environment that is already adherent to MSHA regulations on respirable silica.

4. Please provide any other experience, data, or information that may be useful to MSHA in evaluating miners' exposures to silica.

There is strong evidence that silica has played a major role in the current resurgence of pneumoconiosis in coal miners. In the past 20 years, rapidly progressive pneumoconiosis (RPP) has become more prevalent, despite enactment of the respirable dust rule nearly 50 years ago.[2] Examination of lung tissue from patients with RPP from our Coalition's clinics showed severe disease associated, in most cases, with silica and silicates.[3] Evaluation of hundreds of lung tissue specimens obtained from the NIOSH National Coal Workers' Autopsy Study and performed by scientists including members from our Coalition demonstrated a rise in the proportion of cases of PMF attributable to silica in modern cases compared to those whose work occurred prior to enactment of respirable dust limits.[4] These highly concerning pieces of evidence implicating silica as a major contributor to the current resurgence of pneumoconiosis are consistent with data obtained from active miners as well. Data from the NIOSH Coal Workers' Health Surveillance Program demonstrates that chest radiograph changes associated with silica exposure, r-type small opacities, have increased in prevalence among underground coal miners in recent decades.[5]

While the Coalition is hopeful that MSHA's action to reduce respirable dust limits in coal mines will help reduce disease rates in the future, we should continue to bear in mind that this change did not address silica exposure. Accordingly, the Coalition believes that MSHA needs to enact a permissible exposure limit for respirable silica to mirror the PEL established by OSHA of 50 $\mu g/m^3$. MSHA should also endeavor to increase sampling frequency for silica, and perform sampling across all mining activities including mine development, so that samples are more likely to reflect the reality of silica exposure for miners.

Sincerely,

The National Coalition of Black Lung and Respiratory Disease Clinics

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