June 19, 2019

Mr. David G. Zatezalo, Assistant Secretary
Mine Safety and Health Administration
Room 5C330
201 12th Street South
Arlington, VA 22202-5452

Dear Mr. Zatezalo:

We are writing to request that the Mine Safety and Health Administration immediately initiate a rulemaking to establish a new mandatory standard for respirable crystalline silica, and take certain other steps to protect miner health. The specific impetus for this request is the recent rise in diagnosed cases of coal workers' pneumoconiosis (Black Lung) and progressive massive fibrosis (PMF) amongst our nation's coal miners. However, the risk of silicosis has not been eliminated in metal and non-metal mines, and the standard should apply in all mines under MSHA's jurisdiction, both underground and surface, no matter what the commodity.

As we are all aware, numerous reports over the past several years have shown a disturbing trend in black lung cases, most notability in central Appalachia. These studies have shown that one in five miners with 25 years or more of experience are suffering from black lung. In many of these miners, the disease has advanced to PMF, the worst stage of black lung, caused by the inhalation of coal and silica dust. The only option for an improved quality of life for these miners is a lung transplant, and that is only possible when the miner is healthy enough to qualify for the surgery.

National Public Radio (NPR) first broke the story on the increase in December 2016. They obtained data from eleven black lung clinics and found 962 cases of PMF from the past decade. This was a much higher number than the National Institute for Occupational Safety and Health (NIOSH) had found. NIOSH's records showed only 99 cases from 2012 to 2016.

On December 16, 2016, NIOSH released a report published in the Morbidity and Mortality Weekly Report that showed one clinic in Kentucky reported 60 cases of PMF within twenty months. It noted a resurgence of this debilitating and deadly disease in central Appalachia. The report stated that these numbers show "an urgent need for effective dust

control in coal mines to prevent coal workers' pneumoconiosis" and "is a strong signal that action is needed in the area to identify existing cases at an earlier stage and prevent future cases."

The report also pointed to new or modified mining practices that might be causing this resurgence. Slope mining is one potential source of exposure. This requires miners to cut through hundreds of feet of mostly sandstone to reach the coal seam being mined. This causes miners to be exposed to extremely high concentrations of respirable crystalline silica. The report also noted mining thinner seams of coal requires cutting more rock to obtain the height needed.

NPR continued its research and released a report in July 2017 finding an additional 1,000 cases, bringing the count to nearly 2,000 cases since 2010, twenty times the amount found by NIOSH during the same period. Even more disturbing is the fact that the true number is likely higher because many of the clinics in the area either could not provide data, or had incomplete data.

On February 6, 2018, NIOSH reported finding what they believe is the largest cluster of PMF reported in scientific literature. NIOSH observed 11,200 miners and found 416 cases of PMF. Miners as young as 38 years old and some with as little as eight years of mining experience were diagnosed with PMF. The report also noted the fact that we have gone from nearly having eliminated the disease in the 1990s to the highest concentration of cases anyone has ever seen. Also, in the 1990s, PMF clinics were primarily treating miners ranging in age from their 60s to 80s. Now, they are seeing miners in their 30s to 50s. These numbers are both disturbing and unacceptable.

May 2018 brought two additional studies that documented the rise in PMF cases as well as an increase in lung transplants for miners with the deadly disease. The first study, by Dr. Kirsten Almberg and her colleague Dr. Robert Cohen at the University of Chicago, identified more than 4,600 cases of PMF. Half of the cases identified occurred within the last sixteen years. The study also found sharp increases in PMF year after year in central Appalachian mining states, including thirty percent in West Virginia and sixteen percent in Kentucky and Virginia. The second study found a threefold increase in the rate of lung transplants due to black lung. Eighty percent of lung transplants that have occurred due to PMF have occurred in the past decade alone. An additional 27 miners were put on waiting lists and either died before they received the transplant or became too sick for the surgery and no longer qualified. These transplants cost upwards of $1 million dollars each and most are paid for through federal black lung programs.

In June 2018, the National Academies of Science, Engineering, and Medicine (NAS) released their review of MSHA's new Coal Mine Dust Rule that took effect in 2014 and was fully implemented in 2016. The review referenced MSHA data showing compliance rates above 99 percent. However, the review noted, "these approaches may not guarantee that exposures will

be controlled adequately or that future disease rates will decline." The NAS report also found that "a fundamental shift is needed in the way mine operators approach exposure control," including "beyond compliance" efforts that exceed current MSHA regulations. The report pointed to the fact that dust readings may not be representative of the exposure of miners who are not wearing a dust monitor. The report also called for the development of a real-time silica monitor. While it may be some time before real-time silica monitors are available, NIOSH has created an end of shift silica monitor that can give silica readings much faster than the current process of sending the samples off to a laboratory and waiting for the results to return.

While the rise of black lung and PMF among coal miners is an immediate public health crisis, the risk of silicosis among other miners has not been eliminated. A 2008 NIOSH study found 134 deaths from silicosis among metal and nonmetal miners in selected states between 1990 and 1999. A more recent survey by MSHA found 94 cases of silicosis among 3395 metal and nonmetal miners surveyed between 2000 and 2016.

The state of New Jersey requires the reporting of silicosis cases. The New Jersey Department of Health Silicosis Surveillance Project recorded 561 cases of silicosis between 1979 and 2011. Of these, 81, or 14.4%, were in the mining sector, with a high concentration among surface miners of non-metallic minerals. While the number of cases in New Jersey has declined with each succeeding decade, the decline is largely due to the general decline in mining employment, including the closure of all underground mines in the state. All these numbers are likely to be underestimates, since silicosis is frequently misdiagnosed as other respiratory diseases.

Clearly, we are facing an epidemic of black lung and PMF caused or exacerbated by silica exposure in coal mines. The risk of silicosis still exists in metal and nonmetal mines. What can MSHA do? While MSHA's new Coal Mine Dust Rule closed many loopholes, increased sampling, provided real-time coal mine dust exposure results, and lowered concentration limits for coal mine dust, improvements can be made. Of course, that rule does not apply to metal and nonmetal mines. We therefore request that MSHA take the following actions to protect all miners.

Lower the allowable concentration limit of silica: MSHA's current silica standards are simply inadequate to protect miners from developing silicosis and PMF. MSHA's current standard has not been updated since 1985 and is in desperate need of revision. The undersigned believe that MSHA must promulgate a new silica standard to protect miners from PMF and silicosis. OSHA has recently promulgated a new standard, effectively cutting the allowable concentration from 100 to 50 micrograms of silica per cubic meter of air, averaged over an eight-hour shift. MSHA should consider the OSHA silica rule and then promulgate a new rule that is as, if not more, protective of miners. Currently, our nation provides less protection from silica to miners than to any other group of workers. That is unacceptable.

We believe this is the single most effective step that MSHA can take. On the coal side, the current Coal Mine Dust Rule measures all respirable dust in a coal mine, lumping coal dust with silica. Judging by their respective permissible exposure limits, silica is fifteen to thirty times more fibrogenic than coal dust. A doubling of the silica content in coal mine dust will have a small impact on the measurement of coal mine dust, but a large impact on the health of an exposed miner. And, of course, the Coal Mine Dust Rule only applies to coal mines. A strongly protective silica regulation, reflecting the latest scientific evidence, is essential in metal and nonmetal mines as well.

Fortunately, much of the work on a new standard has already been done by OSHA. The record of the OSHA rulemaking contains a massive amount of evidence and analysis on the health effects of silica and the need for the 50 microgram standard. Of course, MSHA must always be open to new evidence, and the agency will have to do its own determination of feasibility and control measures, but miners are biologically no different from other workers. Much of OSHA's work should be directly transferable to MSHA.

Require the Use of NIOSH's new end-of-shift silica sampler: While real-time silica monitoring is the ultimate goal, such technology will take some time to develop. In the meantime, MSHA and operators should make use of the newly developed end-of-shift sampler that will produce results the same day. Current laboratory delays make it extremely difficult, if not impossible, for employers to adjust operations quickly if miners are being exposed to high silica concentrations. The end-of-shift samplers are also cost-effective for operators because they eliminate laboratory costs. As a result, an end-of-shift sampler pays for itself within 200 samples. End of shift samplers should be required in all mines with potential silica exposure.

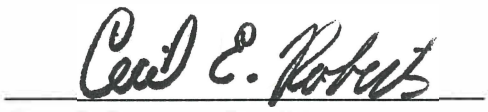
Sample more miners: While operator compliance with the new Coal Mine Dust Rule is over 99 percent, this is only true for miners who are wearing the continuous personal dust monitor. The level of coal and silica dust exposure experienced by miners who are not sampled is unknown. The amount of dust exposure permitted by MSHA's regulations is meaningless without adequate sampling. The alarming rate at which black lung and PMF are rising is not consistent with a 99 percent compliance rate. It is reasonable to assume that miners who are not sampled could be exposed to dangerously high amounts of respirable dust. MSHA should require the monitoring of more miners on more shifts. Although the problem is most acute in coal mines, adequate monitoring should be required in all mines.

Address high silica cutting situations: Special attention needs to be given to situations when miners are exposed to particularly high concentrations of silica. In coal mines, these include cutting overcasts, slopes, and unusually high amounts of rock within coal seams. These extremely hazardous conditions can be addressed through the mine's ventilation and dust control plans. Requiring the operator to sample for silica during these situations as well as mandating additional ventilation requirements could help dramatically decrease miners exposure to silica. Although the precise measures may differ in different commodities, plans addressing high silica concentrations should be required in all mines.

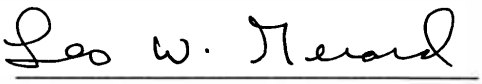
Work closely with the medical community: Access to data and statistics from those who treat miners diagnosed with deadly dust diseases is key to understanding the extent and severity of those diseases. While dust sampling data is valuable, the true indicator of success is whether or not miners are contracting black lung, PMF or silicosis and at what rate. MSHA has the opportunity to work closely with other groups and agencies that possess valuable knowledge on this subject, including NIOSH, the National Black Lung Association, the National Coalition of Black Lung and Respiratory Disease Clinics, the Office of Workers' Compensation Programs, the Health Resources and Services Administration, and medical programs for respiratory disease such as that at National Jewish Hospital. MSHA should embrace the opportunity to share valuable information with these stakeholders. MSHA could use this information to spot trends in the data, while protecting the confidentiality of miners. By monitoring trends, MSHA could quickly and accurately identify mines where a large number of miners have been diagnosed with dust diseases. MSHA could then take action to limit exposure at these problematic mines.

The time for action is now. We stand ready to work with all stakeholders to do everything we can to protect our nation's miners from these debilitating and deadly diseases. We anxiously await MSHA's plan to address one of the worst occupational health crises of our time.

Respectfully,



Cecil E. Roberts, President,
United Mine Workers of America



Leo W. Gerard, President,
United Steel, Paper and Forestry,
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