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September 11, 2023

S. Aromie Noe, Director
Office of Standards, Regulations, and Variances
Mine Safety and Health Administration (MSHA)
201 12th Street South
Suite 4E401
Arlington, Virginia 22202-5450

Re: RIN 1219-AB36
Docket Number: MSHA-2023-0001

Dear Director Noe:

The Nevada Mining Association (NVMA) respectfully submits comments regarding MSHA's proposed RIN 1219-AB36, *Lowering Miners' Exposure: Respirable Crystalline Silica and Improving Respiratory Protection,* as published in the Federal Register on July 13, 2023.

First organized in 1913, NVMA consists of more than 500 companies that comprise Nevada's mining industry and rely, in whole or in part, on this state's foundational industry. These member companies are engaged across the broad spectrum of the industry in Nevada, from exploration and discovery to development and construction, operation and production, closure and reclamation. NVMA provides a voice for Nevada's mining industry in federal, state, and local policy matters, community engagement, public education, and workforce development. NVMA works closely with its member operators to ensure that the health and safety of their workforce is the highest priority.

We respectfully request that the Mine Safety and Health Administration fully consider and evaluate the following comments before proceeding with the promulgation of these rules.

The NVMA comments are presented in two sections: Section (I) includes general comments on the proposed rule, followed by Section (II), which comments on the forty-three (43) specifically requested topics.

Section I: General Comments

NVMA generally supports MSHA's intent to reduce silica exposure permissible exposure level (PEL) from 100 µg/m3 to 50 µg/m3. However, we firmly believe that the proposed rule should not combine coal and metal/non-metal (C/MNM) under one rule. The exposures, methods, and controls vary greatly among coal and metal/nonmetal mines, and both cannot be adequately regulated under a single rule. No coal mines are in Nevada; thus, NVMA's comments address only metal/non-metal (MNM) mines.

Nevada mine operators consider the health and safety of their employees to be of paramount concern and typically exceed regulatory requirements. However, the proposed rule's level of biological and exposure monitoring, follow-up testing, and other components will place a heavy burden on operators without demonstrating significant benefits for miners. Again, the exposure potential in developing a severe respiratory medical condition vastly differs between coal mines and MNM mines. Reducing PEL from 100 µg/m3 to 50 µg/m3 mitigates miners' potential risk of developing silicosis in the MNM industry, but that goal can be achieved without excessive regulatory activity.

NVMA offers comments about the following specific areas.

1) **Action level of 25 µg/m3**: An action level is best achieved by internal company policy, not one defined by regulation. Mine sites are different, and it is difficult to develop an action level that appropriately applies to all of them.

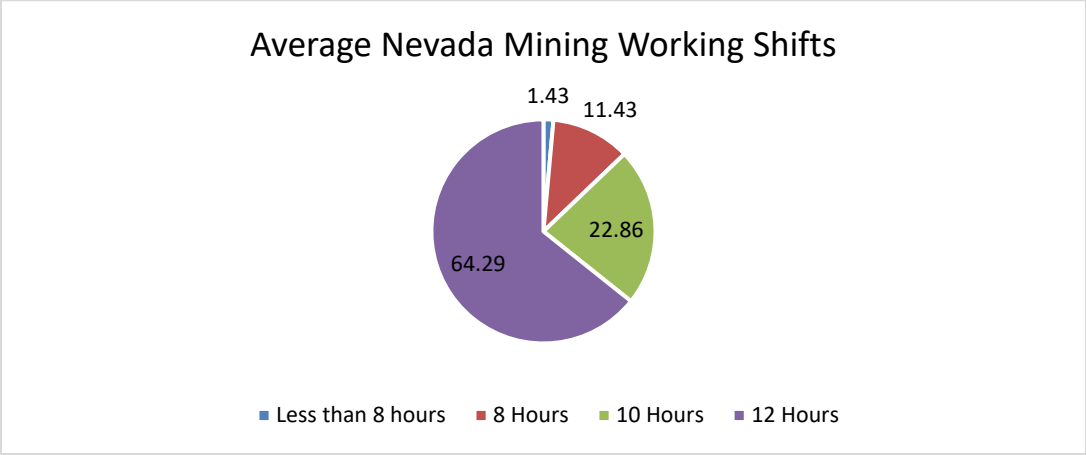
   Each mine should be able to develop its internal policies based on the potential exposures at its operations, identify steps to be taken at a certain action level, and define the exposure limit that should trigger corrective actions. Enforcement actions should be based solely on the 50 µg/m3 PEL and not on a monitoring trigger point.

   MSHA admits in the proposed rulemaking that "*an exposure limit of 25 µg/m3 may not be achievable for all mines.*" Thus, this component should not be included in the final rule.

2) **Hierarchy of Controls**: The control hierarchy is a proven risk mitigation model. MSHA's attempt to circumvent or control the implementation of mitigation controls disrupts proven methods. The National Institute for Occupational Safety and Health (NIOSH) clearly states that the most effective controls are elimination, substitution, engineering, administrative, and personal protective equipment. It is an accepted industrial hygiene practice to use combinations of these controls to act as redundant measures and best practices to protect employees from hazards. The benefits of this approach are clearly demonstrated by the 2016 rule promulgated by the Occupational Safety and Health Administration (OSHA). The OSHA rule treats engineering and administrative controls as equally effective in reducing silica dust exposures to achieve compliance. However, should this not be enough to produce effective results, it also allows for the use of respirators to protect miners further.

3) **NIOSH Recommended Exposure Limit (REL):** While the proposed rulemaking references that MSHA follows NIOSH's REL, MSHA's formula calculates to an 8-hour shift. NIOSH RELs are calculated up to a 10-hour shift. By calculating NIOSH REL of 50 µg/m3 using an 8-hour shift instead of the recommended 10 hours, the PEL is reduced by 20%, which is misleading.

NVMA surveyed Nevada miners to understand the shifts worked and how the formula would impact the industry. The results of this survey show the following:



Below is an example of how the calculation and actual shifts are calculated based on the formula:

- Sampling for 12 hours but calculating to 8 hours artificially increases the result. A 10-hour shift with a full-shift Time Weighted Average (TWA) of 34 µg/m3 would be erroneously increased to 51 µg/m3, exceeding the occupational exposure limit (OEL) (34 µg/m3 x 720/480 = 51 µg/m3). That is a 52% increase simply due to calculating to 8 hours.
- Sampling for 10 hours but calculating to 8 hours also artificially increases the result. A full-shift sample result of 40 µg/m3 would be erroneously increased to 50 µg/m3. This is a 25% increase simply because the math used is incorrect.

Additional information related to the REL/PEL:

NIOSH Hazard Review – Health Effects of Occupational Exposure to Respirable Crystalline Silica. Page 5 in the Executive Summary, NIOSH states:

"*Over a 40 or 45-year working lifetime, workers have a significant chance (at least 1 in 100) of developing radiographic silicosis when exposed to respirable crystalline silica at the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL), the Mine Safety and Health Administration (MSHA) PEL, or the National Institute for Occupational Safety and Health (NIOSH) recommended exposure limit (REL).**"
The footnote states, "**See appendix for the OSHA and MSHA PELs. The NIOSH REL is 0.05 mg/m3 as a time-weighted average (TWA) for up to a 10-hr workday during a 40-hr* work week."

The document was published by NIOSH in 2002. Two statements underscore our points in this area:

NIOSH states that there is a significant chance of developing radiographic silicosis when exposed to silica at (not below) OSHA's PEL, MSHA's PEL, and NIOSHs REL over a 40–45-year period. When this document was published, MSHA's and OSHA's PELs were around 100 µg/m3, and NIOSH's REL was, and still is, 50 µg/m3. There is no justification for any action level below 50 µg/m3. Neither MSHA nor NIOSH has offered evidence that exposures less than 50 µg/m3 pose a hazard to miners.

Criteria for a Recommended Standard – Occupational Exposure to Crystalline Silica – U.S. Department of Health, Education and Welfare - NIOSH. Published 1974.
Page 11, Section 1 – Environmental (Workplace Air) (a) states, "Occupational exposure shall be controlled so that no worker is exposed to a time-weighted average (TWA) concentration of free silica greater than 50 micrograms per cubic meter of air (50 ug/cu m; 0.050 mg/cu m) as determined by a full-shift sample for up to a 10-hour workday, 40-hour workweek." (Emphasis added.) It reiterates that NIOSH REL is intended for a 10-hour workday, not 8 hours.

4) **Technical Feasibility**: MSHA contends that engineering controls are technologically feasible and readily available. However, this conclusion ignores the variability in locations and types of actions that may involve elevated silica exposures. Specific areas or activities may exist where there are no known feasible engineering controls. As referenced by the Essential Minerals Association, not all controls are workable:

- Using water to control silica dust is not an acceptable approach in some operations that require a dry product for customer purposes.
- Ventilation controls cannot be located when dispensing the product. This is a function of the negative pressure (i.e., suction) not being positioned to perform the expected/intended task effectively.
- In most instances regarding maintenance, ventilation is ineffective since the negative pressure dust collection systems cannot influence the area where the maintenance is performed. For example, if a belt chute from a hopper is being fixed, negative pressure ventilation cannot be positioned to capture/draw airborne silica into the dust collection system.
- Whole building dust collection systems are only feasible if the entire building is airtight. While ventilation fans at the top of plants can be helpful, these fans do have limitations.

5) **Economic Feasibility:** MSHA maintains that engineering controls are economically feasible and available. The conclusion fails to factor in that not all work sites are the same. What works at one mine may not work at another. Additionally, MSHA requires in the proposal that operators install all "feasible" engineering controls and administrative controls to achieve compliance with the PEL. Respirators are to be considered temporary, and operators must continue to add engineering and administrative controls until compliance with the PEL is achieved, even if the controls are not feasible. The way

the rule is written, when all “feasible” controls are implemented, the operator will have to continue to install more controls if compliance with the PEL is not achieved and the use of respirators is temporary.

An additional example of economic impact is the increased cost to sample, evaluate samples, and interpret results, which will also impose significant costs on mine operators. For instance, one NVMA member estimated that its silica sampling costs would increase annually by $1.2 million to meet the requirements of the proposed rule for their estimated 7,000 employees. This estimate did not include engineering updates, medical surveillance, or compliance components to meet the sampling requirements.

One of Nevada's prominent mine operators has put together a rough estimate to comply with the proposed rule. The total amount to retrofit all underground and surface mobile equipment with filtered pressurized air, medical surveys, and increased sampling is $22.7 million for the first year and $13.6 million each year after. The cost does not include controls for process areas, as those estimates are still being assessed.

MSHA estimates the proposed rule will have an annual average cost of $56.1 million. The above-mentioned company’s costs alone are 40% of that estimation. If one mine is already at 40% of the cost, representing 7,000 of the 200,000 MNM miners or 3.5% of total MNM employment, the total cost with every mine in the nation will far exceed $56.1 million.

6) **Rotation of Miners:** NIOSH states that reducing a worker’s exposure to chemical carcinogens is the primary way to prevent occupational cancer. Exposure to carcinogens should be kept to levels as low as reasonably achievable. Accordingly, one effective method to reduce individual exposure to crystalline silica is to allow for the rotation of miners as an administrative control. A rotation of miners for specific tasks and engineering controls will reduce individual exposures to lower levels than engineering controls alone.

7) **Lack of direction, such as OSHA Table 1:** A tool such as the OSHA Table 1 is helpful but raises questions about enforcement. For example, would an operator be cited for failing to follow the table, even if the PEL was not exceeded? A better approach may be for the operator to develop its own equivalent Table 1 as part of a dust protection plan. However, this again raises the question of enforcement. MSHA should be able to cite only if the PEL is exceeded and a respirator is not used. The development of an internal tool or plan at the mine site should be independent of MSHA.

8) **Medical Surveillance:** The proposed rule also requires all MNM operators to provide medical surveillance in the form of a medical examination regime that is similar to that assigned to coal mine operators. This proposal would extend medical surveillance requirements to include potentially 200,000 MNM miners at more than 11,000 mines.

Such a massive expansion of these requirements stresses the capabilities of service providers and accredited laboratories to conduct the examinations.

Nevada mines are typically located in rural locations with fewer options to perform these tests and maintain compliance. Not only does this increase the challenge for mine operators to stay in compliance, but it also decreases the availability of medical access to the public in these communities by stressing out the current capacity of medical access.

Medical surveillance should apply only to employees expected to be exposed to respirable silica at the PEL for more than 30 days per year. This is consistent with sound science and is significantly more manageable than requiring medical evaluations for all miners regardless of identified exposure risk levels.

9) **Recordkeeping**: Requiring a new miner to have an initial screening while experienced miners are not required to be screened must be clarified.

   Miners often change companies during the course of their careers. There are no provisions outlined within the proposed rule that track miners' exposure throughout their careers and through multiple employers. Should a miner develop a respiratory illness, would it be assumed that occupational illness is from their latest company, even when all sampling and medical surveillance shows they were not exposed at or above the PEL during their employment?

10) **Gravimetric Dust Sampling Devices**: An Excessive Concentration Value (ECV) table should be included in the rulemaking. MSHA needs to ensure that the applicable standard has been exceeded. The proposed silica rule should provide a margin of error in each measurement to reduce the risk of alleging that the mine operator is non-compliant with the applicable standard.

Section II: Specific Comment Areas

The pertinent language from MSHA's requests-for-comment have been repeated below in italics to assist correlating NVMA's responses with MSHA's requests.

Health Effects

1. "*In the standalone, background document entitled "Health Effects of Respirable Crystalline Silica" and as summarized in Section V. Health Effects Summary of this preamble, MSHA has made a preliminary determination that miners' exposure to respirable crystalline silica presents a risk of material health impairment due to the risk of developing silicosis, NMRD, lung cancer, and renal disease, based on its extensive review of the health effects literature. MSHA requests comments on this preliminary determination and its literature review, which draws heavily from*

the review conducted by OSHA for its 2016 rulemaking. Are there additional adverse health effects that should be included or more recent literature that offers a different perspective? MSHA requests that commenters submit information, data, or additional studies or their citations. Please be specific regarding the basis for any recommendation to include additional adverse health effects."

The referenced studies are outdated and do not recognize that the likelihood of prolonged exposure has been dramatically reduced over the years. For example, cabs have been required on equipment, engineering controls have been updated, cabs have been pressurized, and respirators have been improved. The literature does not evaluate the effects of these improvements and reaches conclusions based on old data.

Preliminary Risk Analysis

2. *"In the standalone, background document entitled "Preliminary Risk Analysis" and as summarized in Section VI. Preliminary Risk Analysis Summary of this preamble, MSHA relied on risk models that OSHA used in support of its 2016 respirable crystalline silica final rule. Does the context of the MSHA rule suggest that the model would benefit from changes? If so, please describe both the justification for those changes and the likely impact on the final risk estimates. Are there additional studies or sources of data that MSHA should consider? What is the rationale for recommending the use of these additional studies or data?"*

NVMA found interesting data while reviewing the following study, "Association between Crystalline Silica Dust Exposure and Silicosis Development in Artificial Stone Workers" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8197517/).

The study indicates that there are discrepancies between exposure groups and the lack of PPE. Wearing respirators is a beneficial aid in protecting workers. Additionally, the study notes that silicosis development is much more prevalent in tobacco users.

Enhancements have been made in the mining industry over the past 30 years, and more technical advances will continue. For example, the use of cabs in underground mines to reduce diesel particulate matter (DPM) exposure has also decreased silica exposure. Filter systems have been continuously improved, and technological advancements have assisted mine operators in monitoring exposure and identifying the source of exposures.

3. "*MSHA's risk analysis of lung cancer mortality uses the exposure-response model from Miller and MacCalman (2010) instead of Steenland et al. (2001a), on which OSHA's risk assessment of lung cancer mortality was based. MSHA uses Miller and MacCalman (2010) for several reasons. First, it covers coal mining-specific cohort large enough (with 45,000 miners) to provide adequate statistical power to detect low levels of risk, and it covers an extended follow-up period (1959-2006). Second, the study provided data on cumulative exposure of cohort members and adjusted for or addressed confounders such as smoking and exposure to other carcinogens. Finally, it developed quantitative assessments of exposure-response relationships using appropriate statistical models or otherwise provided sufficient information that permitted*

MSHA to do so. The Agency is requesting comment on MSHA's reliance on the Miller and MacCalman (2010) study in assessing lung cancer mortality. Please provide any other studies or information that MSHA should take into account in determining the risk of lung cancer mortality among miners."

The Miller and MacCalman (M&M) study primarily focuses on coal miners and is insufficient for justifying the implementation of a rule of this magnitude on MNM mines. Additionally, the date range of the M&M study does not take into consideration the advancement of technology in the mining sector, especially the updates made in the early 2000s due to DPM regulation requirements. The M&M study does not provide a viable study reference when applied to the MNM sector.

Technological Feasibility of the Proposed Rule

4. "*As discussed in Section VIII. Technological Feasibility of this preamble, MSHA has preliminarily determined that it is technologically feasible for mine operators to conduct air sampling and analysis and to achieve the proposed PEL using commercially available samplers. MSHA has also determined that these technologically feasible samplers are widely available, and a number of commercial laboratories provide the service of analyzing dust containing respirable crystalline silica. In addition, MSHA has determined that technologically feasible engineering controls are readily available, can control crystalline silica-containing dust particles at the source, provide reliable and consistent protection to all miners who would otherwise be exposed to respirable dust, and can be monitored. MSHA has also determined that administrative controls, used to supplement engineering controls, can further reduce and maintain exposures at or below the proposed PEL. Moreover, MSHA has preliminarily determined the proposed respiratory protection practices for respirator use are technologically feasible for mine operators to implement. MSHA requests comments on these preliminary conclusions. What methods have you used that proved effective in reducing miners' exposure to respirable crystalline silica in mining operations? Please explain how those methods were effective in reducing miners' exposures. To what extent do existing controls that reduce exposure to other airborne hazards (e.g., coal dust, diesel particulate matter) already reduce exposures to respirable crystalline silica below the proposed PEL? To what extent does the proposed rule including the PEL facilitate MSHA's workplace health and safety goals? Please provide supporting information, such as quantitative data if available."*

NVMA agrees that the proper technology exists to utilize the hierarchy of controls to assist in reaching 50 µg/m3. The challenge is the 25µg/m3 action level. The technology does not exist to keep exposure levels below the action level, and an action level of 25µg/m3 is not achievable for all mines. This should be left to the mine operators to develop their internal action level based on exposure group conditions and not included in the final rule.

The proposed PEL being focused on an 8-hour time-weighted average is an issue for the industry, as Nevada operators rarely use 8-hour shifts. Nevada miners typically work 10–12-hour shifts, and the formula to determine the PEL should be flexible and based on actual exposure time. A 12-hour shift with silica result of 16.7 µg/m3 would exceed the action level of

25 µg/m3 (16.7*720/480=25.05µg/m3) simply by going against NIOSH REL and being calculated at an 8-hour average.

It may be challenging for operators to meet the requirement for two samples of the same task simultaneously when not all positions have duplicative roles. In addition, geology, elevation, mining methods, and geography all play a role in mine-specific conditions. A mine 10 miles down the road from another mine can have different conditions and thus different SEGs. SEGs do not apply.

It is also unclear how MSHA inspectors will perform their sampling. Will they also follow the two-sample methodology or only perform a single-sample determination?

5. "*MSHA has determined that the proposed medical surveillance requirements for MNM are technologically feasible. MSHA requests comments on this preliminary conclusion. Please provide supporting information, such as quantitative data if available."*

Medical surveillance should apply only to miners with potential silica exposure. The proposed rule would apply to all miners, regardless of their potential exposure. The proposed rule creates an excessive burden on mine operators to provide medical surveillance to their entire workforce without regard to their potential of being exposed to silica.

The ASTM F3387-19 standard uses age qualifiers to determine the timelines related to medical surveillance. However, MSHA's proposed rule outlines an entirely different set of guidelines on when to enact the surveillance components.

<u>Preliminary Regulatory Impact Analysis and Regulatory Alternatives</u>

6. "In the standalone background document entitled "Preliminary Regulatory Impact Analysis" and as summarized in Section IX. Summary of Preliminary Regulatory Impact Analysis and Regulatory Alternatives of this preamble, MSHA developed estimated costs of compliance with the proposed rule and estimated monetized benefits associated with averted cases of respirable crystalline silica-related diseases. MSHA requests comments on the methodologies, baseline, assumptions, and estimates presented in the Preliminary Regulatory Impact Analysis. Please provide any data or quantitative information that may be useful in evaluating the estimated costs and benefits associated with the proposed rule."

NVMA disagrees that the cost projection models are accurate because they rely on gross proceeds and not net. Various mines of different sizes and complexities have drastically different cost models. For instance, the all-in-sustaining-cost of gold mining is approximately 75% of the gold price, which is not established by the market. Unlike other commodities, such as coal, the price of gold cannot be adjusted by the operator in order to recover the cost of doing business. These costs vastly differ for every mine and every commodity, and it is inaccurate and misleading to base the cost models on gross proceeds rather than net.

7. "*MSHA considered two regulatory alternatives in developing the proposed rule discussed in Section IX. Summary of Preliminary Regulatory Impact Analysis and Regulatory Alternatives. In the regulatory alternatives presented, MSHA discussed alternatives to the proposed PEL, action level, sampling requirements, and semi-annual evaluations. MSHA requests comments on these and other regulatory alternatives and information on any other alternatives that the Agency should consider, including different average working-life spans and different average shift lengths. Please provide supporting information about how these alternatives could affect miners' protection from respirable crystalline silica exposure and affect mine operators' costs."*

Please see #6 response.

Initial Regulatory Flexibility Analysis

8. "*As summarized in Section X. Initial Regulatory Flexibility Analysis of this preamble, MSHA examined the impact of the proposed rule on small mines in accordance with the Regulatory Flexibility Act. MSHA estimated that small-entity controllers would be expected to incur, on average, additional regulatory costs equaling approximately 0.122 percent of their revenues (or $1,220 for every $1 million in revenues). MSHA is interested in how the proposed rule would affect small mines, including their ability to comply with the proposed requirements. Please provide information and data that supports your response. If you operate a small mine, please provide any projected impacts of the proposal on your mine, including the specific rationale supporting your projections."*

MSHA categorizes mines by size based on employment. For this proposed rule, MSHA has divided mines into three groups: mines that employ fewer than 20 workers, 20 to 500 workers, and more than 500 workers. For the past 20 years, for rulemaking purposes, MSHA has consistently defined a small mine to be one employing fewer than 20 employees and a large mine to be one employing 20 or more employees. Nevada has over 120 mines that meet the small mine criteria and will find it challenging to comply with the updated rule. Many of these mines do not have access to an industrial hygienist and rely on contractors to perform their analysis. NVMA recommends that small mines be excluded from the final rulemaking.

Scope and Effective Date

9. "*MSHA is proposing a unified regulatory and enforcement framework for controlling miners' exposures to respirable crystalline silica for the mining industry. MSHA requests comments on this unified regulatory and enforcement framework. MSHA requests the views and recommendations of stakeholders regarding the scope of proposed part 60, which would include all surface and underground MNM and coal mines. MSHA requests comments on whether separate standards should be developed for the MNM mining industry and the coal mining industry. Please provide supporting information."*

NVMA agrees that the rulemaking should be segmented into two separate rules applying to coal and metal/non-metal. The basis of the proposed rule and the studies referenced are coal-focused. Public testimony was heavily weighted towards coal. A prior Deputy Administrator for

MNM at MSHA has gone on record during one of the public hearings and stated that this should be two distinctly different rulemakings.

10. "*MSHA is proposing that the final rule would be effective 120 days after its publication in the Federal Register. This period is intended to provide mine operators time to evaluate existing engineering and administrative controls, update their respiratory protection programs, and prepare to comply with other provisions of the rule including recordkeeping requirements. Please provide your views on the proposed effective date. In your response, please include the rationale for your position."*

Currently, it is unclear how well mine operators can implement the additional mitigation controls quickly and efficiently, as several key areas have vague guidance. There are many new additions, such as sampling of groups previously not required, area exposure monitoring, lab work, research, implementation of engineering controls, and medical surveillance programs. The proposed effective date for the final rule is inadequate. Mine operators should be allowed time to perform baseline sampling, build out exposure groups, determine if testing laboratories meet the NIOSH certification criteria, and develop comprehensive programs to meet compliance with the updated PEL of 50 µg/m3. When OSHA developed its silica rule in 2016, it provided an implementation period of more than two years. MSHA should consider a similar approach.

11. "*MSHA requests comments on the proposed action level. Stakeholders should provide specific information and data in support of or against a proposed action level. Stakeholders should include a discussion of how the use of a proposed action level would impact their mines, including the cost of monitoring respirable crystalline silica above the proposed action level, and other relevant information. Please provide supporting information."*

NVMA disagrees with the proposed action level. We recommend that the mine operator determine the action level requirement within their policies based on their exposures, conditions, and controls.

Using the formula outlined in the proposed rule, which is based on 8-hour sampling, a 16.7 µg/m3 on a 12-hour shift will result in exceeding the 25 µg/m3 action level simply because the calculation does not consider longer shifts, which are standard in Nevada's mining industry. The proposed formula is also not in alignment with NIOSH's recommended REL of a 10-hour shift.

12. "*MSHA requests comments on the proposed definition for "objective data." Is it appropriate to allow mine operators to use objective data instead of a second baseline sample? Please provide supporting information."*

The only benefit in utilizing "objective data" is confirmation of a second baseline sample when there isn't a duplication of the role being sampled. However, there are many differences between operations, even within the same company at two different sites. Geology, ore, processing, controls, administrative controls, and other factors all have differences, which would invalidate or skew the results based on MSHA's definition of "objective data."

Proposed Permissible Exposure Limit

13. "*MSHA is proposing a PEL for respirable crystalline silica of 50 µg/m3 for a full-shift exposure, calculated as an 8-hour TWA for MNM and coal miners. MSHA has made a preliminary determination that the proposed PEL would reduce miners' risk of suffering material impairment of health or functional capacity over their working lives. MSHA seeks the views and recommendations of stakeholders on the proposed PEL. MSHA solicits comments on the approach of having a standalone PEL and whether to eliminate the reduced standard for total respirable dust when quartz is present at coal mines. Please provide evidence to support your response."*

The formula used to calculate against an 8-hour TWA skews the results compared to operations running nonstandard 8-hour shifts. 8-hour shifts are rare in Nevada mines and are mainly limited to administrative roles that do not have exposure potential. As noted in Section 1 (3), utilizing the formula provided by MSHA, most mines in Nevada will already be near the proposed action level based on this skewed calculation. Example: a 33.5 µg/m3 result will be inaccurately skewed to the 50 µg/m3 PEL under MSHA's proposed formula based on an 8-hour shift.

14. "*MSHA is proposing a PEL of 50 ug/m3 and an action level of 25 µg/m3 for respirable crystalline silica exposure. Which proposed requirements should be triggered by exposure at, above, or below the proposed action level? Please provide supporting information."*

The proposed action level, combined with the TWA formula, will almost always meet the action level of 25 µg/m3 and trigger the medical surveillance components of the proposed rule. The medical surveillance piece has many features and creates an undue burden on mine operations when the exposure is not an actual exposure but a poor calculation. This is redundant, with a wide gap between the PEL and action level. If an action level must exist and be part of this rulemaking, setting the action level closer to the PEL would make more sense. An action level of 25 µg/m3 does not increase any demonstrable safety measures for miners but rather places a burdensome trigger for medical surveillance. If an action level is included in the final rule, it would make more sense to have that action level set closer to the PEL when approaching an actual exposure over the PEL, such as 40µg/m3 or 80% of the PEL. Action levels are typically internal controls within a mining operation's safety and health plan, triggering internal actions to reduce or mitigate exposures. Having this as a portion of the compliance piece should not be the standard.

MSHA has never used an action level before regarding air contaminants, so this is a significant departure from previous rulemaking. OSHA does have an action level; however, the criteria to initiate the action level require 30 days or more of exposure over the action level.

According to the article published by the CDC titled "Trends in Pneumoconiosis Deaths - United States 1999-2018," deaths due to silica exposure dropped by over 40%, with the most significant being in the construction industry. In 2018, 87 deaths in the U.S. were attributed to silica, including all industries, not just mining. In the proposed ruling, MSHA presents a

significant amount of data showing the consequences of the various chronic health effects that silica can and does have on the human body but no viable data on mortality rates.

Trends in Pneumoconiosis Deaths — United States, 1999–2018 | MMWR (cdc.gov): https://www.cdc.gov/mmwr/volumes/69/wr/mm6923a1.htm

Methods of Compliance

15. "*MSHA requests comments on the proposed prohibition against rotation of miners as an administrative control. Please include a discussion of the potential effectiveness of this non-exposure approach and its impact on miners at specific mines. Please provide supporting information."*

Rotating miners in situations such as noise exposure is standard practice when dealing with non-carcinogens. The prohibition of rotating miners would make sense if there were more data on silica being a carcinogen; while it is on the list, the data trends point more toward other factors with the addition of silica, such as tobacco users.

16. "*MSHA requests comments on the proposed requirement that mine operators must install, use, and maintain feasible engineering and administrative controls to keep miners' exposures to respirable crystalline silica below the proposed PEL. Please provide supporting information."*

Additional clarification is needed on what is "feasible". Without a definition, what is "feasible" is left very much to interpretation. NVMA agrees that engineering controls followed by administrative controls are standard practice.

Proposed Exposure Monitoring

17. "*MSHA requests comments and information from stakeholders concerning the proposed approaches to monitoring exposures, and other approaches to accurately monitor miner exposure to respirable crystalline silica in MNM and coal mines. Please provide supporting information and data."*

A challenge presented by monitoring exposures is that there is not always a way to duplicate the sample of the same person, task, time, and conditions. This confirmation piece does not seem "feasible." MSHA inspectors often use pumps that are pre-calibrated away from the mine site, such as at the office or hotel, then arrive at the site and start sampling. The health inspection procedures handbook clearly states in section 8(3) that pumps should be calibrated at or near elevation. What would the interpretation of "at or near" be? What elevation difference would be considered not "at or near"? It should be standard practice for MSHA inspectors to calibrate their pumps upon arrival at the mine site, not some other location.

18. "*MSHA proposes to require mine operators to collect a respirable crystalline silica sample for a miner's regular full shift during typical mining activities. Many potential sources of respirable crystalline silica are present only when the mine is operating under typical conditions. MSHA requests comments on this requirement and whether to specify environmental conditions under*

which samples should be taken to ensure that samples accurately reflect actual levels of respirable crystalline silica exposure. In MSHA's experience, for example, environmental conditions such as precipitation (e.g., rain or snow) or wind could affect the actual levels of respirable crystalline silica exposure at miners' normal or regular workplaces throughout their typical workday. Please provide supporting information and data."

Environmental conditions will always have some effect on sampling results. Nevada has a robust weather system that rapidly changes from a proposed sunny day to a wet or snowy day. Sampling on these days provides a 365-day view of conditions at the mine site and is relevant to the general discussion.

Nevada has air monitoring sampling data from the Desert Research Institute (DRI) and the Environmental Protection Agency (EPA), which has studied ambient silica levels in the Nevada desert. Nevada periodically has days where PM10 levels could reach 20% of the proposed action level or higher, with no mining activity going on at all.

19. "*MSHA recognizes that some mining facilities operate seasonally or intermittently and that cumulative exposures for miners at these facilities may be lower than that of miners working at year-round operations. MSHA requests comments on the exposure monitoring approach under proposed § 60.12, including the frequency of exposure monitoring necessary to safeguard the health of miners at seasonal or intermittent operations. Please provide supporting information and data."*

NVMA does not have any comments on this section.

20*. "MSHA is proposing that each mine operator perform baseline sampling within 180 days after the rule becomes effective to assess the respirable crystalline silica exposure of each miner who is or may reasonably be expected to be exposed to respirable crystalline silica. MSHA requests comments on this proposed baseline sampling requirement. MSHA also requests comment on the ability of service providers used by mines such as industrial hygiene suppliers and consultants, and accredited laboratories that conduct respirable crystalline silica analysis, to meet the demand created by the baseline sampling requirements within the proposed timeline. Please include alternative approaches that might be equally protective of miners that should be implemented for assessing a miner's initial exposure to respirable crystalline silica."*

NVMA is concerned by the statement that "each miner" would require baseline sampling if exposure is possible. Many individuals employed in administrative or support roles at mining operations have a different potential for exposure than miners doing daily mining-related tasks. OSHA's inclusion of a Table 1 chart that identifies tasks and mitigation methods would be an asset to mine operations. Nevada employs over 16,000 direct miners, even more when considering support roles, contractors, and others who enter and exit the mine site.

It is NVMA's understanding that coal dust has had administration-level exposures, but this trend has not been demonstrated at MNM mines. Including administrative roles would cause a

significant increase in sampling. Sampling should be done on a case-by-case, situational basis, not just a broad stroke, including everyone, regardless of potential exposure.

21. *"MSHA is proposing a requirement that mine operators qualitatively evaluate every 6 months any changes in production, processes, engineering controls, personnel, administrative controls, or other factors, beginning 18 months after the effective date. MSHA requests comments on the timing of the proposed semi-annual evaluation requirements, and in particular, whether miners would possibly be exposed unnecessarily to respirable crystalline silica levels above the PEL due to the gap between the effective date and the proposed requirements. Please provide supporting information."*

Doing an assessment every six months is unnecessary. When an engineering, administrative, or process change occurs, risk assessments are typically performed alongside that change. Making this an annual requirement would be less burdensome. We must underscore that the abovementioned changes do not happen quickly; any substantial change will require engineering, construction, and feasibility studies. Having to evaluate this twice a year places an undue burden on operators. At the same time, it provides no additional health benefit to miners. NVMA recommends that the review be an annual review rather than six months. Other portions of this rulemaking will already monitor miners with increased exposure potential.

22. *"MSHA has determined that most occupations related to extraction and processing would meet the "reasonably be expected" threshold for baseline sampling. MSHA recognizes that some miners may work in areas or perform tasks where exposure is not reasonably expected, if at all. MSHA solicits comments on the assumption that most miners are exposed to at least some level of respirable crystalline silica, and on the proposed requirement that these miners should be subject to baseline sampling. Please provide supporting information."*

See NVMA's response to #20. MSHA has more exposure data than any mine operator. NVMA recommends looking at similar exposure groups (SEG) and identifying potential exposures based on previously sampled data. Some Nevada mines have performed similar sampling on a task basis and found little exposure potential for administrative staff. However, MSHA would have far more data and be better positioned to provide SEG data, like OSHA with Table 1 implementation. What timeline of sampling data would be eligible for the baseline assessment? If test sampling was done a year ago, would that meet the spirit of the intent?

23. "*MSHA is proposing that mine operators would not be required to conduct periodic sampling if the baseline sampling result, together with another sampling result or objective data, as defined in proposed § 60.2, confirms miners' exposures are below the proposed action level. MSHA seeks comments on this proposal. Please provide supporting information and data."*

Objective data does not capture mine-specific exposure groups of personnel. We agree that exposures below the action level based on baseline sampling results and the proposed reassessment timeline should capture any changes. For example, the baseline samplings alone would require over 900 samples to be tested at just one of Nevada's large mines. Similar exposure group data would be far more accurate than "objective data." It would also reduce

the implementation timeline and allow for more focused engineering controls on exposure groups close to the PEL.

24. "*MSHA is proposing that mine operators conduct periodic sampling within 3 months where the most recent sampling indicates miner exposures are at or above the proposed action level but at or below the proposed PEL and continue to sample within 3 months of the previous sampling until two consecutive samplings indicate that miner exposures are below the action level. MSHA solicits comments on the proposed frequency for periodic sampling, including whether the consecutive samples should be at least 7 days apart. Please provide supporting information and data."*

MSHA should not implement an action level. Rather, MSHA should urge mine operators to implement internal action-level actions. Sampling does not mitigate the exposure; it simply provides a data marker for tracking over time. Using samples as a reactive response, not a proactive response, would allow companies to develop their internal action level based on mine exposures, geology, processing, and controls. NVMA agrees that 3-month follow-up sampling should be done at or near the PEL, not the action level.

25. "*MSHA is proposing that mine operators may discontinue periodic sampling when two consecutive samples indicate that miner exposures are below the proposed action level. MSHA requests comments on this proposal. Please provide supporting information and data."*

This should not be required based on action levels; this should be required to terminate at the PEL.

26. "*MSHA is proposing that mine operators conduct semi-annual evaluations to evaluate whether any changes in production, processes, engineering controls, personnel, administrative controls, or other factors may reasonably be expected to result in new or increased respirable crystalline silica exposures. Please provide comments on this proposal, as well as alternative approaches that would be appropriate for evaluating any potential new or increased respirable crystalline silica exposures. Please provide supporting information and data."*

An assessment every six months is an overcautious step. When an engineering, administrative, or process change occurs, risk assessments are typically performed with the change. Making this an annual requirement would be less burdensome. NVMA emphasizes that the abovementioned changes require time to implement; any substantial change will require engineering, construction, and feasibility studies. Having to evaluate this twice a year places an undue burden on operators without providing demonstrable additional health benefits to miners. NVMA recommends that the review be an annual review rather than six months.

27. "*MSHA is proposing that miners' exposures are measured using personal breathing-zone air samples for MNM operations and occupational environmental samples collected in accordance with §§ 70.201(c), 71.201(b), or 90.201(b) for coal operations. MSHA requests comments on this proposal. Please provide supporting information and data."*

This is another example of why there should be two separate rules for coal and metal/non-metal. Providing two different sampling methods under the same standard does not make sense.

28. "*MSHA is proposing the use of representative sampling. Where several miners perform the same task on the same shift and in the same work area, the mine operator may sample a representative fraction of miners to meet the proposed exposure monitoring requirements. MSHA seeks comments on the use of representative sampling. Please provide supporting information and data."*

NVMA does not have an issue with using representative sampling; however, not every task at a mine operation will have another employee assigned who will be sampled simultaneously in the same area, performing the same job. Small mines do not have the resources to perform this type of sampling. In this area, some relief should be considered for non-duplicative roles and consideration of small mines. Again, NVMA recommends excluding small mines from the final rule.

29. "*MSHA is proposing that mine operators use laboratories accredited to ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories," where the accreditation has been issued by a body that is compliant with ISO/IEC 17011 "Conformity assessment – requirements for accreditation bodies accrediting conformity assessment bodies." MSHA solicits comments on this proposal. Are there additional requirements that should be incorporated into this proposal to ensure accurate sample analysis methods? Please provide supporting information and data."*

The more significant issue regarding sampling testing is not the laboratories' ability to test the samples. Instead, it is an issue with the volume of samples and the formula used to calculate the PEL or actual exposure. It is rare in Nevada for a miner to work an 8-hour shift; using an 8 TWA automatically raises the exposure level simply by a miscalculation rather than the actual exposure.

If MSHA were to follow NIOSH's guidance and set the PEL at 50 µg/m3 calculated for a 10-hour shift, then the PEL for a 12-hour shift would be 41.7 µg/m3 (41.7 x 720/600 = 50). This would follow NIOSH's recommended REL.

30. "*MSHA seeks comments on the proposal that mine operators ensure that laboratories evaluate all respirable crystalline silica samples using respirable crystalline silica analytical methods specified by MSHA, NIOSH, or OSHA. Are there additional requirements that should be incorporated into this proposal to ensure accurate sample analysis? Please provide supporting information and data."*

NVMA members currently use accredited laboratories.

31. "*MSHA seeks comments and information on mine operator and stakeholder experience using NIOSH's rapid field-based quartz monitoring (RQM) monitors for determining miners' exposures to respirable crystalline silica. Please provide any information and data."*

The NIOSH Rapid Quartz Analysis (RQA) is only in its second testing phase. The current project began on October 1, 2022, and has not been widely adopted, nor is there data regarding its effectiveness. Pushing this into a requirement before testing is completed is premature. Once the technology is proven, mine operators can assess if its application benefits their operation.

32. "*MSHA is proposing to require medical surveillance for MNM miners. Medical surveillance is already required for coal miners under 30 CFR 72.100 and has played an important role in tracking the burden of pneumoconiosis in coal miners but is not currently required for MNM miners. MSHA's proposal would require MNM mine operators to provide each miner new to the mining industry with an initial medical examination and a follow-up examination no later than 3 years after the initial examination, at no cost to the miner. It would also require MNM mine operators to provide examinations for all miners at least every 5 years, which would be voluntary for miners. Is there an alternative strategy or schedule, such as voluntary initial or follow-up examinations, tying the medical surveillance requirement to miners reasonably expected to be exposed to any level of silica or to the action level that would be more appropriate for new MNM miners? Should the rule make each 5-year examination mandatory? Should the 5-year examination be mandatory for coal mine operators as well? Please provide data or cite references to support your position."*

NVMA agrees with keeping the medical surveillance follow-ups "voluntary," as the employee's medical information should be their choice, not the operator's or MSHA's decision. How would mine operators verify if a new miner is experienced and if the initial medical examination has been completed?

When miners transition between companies, medical clearances are already required when employees work with respirators.

33. "*MSHA's proposed medical surveillance requirements for MNM miners do not include some requirements that are in MSHA's existing medical surveillance requirements for coal mine operators in 30 CFR 72.100. For example, § 72.100 requires coal mine operators to use NIOSH-approved facilities for medical examinations. Should MNM operators be required to use NIOSH-approved facilities for medical examinations? Coal mine operators also are required to submit for approval to NIOSH a plan for providing miners with the examinations specified. This is because NIOSH administers medical surveillance for coal miners with requirements for coal operators, but not MNM operators, in NIOSH standards (42 CFR part 37). Should the plan requirements be extended to MNM operators? However, the proposed requirements also include some requirements for MNM operators that are not included for coal operators. For example, the proposed provisions require operators of MNM mines to provide MNM miners with periodic medical examinations performed by physicians or other licensed health care professionals (PLHCP) or specialists including a history and physical examination focused on the respiratory system, a chest X-ray, and a spirometry test. The proposed rule also requires a*

written medical opinion be provided by the PLHCP or specialist to the mine operator regarding the miner's ability to wear a respirator. MSHA seeks comment on the differences between the medical surveillance requirements for MNM operators in this proposed rule and the existing medical surveillance requirements for coal mine operators in § 72.100. MSHA also seeks comment on how best to collect health surveillance data from PLHCPs and specialists to track MNM miners' health, for example how to know when pneumoconiosis cases occur. MSHA seeks comments on alternative approaches to scheduling periodic medical surveillance. MSHA proposes to require operators to keep medical surveillance information for the duration of a miner's employment plus 6 months. The Agency seeks comments on this proposed requirement and on any alternative recordkeeping schedules that would be appropriate. Please provide supporting information."

As the question had several elements, NVMA provides the following comments:

a) Use of NIOSH-Approved Facilities – The proposed rule requires surveillance by a certified pulmonary disease specialist or a board-certified occupational physician, and x-rays be taken and reviewed by a b reader. Requiring the facilities to be NIOSH-approved is excessive and unnecessary.

b) Need to Submit Plans to NIOSH – Requiring the submittal of medical surveillance plans to NIOSH for approval is redundant and unnecessary. The rule provides the requirements for medical surveillance, and MSHA inspectors will review the mine operator's compliance with the rule. Having to submit plans to NIOSH would be redundant and cause an unnecessary burden on the mine operators and NIOSH. NIOSH is not a regulatory agency and should not oversee mine operators' medical surveillance plans.

34. "*MSHA's proposed medical surveillance requirements for MNM miners would require operators of MNM mines to provide miners with periodic medical examinations performed by PLHCP or specialists, including a history and physical examination focused on the respiratory system, a chest X-ray, and a spirometry test. MSHA seeks comment on whether use of any new diagnostic technology (e.g., high-resolution computed tomography) for the purposes of medical surveillance should be used."*

This should sum up an accredited medical diagnosis; specifying what technology is used limits what is available in the future. In addition, not all mines have access to the same resources. Nevada mines are in rural locations, adjacent to small communities, and do not have access to the resources available in urban Nevada without significant travel times. On average, Nevada mines are 4 hours away from Nevada's larger cities.

35. "*MSHA's proposed medical surveillance requirements would require that the MNM mine operator provide a mandatory follow-up examination to the miner no later than 3 years after the miner's initial medical examination. If a miner's 3-year follow-up examination shows evidence of a respirable crystalline silica-related disease or decreased lung function, the operator would be required to provide the miner with another mandatory follow-up examination with a specialist within 2 years."*

Test results should be communicated to the mine operator, physician, and miner who shows the potential silica-related disease. Once confirmed, this should be reported to MSHA as an occupational illness.

36. "*MSHA requests comments as to whether the proposed provisions should include a medical removal option for MNM miners who have developed evidence of silica-related disease that is equivalent to the transfer rights and exposure monitoring provided to coal miners in 30 CFR part 90 (Part 90). Under Part 90, any coal miner who has evidence of the development of pneumoconiosis based on a chest X-ray or other medical examinations has the option to work in an area of the mine where the average concentration of respirable dust in the mine atmosphere during each shift to which that miner is exposed is continuously maintained at or below the applicable standard. Under Part 90, coal miners are entitled to retention of pay rate, future actual wage increases, and future work assignment, shift and respirable dust protection. MSHA seeks comment on whether this medical removal option should be provided to MNM miners. What would be the economic impact of providing MNM miners a medical removal option? Please provide supporting information and data."*

Upon a diagnosis of a silica-related disease and some verification that the exposure occurred as a work-related illness, not an external factor, should trigger the discussion of a medical removal option. Allow miners to select the option to go under Part 90 and switch their work duties to a suitable duty. NVMA recommends that the decision should be the miner's.

<u>Proposed Respiratory Protection Standard</u>

37. "*MSHA requests comments concerning the temporary, non-routine use of respirators and whether there are other instances or occupations in which the Agency should allow the use of respirators as a supplemental control. Please discuss any impacts on particular mines and mining conditions and the cost of air-purifying respirators, if applicable. MSHA also solicits comments on the proposed requirement that affected miners wear respiratory protection to maintain protection during temporary and non-routine use of respirators. Please provide supporting information."*

Respirators have a proven history of being effective. MSHA should allow respirators when all feasible controls have been put in place. OSHA allows the use of respirators in the same situation.

In addition, feasibility needs to be defined. Historically, there has been a significant difference in how MSHA and industry determine feasibility. The proposed rule states that respirators must be temporary, meaning that more controls must always be put in place if the PEL is exceeded, regardless of being determined feasible by the operator. Feasibility needs to be kept reasonable. Within the definition, respirators must be allowed if it is determined that all possible controls have been implemented and the PEL is exceeded. Implementing controls will always continue for job classifications exceeding the PEL after 'feasible' controls have been implemented.

38. "*MSHA is proposing to incorporate by reference ASTM F3387-19, published in 2019. Whenever respiratory protective equipment is needed, mine operators would be required to follow practices for program administration, standard operating procedures, medical evaluations, respirator selection, training, fit testing, and maintenance, inspection, and storage in accordance with the requirements of ASTM F3387-19. Beyond these elements, MSHA is proposing to provide operators the flexibility to select the elements in ASTM F3387-19 that are applicable to their practices of respirator use at their mines. Should mine operators have the flexibility to choose the ASTM F3387-19 elements that are appropriate for their mine-specific hazards because the need for respirators may vary due to the variability of mining processes, activities, airborne hazards, and commodities mined? What, specifically, do you think should factor into the determination of what is applicable? MSHA seeks comments on its proposed approach and the impact it would have on mine operators and on miners' life and health."*

NVMA disagrees that all mines should follow ASTM F3387-19. However, we agree with mine operators' option to incorporate ASTM F3387-19 for their mine-specific hazards. Most Nevada mine operators already follow the newer standards rather than the outdated ANSI standard.

39. "*ASTM F3387-19 identifies a variety of respiratory protection practice elements. MSHA proposes to require certain minimally acceptable program elements: program administration; standard operating procedures; medical evaluations; respirator selection; training; fit testing; and maintenance, inspection, and storage. Please comment on whether these are the appropriate elements to require, or if there are any other elements of ASTM F3387-19 that should be minimally included in any respiratory protection program. MSHA also welcomes comments on whether it would be appropriate to require the standard in its entirety. Please identify those elements that would ensure that approved respirators are selected, fitted, used, cleaned, and maintained so that the life and health of miners are safeguarded. MSHA also seeks data and information on the impact these changes would have on mine operators, especially smaller operators. What would be the economic impact if all or parts of ASTM F3387-19 were required respirator program elements? Please be specific with your response and provide details on respirator use at your mine to include information and data on mining processes and environmental conditions; level of exposures to airborne contaminants; frequency and duration of exposures; type and amount of work or physical labor, including frequency and duration; and medical evaluation on respirator use, if applicable."*

NVMA does not have comments on this section.

<u>Recordkeeping Requirements</u>

40. "*MSHA is proposing to require recordkeeping for records of evaluations, records of samplings, records of corrective actions, and written determination records received from a PLHCP. The proposed rule's recordkeeping requirements are discussed in the Section-by-Section Analysis section of this Preamble. MSHA seeks comment on the utility of these recordkeeping requirements as well as the costs of making and maintaining these records. Please provide supporting information."*

MSHA's proposed recordkeeping requirements at §60.16 are not onerous and essentially no different than those under the noise rule regarding the records to maintain and the period to keep them, with one exception. Subsection (a)(3) requires the retention of corrective action records made under §60.13(b) and further provides they must be stored with records of the related sampling. NVMA requests clarification on this requirement. An operator may end up with corrective actions applicable to multiple sampling results. Does this requirement mean that for each sampling result over the PEL, the operator will have to "match" the corrective action(s) to it, potentially resulting in a single corrective action applying to multiple sampling results? The rule requires immediate corrective action to lower the silica level, and we read this proposal as requiring operators to show the specific corrective actions for each overexposure. Further clarification is requested in the final rule.

Training Requirements

41. "MSHA requests the views and recommendations of stakeholders regarding whether training requirements for miners should be included in proposed part 60. Please provide supporting information and data."

Coverage of health effects is included in part 48 of the training requirements. Employees who use a respirator are trained in use, maintenance, and fit testing before being placed under respirators.

Conforming Changes

42. "*MSHA requests comments on the proposed conforming changes to remove the reduced coal dust standard from 30 CFR and the potential impact on coal mines and miners and on whether to retain the reduced standard for Part 90 miners. Please provide supporting information."*

This would apply to a coal-specific rule. Nevada has no coal mines; thus, NVMA has no comments on this section.

43. "*MSHA is not proposing to adopt a similar approach as the OSHA Table 1 for the construction industry, where MSHA would prescribe specific exposure control methods for task-based work practices when working with materials containing respirable crystalline silica. See 29 CFR 1926.1153(c)(1). MSHA requests comments on specific tasks and exposure control methods appropriate for a Table 1-approach for the mining industry that also would adequately protect miners from risk of exposure to respirable crystalline silica. Please provide specific rationale and supporting information, including data on how such an approach would be implemented."*

This proposed rulemaking has been rushed without sufficient justification, and Table 1 inclusion should have been included from the beginning rather than as an afterthought or left to the industry to develop the list. We believe a better approach may be for the operator to develop their own equivalent Table 1 as part of their dust protection plan. However, this again raises

the question of enforcement; MSHA should only be able to cite if the PEL is exceeded and a respirator is not used. The development of an internal tool or plan at the mine site should not be citable by MSHA.

NVMA appreciates MSHA's consideration of our comments regarding the proposed rule. In general, NVMA recommends a continuation of the comment period, which would allow MSHA to gather additional data and develop rulemaking that truly protects MNM miners from harm. Again, MSHA should separate the coal and MNM rules, recognizing the vast differences between the two industries. In addition, NVMA recommends an appropriate implementation period that recognizes the complexity of the final rule and allows sufficient time for mine operators to prepare. OSHA's implementation period was more than two years and serves as an appropriate model.

Sincerely,

Dana R. Bennett, PhD
Interim President
Nevada Mining Association