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Re: Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection; RIN 1219–AB36 Docket No. MSHA–2023–0001

On behalf of the Illinois Association of Aggregate Producers (IAAP), the trade association representing companies that produce and sell crushed stone, sand, gravel, and industrial minerals in Illinois, as well as companies providing goods and services to the mining industry, I am pleased to submit the following comments in response to the Mine Safety and Health Administration's (MSHA) proposed rule, "Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection". Our producer members have operations affected by this proposed rule.

The IAAP's 79 producing members range in size from "mom and pop" operations that manufacture less than 100,000 tons of these products each year to companies that produce well over 20,000,000 tons annually. Aggregate and industrial mineral producers in Illinois operate more than 230 surface and underground mines and processing plants in all regions of Illinois.

IAAP works with its members on health and safety issues through its Health and Safety Committee, which brings together professionals from across the membership to advance shared industry goals to promote health and safety practices and awareness through communications, training, and supporting resources.

In response to the proposed rule, IAAP offers the following comments:

1. *Include an applicability threshold and exempt predetermined areas or locations with geology that does not contain silica.*
   MSHA should adopt a provision similar to OSHA's general industry standard, which states that the standard does not apply when an employer has data demonstrating employee exposures will remain below the action level under any foreseeable circumstances. MSHA did not include a provision similar to this in its proposed silica standard. Some MNM operations will never expose workers to potentially harmful levels of respirable crystalline silica, for example those whose geology contains no silica or dredge operations where material is wet throughout the entire process from extraction to sale. i.e. In Illinois, the Galena formation would be considered chert or silica-free in most of the region. MSHA's silica standard should not apply to such operations. The application of the silica

standard to operations at which employee exposures will remain below the AL under any foreseeable circumstances does not advance miner health, but rather diverts time, attention, and resources away from other health and safety matters (e.g., training, fatality prevention); furthermore, samples from these operations and inclusion of workers in medical surveillance will cause unnecessary backlogs and delay results for operations where silica exposures do exist.

2. *Keep the PEL at 50 µg/m^3 and action level of 25 µg/m^3.*
We support both the proposed PEL of 50 µg/m^3, and we do not oppose the action level of 25 µg/m^3. However, we do have concerns with current sampling practices and labs' ability to measure low concentrations of silica consistently and accurately at 25 µg/m^3. Additionally, we do not believe that a systematic review of the literature concerning silica health effects supports the conclusion that a material risk of adverse health effects exists at exposures below 25 ug/m3.

3. *Add a performance-based sampling option, use the OSHA scheduled monitoring (with one caveat) and add a Table 1.*
MSHA should adopt OSHA's exposure assessment options: the performance-based exposure assessment option and the scheduled monitoring option. Additionally, MSHA should adopt a Table 1, similar to the Table 1 in OSHA's construction standard (discussed in detail below). MSHA should adopt the OSHA provision which requires sampling after changes that may affect exposures. MSHA should adopt these provisions in lieu of the periodic sampling and qualitative assessment provisions in its proposed rule. The introduction of four new categories of sampling is confusing and unnecessary. Many operators and workers are already familiar with the OSHA silica standard through vertical integration (i.e., asphalt, ready mix concrete, construction, etc. as part of their business) or having aggregate sales yards. Adopting the OSHA standard would protect worker health and simplify work for many employees who often go back and forth between OSHA and MSHA regulated sites. It would also simplify sampling and medical surveillance requirements for these employees. Additionally, under the current proposal, if a worker is sampled repeatedly and each time levels are between 25 and 50 µg/m^3, then, even though exposures are controlled below the PEL, that individual will continually have to wear a dust pump once every three months for their entire tenure at that job. This is not necessary to protect workers' health and is an inconvenience. It is financially unnecessary for the operator and harmful to the greater sampling system and labs, which will experience a surge and face difficulties servicing the industry and getting samples results back to those who need them most.

4. *Make medical surveillance risk based.*
MSHA should adopt a provision like the OSHA medical surveillance provision, which requires employers to offer medical surveillance to workers exposed to RCS at or above the action level for 30 or more working days a year. We believe that medical surveillance should be offered to workers who exceed a threshold level of silica exposure, rather than requiring operators to offer it to every miner. We believe this should apply to voluntary and mandatory medical surveillance.

5. *Initial medical exams cannot be completed within 30 days of hire.*
The National Stone Sand and Gravel Association has stated, based on conversations with more than 20 member companies who currently have medical surveillance programs, operators cannot realistically get medical exams performed and results back within 30 days. The 30-day requirement in the proposal is not necessary to protect worker health

given the exposures that exist in MNM, and an initial medical exam taken after 30 days provides an adequate baseline for future comparisons for the same reason. Furthermore, it is increasingly common for workers new to the industry to quit after a few months. Many operators have probationary periods and MSHA should take this industry norm into consideration relating to the medical surveillance date.

6. *Operators should have flexibility on how to run medical surveillance programs.*
The IAAP agrees with MSHA concerning the components of the proposed medical surveillance. However, the proposed rule is too prescriptive regarding medical conduct of surveillance, should clarify operators may do more extensive testing, clarify operators can make medical surveillance mandatory, and should allow operators to get limited and pertinent test results. The MSHA proposed rule should not interfere with medical surveillance programs that are more comprehensive in terms of the testing provided and the frequency of the testing than the MSHA proposal. The MSHA proposed rule should not prohibit mine operators from making participation in medical surveillance a mandatory condition of employment, if the mine operator believes that it is warranted. The MSHA proposed rule should not prohibit operators from requiring workers to execute a medical release authorizing the medical surveillance provider to provide the operator with only those records pertaining to the potential health effects of exposure to RCS, including but not limited to, chest x-ray and PFT results. Any time limits applicable to the provision of medical surveillance results to the worker should allow the operator to obtain consensus readings of chest x-rays. Finally, all workers should be on the same rotation (e.g., every 3 years) to minimize logistical challenges like scheduling van services and when miners will be out of work, and MSHA does not further need to provide detail regarding timing, as it does in the proposed rule (every 5 years means a period between 3.5 years and 4.5 years after that last period). Finally, operators must receive results of medical exams pertaining to silica health effects, including the results of the ILO reading of the chest x-ray and the pulmonary function testing results. Without this information, operators cannot make informed decisions on worker placement, jobs, and the efficacy of control measures, which are essential to protect worker health.

7. *Allow for employee rotation.*
MSHA should allow employee rotation as an administrative control as OSHA does in its silica standard. We fully support the implementation of the hierarchy of controls where feasible engineering controls are primary and administrative controls supplementary. Worker rotation is a NIOSH-recommended and industrial hygiene-supported best practice administrative control. Worker rotation is a proven and effective administrative control that protects workers from overexposure to silica[1]. The elimination of employee rotation to limit the number of workers exposed to silica flies in the face of MSHA's assumptions stated throughout the preamble that all workers are exposed to some levels of silica. Eliminating worker rotation to limit the number of workers exposed also contradicts the existence of a PEL and its calculation as a time weighted average. A PEL allows for some level of exposure to a substance at issue (in this case, respirable crystalline silica). When a PEL is complied with, and a worker's exposure stays under that permitted level of exposure, then they are deemed by MSHA to be protected. If there was no threshold, then there would be no PEL, or the PEL would be zero– but this is not the case. MSHA has proposed a PEL of 50 $\mu g/m^3$ that it deems protective of worker health and worker rotation is a proven tool operators must be able to use to achieve exposure levels under the PEL after feasible engineering controls have been applied. Furthermore, worker rotation is sometimes the only

feasible control to limit employee overexposure and has other benefits such as ergonomics (i.e., reducing repetitive use injuries) and mental health gained from increasing job engagement.

8. *Temporary respirator use should be explicitly allowed for compliance.*
We agree with MSHA that respirators should not be relied upon as a primary method for controlling exposure to respirable crystalline silica. However, as MSHA notes, there are times where engineering and administrative controls are not feasible and PPE (i.e., respirators) is the only way to keep an employee from being overexposed – for example, during some non-routine maintenance activities, or for tasks of limited duration. In these *limited and temporary* circumstances, respirators should explicitly be allowed for compliance. In addition to maintenance activities, which often by their nature cannot be controlled through engineering and are temporary, there are other short-term tasks for which respirators should be permitted for compliance, e.g., short-term seasonal bagging operations, which only occur a couple of weeks or a month in a year, To keep operators from simply relying on respirators to achieve compliance, MSHA should require operators to outline within their respiratory protection plan (i.e., proposed section §60.14) their process for determining when respirators will be used.

9. *Both 95 and 99 series respirators should be allowed.*
Regarding non-powered air purifying respirators, MSHA's proposed standard only allows for the use of 100 series respirators; however, for non-powered air purifying respirators, 95 and 99 series respirators are protective of worker health and should also be allowed.

10. *The effective date should be extended for M/NM.*
MSHA should make the effective date of a final rule for MNM operations 24 months after publication in the Federal Register, which would provide time for MNM operations to come into compliance with the new provisions. The implementation period of 120 days is insufficient for all operators to comply. Even with the additional 180 days until sampling is proposed to go into effect, this is insufficient especially for MNM operators new to sampling and medical surveillance. It also does not consider the demand and backlog for industrial hygienists, labs, medical facilities, and B-readers. Furthermore, it does not consider time for operators to plan, purchase, and implement engineering controls or that there could be a surge in demand for various components that puts additional demand on an already strained supply chain. According to MSHA's Mine Data Retrieval System (MDRS), in 2022, there were roughly 12,500 mines in the US and over 300,000 miners. Of those mines, over 11,600 (93%) were MNM, accounting for almost 250,000 workers. Currently, most MNM facilities do not conduct medical surveillance, many are unfamiliar with sampling, and numerous operators will have to implement new engineering controls. In contrast, coal operations are already familiar with sampling and medical surveillance and have engineering controls in place, making it simpler for those operators to comply more quickly. Furthermore, there is a more urgent need in the coal industry to quickly implement the rule. There is no silicosis crisis in MNM[2] and providing 24 months for compliance will not negatively affect miners' health, but it is essential for compliance.

11. *Operations found knowingly or intentionally violating the silica standard should face severe penalties.*

Based on the testimony of numerous organizations representing coal miners and coal miners themselves, there is clearly concern that coal operators knowingly cheat on sampling, retaliate due to participation in medical surveillance programs, and engage in other deceitful behavior. There is no evidence that this occurs in the MNM industry. However, *all* miners throughout the entire mining community deserve healthy workplaces; therefore, we recommend MSHA include severe penalties for operators who are found willfully and intentionally violating the silica standard.

12. *MSHA's economic burden analysis is far lower than reality.*
MSHA's reported economic analysis, which states the rule will not impose a significant economic impact, is incorrect. Furthermore, the cost estimate of $1,220 per $1 million in revenue for small operators is a vast understatement of costs to these companies. Based on data gathered by the National Stone Sand and Gravel Association, we calculate the annual burden will be far greater than MSHA estimates. The economic burden imposed on mine operators by the proposed rule is exacerbated by requirements that do nothing to protect miner health and safety. For example, requiring sampling every 3 months *forever* for exposures between 25 $\mu g/m^3$ and 50 $\mu g/m^3$, requiring that medical surveillance be offered to miners with less than 30 days a year of exposure to RCS above the action level, requiring baseline sampling even for facilities that have had exposure monitoring for decades, and more. Under the proposed standard, companies will incur millions of dollars in costs that do not benefit miners' health and safety.

13. *Contractors and unique circumstances in M/NM need to be considered.*
MSHA's proposed standard does not discuss contractors, take into consideration challenges faced by the numerous MNM operations that have employees going back and forth between OSHA and MSHA regulated sites, nor does it address unique challenges that would be faced by portable operations. As we proposed above and will outline in detail in the following section, MSHA should adopt a silica standard similar to OSHA's because it will iron out the numerous issues for contractors, facilities with employees under both MSHA and OSHA, and portable operations.

Thank you for the opportunity to comment on MSHA's proposed rule, "Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection". We appreciate MSHA's commitment to miner safety and health and look forward to working with the agency. Please do not hesitate to reach out with any questions or clarifications.

Respectfully submitted,

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