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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:

I oppose the proposed rule "Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection." Before I get into the facts, I would like to provide my background. I started out mining Gallium and Germanium in Utah from 1989 – 1990. I then worked in the gold mines on the Carlin Trend from 1990 – 1998. I left there and went to work as an MSHA inspector when the office was in Bellevue, WA, from 1998 – 2001. I then started my own company as a consultant from 2001 – to the present. I have worked for over 22 years in this capacity, serving well over 500 mining companies and contractors, training thousands of miners, and serving as an accident investigator, many of which had resulted in the death of a miner. Mercury poisoned me at one of the mines I worked at, and I have suffered many ailments, including severe allergic reactions that put me into anaphylaxis weekly. I understand when there is a need to enforce the law.

In the case of this upcoming Silica standard, many things don't add up, especially the need for stricter standards in the Metal/Non-Metal side of Mining. There have been reported 1600 plus cases of silicosis or complications from exposure to silica in mining, but only 20 of those cases are on the Metal/Non-Metal side. (Data from the Mine Data Retrieval System) There were 20 7000-1 forms in the last ten years claiming the miner had silicosis. That is two miners a year. Of those 20, less than 10 out of the 11,231 mines occurred. If MSHA increased enforcement at those mines as those issues were reported, those numbers would likely diminish. Of those twenty 7000-1 forms, none of the miners showed symptoms, and it showed most returned to work without any restrictions while others chose to retire.

This proposal should give us complex numbers on why the standard needs to be implemented for Metal and Non-Metal mines. For example, the agency should show how many miners on the Metal and Non-Metal mining side are disabled and draw from Workman's Comp. There should be complex numbers on how many miners have died from Silicosis and its complications from the Metal and Non-nonmetal mines.

Table III-1: Number of Mines and Miners by Commodity in 2021

	Number of Mines	Number of Miners
MNM Mines		
Metal	264	35,864
Nonmetal	549	15,736
Stone	2,320	33,031
Crushed Limestone	1,866	23,691
Sand and Gravel	6,232	33,296
MNM Contract Workers	–	57,426*
MNM Subtotal	11,231	199,044
Coal Mines		
Underground	211	21,108
Surface	720	17,571
Coal Contract Workers	–	16,151*
Coal Subtotal	931	54,830
Grand Total	**12,162**	**253,874**

* The number of MNM and coal contract workers is presented in aggregate because commodity data for contract workers is unavailable.
Source: MSHA MSIS Data (reported on MSHA Form 7000-2).

The following are the tables derived from the MSHA Data Retrieval System on how many citations were issued in the last two years broken down by mine types. 56.9315 is included, although this standard is geared towards visibility, not health. I should include those numbers as it shows how the mines control dust.

Citations for Metal 2022-2023 for dust-related Violations

https://www.msha.gov/data-and-reports/statistics/top-20-most-frequently-cited-standards-mine-type

2022 Metal Surface 56.5001(a)/56.5005 10 Citations 0.01%
2023 Metal Surface 56.5001(a)/56.5005 3 Citations 0.00%
2022 Metal Facility 56.5001(a)/.5005 Exposure limits for airborne contaminants. 2 Citations 0.00%
2023 Metal Facility 56.5001(a)/.5005 Exposure limits for airborne contaminants. 3 Citations 0.00%
2023 Metal Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 15 Citations 0.01%
2022 Metal Facility 56.5001(a)/56.5005 1 Citation 0.00%
2023 Metal Facility 56.5001(a)/56.5005 2 Citations 0.00%
2022 Metal Surface 56.9315 Dust control. 6 Citations 0.00%
2023 Metal Surface 56.9315 Dust control. 1 Citation 0.00%
2022 Metal Surface 56.5002 2 Citations 0.00%
2023 Metal Surface 56.5005(a) Control of exposure to airborne contaminants. 2 Citations 0.00%
2023 Metal Surface 56.5002 Exposure monitoring. 1 Citation 0.00%
2023 Metal Surface 56.5005 Control of exposure to airborne contaminants. 1 Citation 0.00%

Citations for Non/Metal 2022-2023 for dust-related Violations
2022 Non/Metal Surface 56.5001(a)/.5005 16 Citations 0.01%
2023 Non/Metal Surface 56.5001(a)/56.5005 13 Citations 0.01%
2022 Non/Metal Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 10 Citations 0.01%
2022 Non/Metal Surface 56.9315 Dust control. 9 Citations 0.01%

2022 Non/Metal Facility 56.5001(a)/.5005 Exposure limits for airborne contaminants. 6 Citations 0.00%
2023 Non/Metal Facility 56.5001(a)/.5005 Exposure limits for airborne contaminants. 6 Citations 0.00%
2023 Non/Metal Surface 56.9315 Dust control. 5 Citations 0.00%
2023 Non/Metal Facility 56.5001(a)/56.5005 3 Citations 0.00%
2023 Non/Metal Surface 56.5005 Control of exposure to airborne contaminants. 3 Citations 0.00%
2022 Non/Metal Surface 56.10000 Not in current CFR 2 Citations 0.00%
2023 Non/Metal Facility 56.5002 Exposure monitoring. 2 Citations 0.00%
2023 Non/Metal Facility 56.9315 Dust control. 2 Citations 0.00%
2023 Non/Metal Surface 56.5002 Exposure monitoring. 2 Citations 0.00%
2022 Non/Metal Facility 56.9315 Dust control. 1 Citation 0.00%
2023 Non/Metal Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 1 Citation 0.00%
2023 Non/Metal Surface 56.5005(a) Control of exposure to airborne contaminants. 1 Citation 0.00%

Citations for S&G 2022-2023 for dust-related Violations
2022 Sand & Gravel Surface 56.9315 Dust control. 19 Citations 0.01%
2022 Sand & Gravel Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 16 Citations 0.01%
2022 Sand & Gravel Surface 56.5001(a)/56.5005 12 Citations 0.01%
2023 Sand & Gravel Surface 56.5001(a)/56.5005 12 Citations 0.01%
2023 Sand & Gravel Surface 56.9315 Dust control. 12 Citations 0.01%
2023 Sand & Gravel Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 11 Citations 0.01%
2022 Sand & Gravel Surface 56.5002 Exposure monitoring. 5 Citations 0.00%
2023 Sand & Gravel Surface 56.5002 Exposure monitoring. 3 Citations 0.00%
2023 Sand & Gravel Surface 56.5005 Control of exposure to airborne contaminants. 2 Citations 0.00%
2022 Sand & Gravel Surface 56.5001(a) 1 Citations 0.00%
2022 Sand & Gravel Surface 56.5005 Control of exposure to airborne contaminants. 1 Citations 0.00%
2023 Sand & Gravel Facility 56.5001(a)/56.5005 1 Citations 0.00%
2023 Sand & Gravel Facility 56.5002 Exposure monitoring. 1 Citations 0.00%
2023 Sand & Gravel Surface 56.5005(a) Control of exposure to airborne contaminants. 1 Citations 0.00%

. **Citations for Stone 2022-2023 for dust-related Violations**
2022 Stone Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 33 Citations 0.02%
2022 Stone Facility 56.5001(a)/.5005 Exposure limits for airborne contaminants. 23 Citations 0.01%
2022 Stone Facility 56.9315 Dust control. 19 Citations 0.01%

2023 Stone Surface 56.5001(a)/.5005 Exposure limits for airborne contaminants. 15 Citations 0.01%
2023 Stone Facility 56.9315 Dust control. 14 Citations 0.01%
2022 Stone Facility 56.5001(a)/56.5005 12 Citations 0.01%
2023 Stone Facility 56.5001(a)/56.5005 10 Citations 0.01%
2022 Stone Surface 56.5002 Exposure monitoring. 9 Citations 0.01%
2022 Stone Surface 58.620 Drill dust control. 9 Citations 0.01%
2022 Stone Facility 56.5002 Exposure monitoring 8 Citations 0.01%
2023 Stone Facility 56.5002 Exposure monitoring 5 Citations 0.00%
2023 Stone Surface 58.620 Drill dust control. 5 Citations 0.00%
2023 Stone Surface 56.5002 Exposure monitoring 4 Citations 0.00%
2023 Stone Facility 56.5005 Control of exposure to airborne contaminants. 3 Citations 0.00%
2022 Stone Facility 56.5005(b) Control of exposure to airborne contaminants. 2 Citations 0.00%
2022 Stone Surface 56.20009 Tests for explosive dusts. 2 Citations 0.00%
2022 Stone Surface 56.5005 Control of exposure to airborne contaminants. 2 Citations 0.00%
2023 Stone Surface 56.5005 Control of exposure to airborne contaminants. 2 Citations 0.00%
2022 Stone Facility 58.620 Drill dust control. 1 Citations 0.00%
2023 Stone Surface 56.20009 Tests for explosive dusts. 1 Citations 0.00%
2023 Stone Facility 56.5005(b) Control of exposure to airborne contaminants. 1 Citations 0.00%
One hundred eighty citations total for the last 2 years, 85 of those are for §56.9315 dust control, which pertains to visibility and not Silica. We don't know how many 95 citations written over these 2 years held up. 3 of the 95 citations were written for explosive dust, which doesn't pertain to Silica.
Forty-six citations a year out of 51,309 Citations and orders issued in 2022.

§56.9315 Dust shall be controlled at muck piles, material transfer points, crushers, and on haulage roads where hazards to persons would be created due to impaired visibility.
These two reasons alone are reasons to take a severe pause on making this a new set of standards.

Of the 57,769 MNM respirable dust samples analyzed for respirable crystalline silica over the 15 years, about 6 percent (3,539 pieces) had respirable crystalline silica concentrations exceeding 100 µg/m3 PEL. The average annual rates of overexposure ranged from a maximum of approximately 10 percent in 2006 (the second year) to a minimum of roughly 4 percent in 2019 (the last year of the time series). Compared with the rates in 2005–2008, overexposure rates were substantially lower in 2009–2017, with a further drop in 2018–19.

Table IV-1: MNM Respirable Dust Samples, 2005–2019

Year	Number of Samples	Number of Samples with Respirable Crystalline Silica Concentration Greater than 100 µg/m³	Percent of Samples with Respirable Crystalline Silica Concentration Greater than 100 µg/m³
2005	6,982	503	7.2%
2006	3,385	338	10.0%
2007	3,879	297	7.7%
2008	2,806	269	9.6%
2009	5,937	320	5.4%
2010	4,992	259	5.2%
2011	3,938	234	5.9%
2012	3,422	205	6.0%
2013	3,150	140	4.4%
2014	3,067	153	5.0%
2015	3,015	169	5.6%
2016	2,958	150	5.1%
2017	3,526	205	5.8%
2018	3,227	152	4.7%
2019	3,485	145	4.2%
Total	**57,769**	**3,539**	**6.1%**

Source: MSHA MSIS respirable crystalline silica data for the MNM industry, January 1, 2005, through December 31, 2019 (version 20220812).

This is old data which shows a downward trend. Where is the data for 2020-2022? That must be made available before this rule takes place. MSHA shouldn't be making standards based on theory.

"For those miners working only under the proposed PEL, MSHA estimates that the proposed rule would result in a total of 799 lifetimes avoided deaths (63 in coal and **736 in MNM mines**) and 2,809 lifetimes avoided morbidity cases (244 in coal and **2,566 in MNM mines)** over 60 years." **Where is this data coming from? In all my research, I can't find deaths reported by MSHA on the Metal/Non-Metal side. Where are these 7000-1 Forms?**

A rule is significant under Executive Order 12866 Section 3(f)(1), as amended by E.O. 14094, if it is likely to result in "an annual effect on the economy of $200 million or more or . . . adversely affect materially the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safely, or State, local, or tribal governments or communities." The Office of Management and Budget has determined that the proposed rule is significant within the meaning of E.O. 12866 Section 3(f)(1).

This rule will easily exceed the $200 million effect on the economy. Small companies are looking at costs exceeding $ 50,000.00 a year, which is a very conservative estimate. Larger companies' fees will be in the millions of dollars annually. That is without the cost of citations, downtime, and defending themselves. The 25 µg/m³ action level will place most mines in violation, as this number is four times lower than the current PEL and will take four times the actions to stay below the Action Level. This will drive the cost of all commodities and tremendously impact transportation needs and expenses. Many small crushing companies crush municipalities, County Road and Bridge Departments, and State Highway shops. One of my companies is crushing for an airport job right now and can't think of addressing these comments like they need to because of the impending weather. It has already snowed in Utah, just south of where they work. They will be forced to charge more, eating up existing budgets for no reason.

2. In the standalone background document entitled “Preliminary Risk Analysis” and as summarized in Section VI. In the preliminary Risk Analysis Summary of this preamble, MSHA relied on the risk models that OSHA used to support its 2016 respirable crystalline silica final rule.

MSHA uses OSHA risk models that have nothing to do with Metal/Non-Metal. Why isn’t MSHA using its risk models? Why not do away with MSHA and put everything under OSHA’s control? Most prominent companies have already adopted OSHA standards for Silica compliance; let’s make everything under OSHA to prevent overlapping and contrary rules. The fact that companies that both agencies regulate will have to follow different standards depending on the task will cause confusion and likely cause companies to violate MSHA standards. Why won’t MSHA allow previous data that companies have compiled? This action is arbitrary and capricious. Why can’t N95 Respirators be used? Why aren’t administrative controls allowed?

I have called around to the few Occupational Medicine Clinics in Oregon and Idaho for my clients. The clinics were unaware of this new standard, and I am still waiting to hear back from several if they can meet the company’s new MSHA-required medical surveillance. In Oregon, all the clinics seem to be west of the Cascade Mountain Range in the higher populated areas. If you’re a Mine Operator from central Oregon or eastern Oregon, the companies will have to go to the surrounding states to meet this new requirement. I’m still waiting to hear back from the Eastern Idaho Clinic. They can complete part of the surveillance, but a group of doctors were convening to see if it is something they even want to do.

In MSHA's experience, for example, environmental conditions such as precipitation (e.g., rain or snow) or wind could affect respirable crystalline silica exposure at miners' normal workplaces throughout their typical workday. Please provide supporting information and data. In Wyoming, the wind blows every day, almost without exception, and it snows six months out of the year. In Western Washington and Western Oregon, it rains more than half of the year. When I worked for MSHA, we were told to sample all the time as it was a typical day for the miners while we were there.
The Mine Act requires a minimum of two inspections a year and didn’t allow us to return when we thought it was optimum.

MSHA is pushing this standard as fast as it can, and no data supports the need for a fast rule on the Metal/Non-Metal side of mining. There should be an extension for comments, and our congressmen and women need to look at this closely to ensure this rule is required on the Metal/Non-Metal side.

Sincerely,

Kim Redding
President