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| **From:** | Curtiss Cooley Jr. |
| **To:** | zzMSHA-Standards - Comments to Fed Reg Group |
| **Subject:** | RIN 1219-AB36 |
| **Date:** | Monday, September 11, 2023 6:13:47 PM |
| **Attachments:** | TATA comment letter MSHA.pdf |



Hello,

The attached comment letter is submitted in response to the Mine and Safety Health Administration's rulemaking concerning Crystalline Respirable Silica, RIN 1219-AB36 and Docket No. MSHA-2023-0001.

Thank you,

**Curt Cooley**
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*"Life is like a dogsled team. If you ain't the lead dog, the scenery never changes."* - Lewis Grizzard.

TATA CHEMICALS SODA ASH PARTNERS LLC

September 11, 2023

S. Aromie Noe
Director, Office of Standards, Regulations, and Variances
Mine Safety and Health Administration
201 12th Street S
Suite 401
Arlington, VA 22202

Re: RIN 1219-AB36
Docket No: MSHA-2023-0001
Email Address: zzMSHA-comments@dol.gov

Tata Chemicals Soda Ash Partners, LLC (Tata) hereby submits its comments to the Mine Safety and Health Administration (MSHA) in the above-referenced proposed rulemaking regarding Respirable Crystalline Silica (RCS), titled "Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection," published on July 13, 2023[1] (the Proposed Rule). MSHA has since extended the initial 45-day public comment period by 15 days until September 11, 2023, for a total of 60 days.

Tata owns and operates the Tata Chemicals Mine (the Tata Mine) near Green River, Wyoming. The Tata Mine produces and processes trona, a non-metal evaporite,[2] which is the primary source of the nation's sodium carbonate (often called soda ash), found in many common consumer, agricultural and industrial products. Once mined, trona is processed into soda ash. Soda ash is an essential ingredient in the manufacturing industry, from industrial chemicals to home products such as baking soda. The number one use of soda ash is glass manufacturing, but soda ash is also used in making soaps and detergents, water purifiers, paper and numerous other food and pharmaceutical products. Trona-related products are used by all of us every day.[3] Mines in Wyoming produced over 17.4 million tons of trona and employed 2,225 miners in 2018.[4]

Tata shares MSHA's stated mission of protecting the health and safety of our miners. We commend MSHA for its efforts to date on the Proposed Rule. It is clear that much time has gone into drafting; however, significant work remains.

As many commenters from the regulated mining community have noted, the Proposed Rule is quite lengthy and technical. In it, MSHA requests responses to 40-plus different areas, many of which

[1] 88 Fed. Reg. 44,582 (Jul. 13, 2023).
[2] An evaporite is "sedimentary rock (such as gypsum) that originates by evaporation of seawater in an enclosed basin." Found at https://www.merriam-webster.com/dictionary/evaporite.
[3] For more information on Trona mining, processing and uses, visit the Wyoming Mining Association website at https://www.wyomingmining.org/minerals/trona/.
[4] *Id.*

involve multiple subparts, but has only provided 60 days for industry and other stakeholders to review, digest, evaluate and comment on the Proposed Rule. In the Proposed Rule (and preamble), and at MSHA's three related hearings, MSHA requested that commenters include data to support submitted comments. To make this public comment process meaningful, however, such data must be developed, collected, analyzed and submitted.

Moreover, many of those commenting or assisting in preparing comments are full-time health and safety professionals, who spend a majority of their time ensuring employee health and safety. Most are not seasoned government affairs professionals who regularly participate in agency rulemakings. The goal of a comment period is to provide an opportunity for stakeholders to be heard. Section 553(c) of the Administrative Procedure Act (APA) states, in part, "the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation."[5] Sixty days is not nearly enough time to properly gather requested data, particularly where MSHA itself has not provided the data in the Proposed Rule and supporting information. MSHA should follow the letter and spirit of this Congressionally-proscribed process and provide commenters with enough time to properly comment. It will certainly serve to strengthen the quality of MSHA's final rule.

Accordingly, Tata hereby requests an additional 60 days to evaluate more fully the Proposed Rule and to submit additional substantive comments.

**PEL / Action Level / Administrative Controls**

The Proposed Rule models in part the Occupational Safety and Health Administration's (OSHA) 2016 rule regarding RCS covering general industry, construction and the maritime industry (the OSHA Rule).[6] In the Proposed Rule, MSHA recognizes that "[s]ilica dust is generated in most mining activities" and presumably understands the complexity and time-consuming process of designing feasible engineering controls to meet the lowered Permissible Exposure Limit (PEL) for all environments in a mine operation. Indeed, Tata does not take issue with MSHA's, the National Institute for Occupational Safety and Health's (NIOSH) and others' conclusions that over-exposure to RCS is harmful.

While Tata generally agrees with MSHA following OSHA's lead and NIOSH's recommendations to reduce the RCS PEL to 50 $\mu g/m^3$, Tata encourages MSHA to follow the OSHA model much more closely. For instance, unlike the OSHA Rule, which acknowledges an option to test a worker's exposure while using personal protective equipment (PPE), the Proposed Rule does not allow this option. If the intent is to protect the miner, the miner's PPE environment must be factored into the required exposure sampling tests in any final MSHA RCS rule. MSHA instead states, "respiratory protection should only be relied upon as an exposure control measure in limited situations and on a temporary basis, and to supplement engineering controls, followed by administrative controls."

[5] Administrative Procedure Act, 5 U.S.C. § 553 (2006)

[6] Occupational Exposure to Respirable Crystalline Silica, 81 Fed. Reg. 16,285 (Mar. 25, 2016).

In reality, some mine operations will find the engineering and administrative controls infeasible or too difficult to implement in order to comply with MSHA's proposed PEL unless workers can use PPE to prevent excessive silica exposure. Indeed, NIOSH and OSHA support the use of N95 respirators and technologically advanced powered air-purifying respirators (PAPR), and MSHA should as well. PPE is necessary and effective for trona mines such as Tata's; a loosely-defined "temporary option" provides little certainty and is neither practical nor technologically or economically feasible.

Some situations arise where the best control is the worker's PPE, which may include a PAPR with a high-efficiency particulate air (HEPA) filter. Many of Tata's miners voluntarily wear respirators all day, every day, without issue. This decades-long practice works, and our miners have safely and successfully logged hundreds of thousands of man-hours while using respirators. As a result, and as further discussed herein, trona mines have had zero reported silica-related illnesses due to the nature of the mines, the mining methods and environment and the proper and intentional use of PPE. MSHA should embrace twenty-first century technology, which has made mining safer and healthier. We believe that if PPE is factored into the testing/sampling process as a permanent control option, miner safety and health will be enhanced, and nonmetal evaporite operations, like Tata's, should be able to achieve compliance with the lower PEL.

Tata also objects to the proposed prohibition against rotating miners as an administrative control, especially if MSHA does not allow for PPE to be factored into environmental sampling for a miner's exposure to RCS. While by itself job rotation may not be an optimal means of reducing RCS exposure, job rotation is and has always been an important and MSHA-recognized administrative control for limiting exposure to any hazard.

Additionally, MSHA proposes a 25 microgram-per-cubic-meter action level; yet the Proposed Rule states, "an exposure limit of 25 $\mu g/m^3$ may not be achievable for all mines."[7] Tata underscores the concern that 25 $\mu g/m^3$ will be unnecessarily burdensome for it and most similar mines both from a recordkeeping and sampling perspective. Instead, as each mining operation is unique, each mine operator should identify its own action level and related policies and procedures for RCS mitigation at such level.

**Table 1 – Mining Operations**

During the instant rulemaking process, commenters and speakers at hearings suggested that MSHA consider a "Table 1" like OSHA adopted in the OSHA Rule.[8] OSHA developed Table 1 for RCS as a flexible compliance option that effectively protects workers from silica exposure. It itemizes tasks that generate high exposures to silica, and for each task, specifies engineering controls and administrative controls that effectively protect workers. MSHA wisely appears open to considering such an approach and has requested examples of what a Table 1 in this context might look like. Since then, Tata has worked to prepare some examples, but, as with meaningful data development, doing so will take more time than the current comment period allows.

[7] 88 Fed. Reg. at 44,853.
[8] *See,* e.g., 29 C.F.R. 1926.1153(c)(1).

A Table 1 for mining operations must be mine-specific because mine operations and commodities vary widely. A Table 1 for mining could be incorporated in a mine's Ventilation Plan and should provide for all Hierarchy of Controls. This includes engineering controls, such as water sprays, adequate water pressure, adequate ventilation, maintenance of bits, scrubbers, remote-control or automated operation, and administrative controls, such as job rotation.

A Table 1 for Metal Non-Metal (MNM) mines should also be based on sampling data, and it could identify those mining occupations with history of silica exposure based on such data. Subsequently, MSHA should share this data with mine operators and allow them to create specific procedures for each mine compliant with Table 1. MSHA and the mining industry simply need more time to further develop an applicable Table 1.

**Sampling and Coal vs. Metal/Non-Metal Mines**

There is much *sampling* data in the proposed rule, but that data is primarily for various types of mines and mining occupations (e.g., drilling, stonecutting, conveyor operators, etc.), rather than critical data regarding existence of silicosis at various types of non-coal mines. For example, the Proposed Rule and hearing testimony focus on underground coal mining and clearly explain the associated unique risks. Many of these risks, however, are not present at other types of underground and surface mines, including MNM mines. There is an absence of data in the Proposed Rule on silica-caused illness and mortality rates at these other types of mining operations, across different commodities, which comprise the totality of the US mining industry.

Based on our research on and beyond MSHA's public Mine Data Retrieval System database, silicosis is virtually non-existent at trona mines.[9] Whereas, by comparison, coal mines have elevated levels of silica-related illness, and their operations may require additional administrative and engineering controls, action levels and PELs to further mitigate RCS exposure beyond what is needed at trona and other types of mines.[10]

For example, a NIOSH report found that the prevalence of Coal Workers Pneumoconiosis (CWP) increased between 2006-2007, which followed a consistent downward trend after the 1969 Mine Act.[11] CWP's prevalence increased in the southern WV, eastern and central KY, TN, and VA MSHA regions by 2–4 times greater than predicted from cumulative coal mine dust exposure and age. Evidence from dust sampling in mines in this region confirmed the occurrence of excessive silica exposures. "The results show that CWP prevalence is increasing in mines of all sizes, but the trend is much more obvious and much greater among miners employed in smaller coal

[9] *See, generally,* MDRS found at https://www.msha.gov/data-and-reports/mine-data-retrieval-system.
[10] *Id.*
[11] National Institute of Occupational Health and Safety, Current Intelligence Bulletin 64, Coal Mine Dust Exposures and Associated Health Outcomes, A Review of Information Published Since 1995.

mines."[12] Possible causes include working longer hours and increased production. Increased production should have resulted in increased measures to control respirable dust.[13]

Another NIOSH report summarizes the mass concentration and quartz mass percent of respirable coal mine dust samples annually by district and by occupation during 1982-2017.[14] The report states the number of black lung cases decreased from the mid 1970's through the late 1990's among long-tenured coal miners from 30% to 5%, with the most severe form of black lung, progressive massive fibrosis (PMF), nearly eradicated. Since that time, there has been a resurgence of black lung and PMF in central Appalachia surpassing any historical precedent. Indeed, 75% of all reported black lung cases occurred in central Appalachia.[15]

As coal is the focus of the available data and the source of the bulk of the problems cited by MSHA, comments and testimony to date, we suggest MSHA consider a tailored approach to metal, non-mental, coal, and other mines by commodity.

Applying a sweeping silica rule change across disparate mine operations with widely differing silica exposure levels is counterintuitive. Salt and evaporite mining, like Tata's Mine, for example, present a different set of hazards than coal and hardrock mining. Therefore, and because of the lack of silicosis cases stemming from trona mining, MSHA should consider either a separate silica rule or divisions within a final RCS rule for nonmetal operations, including distinct provisions for salts and other evaporites, specifically.[16]

A final MSHA silica rule should focus on targeting problematic operations and commodities and sharing that information with the public. To tailor the best solutions, all stakeholders, including MSHA, must understand how RCS-related illness may stem from different types of mining operations. Data sharing facilitates an understanding of where the problems truly exist and how to properly solve for them. Commenters should have the opportunity to review and comment on this data.

The one-size-fits-all approach to the disparate mine operations embodied in MSHA's Proposed Rule is not the best solution, and there is much precedent for a tailored approach. As proof, we need to look no further than MSHA's distinct standards for surface and underground and metal/nonmetal and coal operations.[17] OSHA's use of Table 1 further underscores this point.

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[12] *Id.*

[13] *See id.*

[14] National Institute of Occupational Health and Safety, Respirable Coal Mine Dust in Underground Mines, United States, 1982-2017

[15] *Id.*

[16] For example, trona mining typically does not involve the use of explosives, which may increase respirable silica exposure levels.

[17] See, e.g., 30 C.F.R. Parts 56, 57, 75 and 77.

**Conclusion**

Tata's comments on the Proposed Rule can be summarized as follows:

1. Extend the comment period for an additional 60 days.
2. Work with stakeholders to develop a Table 1 for mining like that used in the OSHA Rule.
3. Allow technologically advanced PPE, such as PAPRs *and* respirators, and administrative job rotation to permanently account for a miner's PEL. Accommodate the time-consuming process of implementing new engineering controls.
4. MSHA should publicly share its data regarding RCS exposure and silica-related illness for various mines and mining operations beyond coal and allow for public review and comment.
5. Remove the 25 $\mu g/m^3$ action level and require each unique mine to identify its own action level and appropriate, feasible RCS abatement policies once that level is reached.
6. Adopt a tailored approach to mitigate RCS exposure across varying commodities, operations and levels of silica, as a one-size-fits-all approach is not ideal given the huge differences across the various disparate mining sectors.

Tata greatly appreciates the opportunity to comment on the Proposed Rule and MSHA's effort to craft a rule intended to make mining safer and heathier for everyone.

Thank you for your consideration.

Sincerely,

Curtiss Cooley
Safety Manager / Mine Rescue Coordinator