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September 11, 2023

The Honorable Julie Su  
Acting Secretary  
U.S. Department of Labor  
200 Constitution Ave., NW  
Washington, DC 20210

RE: Lowering Miners' Exposure to Respirable Crystalline Silica and  
Improving Respiratory Protection (RIN 1219-AB36)

Dear Acting Secretary Su:

We submit these comments on the proposed rule published by the Mine Safety and Health Administration (MSHA) of the U.S. Department of Labor (DOL) to update miners' protections from silica (Proposed Rule).<sup>1</sup> Given that the House Committee on Education and the Workforce has jurisdiction over labor standards in general and the welfare of miners specifically, we have been engaged on the issues addressed by this Proposed Rule for years.<sup>2</sup>

We strongly support MSHA's decision to lower the Permissible Exposure Limit (PEL) for silica to 50  $\mu\text{g}/\text{m}^3$  in both coal and metal/nonmetal (MNM) mines. It is urgent that the revised PEL be adopted quickly, since miners have not received any meaningful protection from silica dust in 50 years.<sup>3</sup> We also agree that extending to MNM miners the same benefit that coal miners currently receive of operator-covered respiratory screenings will be invaluable to helping all miners track

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<sup>1</sup> Lowering Miners' Exposure to Respirable Crystalline Silica and Improving Respiratory Protection, 88 Fed. Reg. 44,852 (July 13, 2023) [hereinafter "Proposed Rule"]. For convenience, these comments will refer to the hazard targeted by the Proposed Rule—respirable crystalline silica, or crystalline silica dust so fine that it can be inhaled and reach deeply into the alveolar regions of the lung—with the simple shorthand "silica" or "silica dust."

<sup>2</sup> See, e.g., *Breathless and Betrayed: What Is MSHA Doing to Protect Miners from the Resurgence of Black Lung Disease?: Hearing Before the Subcomm. on Wrkf. Prots. of the H. Comm. on Educ. & Lab.*, 116th Cong. (2019); *Examining the Policies and Priorities of the U.S. Department of Labor: Hearing Before the H. Comm. on Educ. & Lab.*, 116th Cong. 4, 6, 61, 139, 170-71 (2019); *H.R. 5663, Miner Safety and Health Act of 2010: Hearing Before the H. Comm. on Educ. & Lab.*, 111th Cong. (2010); *Protecting the Health and Safety of America's Mine Workers: Hearing Before the H. Comm. on Educ. & Lab.*, 110th Cong. 37 (2007).

<sup>3</sup> See Letter from Reps. Robert C. "Bobby" Scott & Alma S. Adams to the Hon. Richard L. Revesz, Off. of Info. & Reg. Affs. (June 12, 2023), [https://democrats-edworkforce.house.gov/imo/media/doc/ranking\\_member\\_scott\\_letter\\_to\\_oira\\_re\\_msha\\_silica\\_proposed\\_rule.pdf](https://democrats-edworkforce.house.gov/imo/media/doc/ranking_member_scott_letter_to_oira_re_msha_silica_proposed_rule.pdf), at 4-6 (recounting history of recommendations for a lowered PEL and MSHA inaction).

their respiratory health. As discussed below, however, the Proposed Rule falls short in many other respects. In order to meet the agency’s mandate under the *Federal Mine Safety and Health Act of 1977* (Mine Act) to set the standard that “attain[s] ... the highest degree of health and safety protection for the miner” and “most adequately assure[s] ... that no miner will suffer material impairment of health or functional capacity,”<sup>44</sup> the Proposed Rule must remedy these shortcomings by demanding more from operators to keep mines safe; closing loopholes that unscrupulous operators and their hired experts can use to avoid meaningful compliance; empowering workers; and leveraging the power of information.

## **I. THE PROPOSED RULE DOES NOT DEMAND ENOUGH FROM OPERATORS TO REDUCE SILICA EXPOSURES.**

The Proposed Rule is built from the right kinds of core elements. The first and most important, of course, is the PEL. The PEL is accompanied by provisions on exposure monitoring, with prescribed schedules of dust sampling to be conducted by operators that, depending on whether the results exceed the PEL or a lower “action level” of 25  $\mu\text{g}/\text{m}^3$ , would trigger additional monitoring or corrective action. They appear to be meant as complementary requirements: the PEL establishes the upper limit for silica exposure, and the exposure monitoring provisions set out operators’ day-to-day requirements to ensure that they stay at or below the PEL. In order for this program of measures to work effectively and keep miners safe, however, the exposure monitoring provisions must be significantly strengthened to require more vigilance from operators.

### **A. The Proposed Rule creates options for operators to slough off responsibility.**

The Proposed Rule permits operators to assess their own dust levels, decide upon corrective measures if their samples ever exceed the PEL, and reevaluate every six months whether they believe additional monitoring is warranted. The following is a rough schematic of the exposure monitoring and corrective action provisions:<sup>5</sup>

#### **1) Baseline Sampling**

- a) Requirement: One round of samples for each miner who is or may reasonably be expected to be exposed to silica, to be completed by the 180th day following the first 120 days of publication of the final rule.
- b) Exit paths:
  - i) *Samples Below Action Level*: Shift to **(2) Periodic Sampling** unless operator can show certain additional evidence backing the low baseline samples,<sup>6</sup> in which case shift to **(4) No Sampling**.
  - ii) *Samples Exceed Action Level*: Shift to **(2) Periodic Sampling**.
  - iii) *Samples Exceed PEL*: Shift to **(3) Corrective Action Sampling**.

#### **2) Periodic Sampling**

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<sup>44</sup> Federal Mine Safety and Health Act of 1977, Pub. L. No. 91-173, § 101(a)(6)(A) [hereinafter Mine Act].

<sup>5</sup> See Proposed Rule, *supra* note 1, at 45,012-45,013 (proposed §§ 60.12-60.13).

<sup>6</sup> See *infra* text accompanying notes 81-86.

- a) Requirement: One round of samples within 3 months of entering this phase, followed by subsequent rounds every 3 months until an exit path applies.
  - b) Exit paths:
    - i) *Samples Below Action Level*: Remain in the 3-month cycle until there are two consecutive rounds of periodic sampling below action level, in which case shift to **(4) No Sampling**.
    - ii) *Samples Exceed Action Level*: Remain in the 3-month cycle.
    - iii) *Samples Exceed PEL*: Shift to **(3) Corrective Action Sampling**.
- 3) Corrective Action Sampling**
- a) Requirement: Issue respirators, take whatever corrective actions are necessary to reduce silica below PEL, then take samples at an unspecified interval until an exit path applies.
  - b) Exit paths:
    - i) *Samples Below Action Level*: Cease respirator use and shift to **(2)(b)(i)**.
    - ii) *Samples Exceed Action Level*: Cease respirator use and shift to **(2) Periodic Sampling**.
    - iii) *Samples Exceed PEL*: Continue use of respirators, corrective actions, and sampling until (i) or (ii) applies.
- 4) No Sampling**
- a) Requirement: Nothing.
  - b) Exit path: Every 6 months, shift to **(5) Semi-Annual Evaluation**.
- 5) Semi-Annual Evaluation** (applicable throughout all previous phases)
- a) Requirement: Every 6 months, evaluate any changes in operation to determine if new or increased silica exposures may reasonably be expected to have resulted from changes.
  - b) Exit paths:
    - i) *No Increase Reasonably Expected*: Continue with applicable pre-evaluation requirements.
    - ii) *Increase Reasonably Expected*: Conduct a round of post-evaluation samples then shift as appropriate:
      - (1) *Samples Below Action Level*: Shift to **(4) No Sampling**.
      - (2) *Samples Exceed Action Level*: Shift to **(2) Periodic Sampling**.
      - (3) *Samples Exceed PEL*: Shift to **(3) Corrective Action Sampling**.

Although this is intended to be the roadmap for operators to stay aware of silica levels and act when necessary, it comes with pathways to inaction.

#### Options for Zero Exposure Monitoring

The Proposed Rule understandably identifies conditions that escalate operators' requirements for monitoring and dust control measures. It does not, however, rest on a foundation of regular monitoring for all operators. Instead, even though silica dust is 20 times more toxic than coal

dust and causes faster disease progression,<sup>7</sup> the Proposed Rule actually allows for multiple pathways for operators to escape exposure monitoring requirements, even as early as the first 300 days of the publication of the final rule. Operators freed from exposure monitoring would need to reevaluate every six months whether changes in production processes or other factors warrant a return to monitoring, but that decision is left to the discretion of the operators themselves.

#### Options to Shift Responsibility onto Miners

Additionally, the Proposed Rule would allow operators to continue mining activity even when silica levels exceed the PEL, provided only that they supply respirators to miners.<sup>8</sup> As MSHA knows from the long-established hierarchy of controls, personal protective equipment is the least-preferred occupational health control measure, subordinate to the more effective controls that eliminate the hazard or engineer away the exposure.<sup>9</sup> The Proposed Rule partially embodies the hierarchy of controls by instructing operators to prioritize engineering controls, supplemented when necessary by administrative controls.<sup>10</sup> The hierarchy is turned upside down, however, when exposures exceed the PEL, because the Proposed Rule would allow “temporary” and “non-routine” use of respirators while operators attempt to implement corrective action to bring dust levels down.<sup>11</sup> Even if a corrective action has immediate effect, operators will not have definitive information for several weeks, and miners will be forced to wear respirators as they continue high-exertion labor in often hot environments during that time.<sup>12</sup> Moreover, there is no time limit specified for the “temporary” use of respirators.

Even worse, allowing miners to continue working despite hazardous dust levels flatly violates the Mine Act. The Mine Act is quite clear: “No mandatory health or safety standard promulgated under [Title I] shall reduce the protection afforded miners by an existing mandatory health or safety standard.”<sup>13</sup> The interim respirable dust standard for coal miners set in Title II—which MSHA is free to supersede, subject to this prohibition against regulatory weakening<sup>14</sup>—expressly forbade respirator use as a “substitute[] for environmental control measures.”<sup>15</sup> MSHA’s current respirable coal mine dust standard respects that limitation.<sup>16</sup> At least to the extent that the Proposed Rule would cover coal mines, the provision contemplating continued production activity with respirators in conditions of hazardous silica dust levels would illegally

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<sup>7</sup> Howard Berkes *et al.*, *An Epidemic Is Killing Thousands of Coal Miners. Regulators Could Have Stopped It*, NPR (Dec. 18, 2018), <https://www.npr.org/2018/12/18/675253856/an-epidemic-is-killing-thousands-of-coal-miners-regulators-could-have-stopped-it>.

<sup>8</sup> Proposed Rule, *supra* note 1, at 45,013-45,014 (proposed §§ 60.13-60.14).

<sup>9</sup> Nat’l Inst. for Occ. Safety & Health, *Hierarchy of Controls*, CDC.GOV., <https://www.cdc.gov/niosh/topics/hierarchy/default.html>.

<sup>10</sup> Proposed Rule, *supra* note 1, at 45,012 (proposed § 60.11).

<sup>11</sup> *Id.* at 45,012-45,014 (proposed §§ 60.12(c), 60.12(f)(4), 60.13(a)(2), 60.14).

<sup>12</sup> *See infra* text accompanying notes 17-23.

<sup>13</sup> Mine Act § 101(a)(9).

<sup>14</sup> *Id.* § 201(a).

<sup>15</sup> *Id.* § 202(h).

<sup>16</sup> 30 C.F.R. § 72.700(a).

weaken miners' existing protections. MSHA must, therefore, narrow the respirator use provision consistent with the respirable coal mine dust standard—and, in order to attain the maximum attainable protection for miners' health, must similarly narrow the provision for MNM miners as well.

**B. The Proposed Rule does not guarantee rapid response to hazardous silica levels.**

If the goal of the exposure monitoring requirement is to create a feedback loop for operators—requiring them to monitor dust levels and make changes on the fly, as necessary, to keep levels below the PEL—then timeliness of monitoring data is particularly important. It is therefore puzzling that the Proposed Rule does not require operators to use the most contemporaneous data.

Delayed Sampling Data

Through its prescriptions for the sampler devices to be used and the method of sample analysis,<sup>17</sup> the Proposed Rule effectively forces a significant lag time between sampling and receipt of sample results. The Proposed Rule requires operators to ship samples to an accredited lab for analysis, a process that can take up to two weeks before the results are available.<sup>18</sup> Given that mines are “constantly moving into new and often different geological strata with changing silica levels,”<sup>19</sup> exposure data from weeks prior will likely be “of little use to inform modifications to workplace conditions aimed at preventing overexposures.”<sup>20</sup>

An alternative with more contemporaneous sample analysis is possible. Researchers with the National Institute for Occupational Safety and Health (NIOSH) and elsewhere have been steadily developing and testing methods for inexpensive on-site analysis of dust samples at the end of a miner's shift.<sup>21</sup> Portable instruments using Fourier transform infrared spectroscopy (FTIR) directly on sampler filters are now available on the market.<sup>22</sup> Having developed the method successfully for use in coal mines, researchers have more recently learned how to apply mine-specific correction factors to account for the “interferences” that had previously undermined the

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<sup>17</sup> Proposed Rule, *supra* note 1, at 45,013 (proposed § 60.12(f)-(g)).

<sup>18</sup> Public Hearing Transcript from the 08/03/2023 Arlington, VA Hearing—Lowering Miners' Exposure to Respirable Protection (Doc. No. MSHA-2023-0001-1353), Reg. Docket No. MSHA-2023-0001, at 24 [hereinafter Arlington Transcript].

<sup>19</sup> Arthur L. Miller *et al.*, *Evaluating Portable Infrared Spectrometers for Measuring the Silica Content of Coal Dust*, 1 J. ENVTL. MON. 48 (2011).

<sup>20</sup> Arthur L. Miller *et al.*, *Deposition Uniformity of Coal Dust on Filters and Its Effect on the Accuracy of FTIR Analyses for Silica*, 47 AEROSOL SCI. & TECH. 724 (2013).

<sup>21</sup> Jason D. Pampera *et al.*, *Use of the Field-Based Silica Monitoring Technique in a Coal Mine: A Case Study*, 37 MINING, METALL. & EXPL. 717 (2020); Emanuele Cauda *et al.*, *Promoting Early Exposure Monitoring for Respirable Crystalline Silica: Taking the Laboratory to the Mine Site*, 13 J. OCC. & ENVTL. HYGIENE D39 (2016); Jun Ojima, *Determining of Crystalline Silica in Respirable Dust Samples by Infrared Spectrophotometry in the Presence of Interferences*, 45 J. OCC. HEALTH 94 (2003)

<sup>22</sup> Elizabeth L. Ashley *et al.*, *Performance Comparison of Four Portable FTIR Instruments for Direct-on-Filter Measurement of Respirable Crystalline Silica*, 64 ANNALS WORK EXPOS. & HEALTH 536 (2020).

applicability of the method in MNM mines.<sup>23</sup> Rapid quartz monitoring with end-of-shift analysis is, thus, on the horizon. Since the direct-on-filter analysis method is non-destructive, the filters can still be shipped to accredited labs for validation.<sup>24</sup>

### Disconnected from Change

Recognizing the ever-changing nature of mine conditions, the Proposed Rule calls upon operators to conduct a semi-annual retrospective evaluation of recent changes and assess whether their exposure monitoring regimes need to be updated in response to such changes.<sup>25</sup> The limitation here is that monitoring updates would always be decided retrospectively, possibly several months after a change in the mine, rather than implemented contemporaneously with those changes.

Additionally, some of these changes could create risks of silica overexposure, perhaps even acute overexposure, during the execution of the change itself. For example, a United Mine Workers of America representative testifying in a public hearing for this rulemaking pinpointed “high-silica cutting situations in underground coal mines, such as ... cutting overcast, cutting belt channels, doing types of outback construction work.”<sup>26</sup> These operations could, he explained, already escape dust monitoring under current rules, much less the Proposed Rule:

These are types of work that are generally not as monitored like you are on a production section. They don’t have the ventilation controls that are set up for the production section, and these miners are cutting ... all rock, and we believe that a lot of the issues that we’re seeing are coming from those situations.<sup>27</sup>

Such activities performed after an operator has already established a monitoring regime (or who is not conducting any monitoring, given the monitoring offramps discussed earlier) but concluded before any semi-annual review could create silica exposures that would not be captured at all.

### **C. MSHA should revise the exposure monitoring provisions to require continuous vigilance and ongoing operator responsibility for maintaining low dust levels.**

In order to ensure that operators remain vigilant during all phases of mine operation and provide the highest degree of health and safety protections for miners, the final rule should address the deficiencies discussed above. We offer the following recommendations:

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<sup>23</sup> Emanuele Cauda *et al.*, *Evaluating the Use of a Field-Based Silica Monitoring Approach with Dust from Copper Mines*, 15 J. OCC. & ENVTL. HYGIENE 732 (2018); Julie F. Hart *et al.*, *A Comparison of Respirable Crystalline Silica Concentration Measurements Using a Direct-On-Filter Fourier Transform Infrared (FT-IR) Transmission Method vs. a Traditional Laboratory X-Ray Diffraction Method*, 15 J. OCC. & ENVTL. HYGIENE 743 (2018).

<sup>24</sup> Pampena *et al.*, *supra* note 21.

<sup>25</sup> Proposed Rule, *supra* note 1, at 45,012-45,013 (proposed § 60.12(d)-(e)).

<sup>26</sup> Arlington Transcript, *supra* note 18, at 93-94 (statement of Josh Roberts, United Mine Workers).

<sup>27</sup> *Id.*

- MSHA should require much more frequent and ongoing testing without the potential discontinuities allowed under the Proposed Rule. The foundational requirement should be no less than quarterly monitoring, ratcheted up to monthly monitoring when silica samples exceed the action level and even more frequently when levels exceed the PEL.
- Regardless of the periodicity of the required sampling, MSHA should (1) identify specific activities that may not be continuous activities but would be expected to create silica hazards and (2) require contemporaneous monitoring during those activities.
- Given the changing nature of mines, MSHA should require operators to develop and submit dust sampling plans for MSHA approval. Changes likely to create new silica dust hazards should be identified in advance or should be the basis of a request to modify the plan. Underground coal operators could combine such a plan with their ventilation plans. The plan should be posted on the mine bulletin board and distributed to miner's representatives. Miners themselves, given their expertise, should be allowed to participate in the development of dust sampling plans, in the same manner as employees participate in safety plans under OSHA's Process Safety Management standard.<sup>28</sup>
- Respirator use should be much more narrowly circumscribed. If silica dust exposures exceed the PEL, the primary control for most miners should be to eliminate exposures by shutting down relevant areas of the mine and limiting respirator use to workers deployed to implement the corrective dust controls.
- MSHA should leverage the technology-forcing nature of the Mine Act<sup>29</sup> and prioritize rapid quartz monitoring and end-of-shift analysis. As it did in the rulemaking for continuous personal dust monitors,<sup>30</sup> MSHA could phase in this requirement over a number of years it projects for the technology to meet the agency's expectations.

## II. THE PROPOSED RULE FAILS TO ADDRESS OPERATOR FRAUD.

The Proposed Rule is, for the most part, a policy that depends on operator self-regulation. The PEL is definitely enforceable: it is a clear, unmistakable command setting a specific upper bound to the amount of silica exposure tolerated, and it is simple for MSHA to measure whenever the agency performs an inspection. The exposure monitoring provisions, by contrast, leave much to the discretion of operators to determine where monitoring will take place and, at times, whether monitoring is even warranted at all. By entrusting so many essential decisions to operators, MSHA has failed—at great peril to miners—to learn the many lessons of operator compliance fraud.

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<sup>28</sup> See Process Safety Management of Highly Hazardous Chemicals, 29 C.F.R. § 1910.119.

<sup>29</sup> Because courts have interpreted occupational safety and health statutes as “technology forcing,” a proposed health standard should not be rejected as infeasible “when the necessary technology looms on today’s horizon.” AFL-CIO v. Brennan, 530 F.2d 109 (3d Cir. 1975); Society of Plastics Industry v. OSHA, 509 F.2d 1301 (2d Cir. 1975). In fact, when MSHA is knowledgeable about the industry’s innovative capabilities, it can project ahead to coming technological solutions based on “plausible reasons for its belief that the industry will be able to solve those problems in the time remaining.” Kennecott Greens Creek v. MSHA, 476 F.3d 946, 957 (D.C. Cir. 2007) (quoting National Petrochemical & Refiners Ass’n v. EPA, 287 F.3d 1130, 1136 (D.C. Cir. 2002)).

<sup>30</sup> Lowering Miners’ Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors, 79 Fed. Reg. 24,814 (May 1, 2014) [hereinafter Coal Mine Dust Final Rule].

**A. MSHA knows from decades of experience that mine operators routinely attempt to cheat dust sample programs.**

For as long as MSHA has been an agency, it has been aware of fraudulent efforts by operators to cheat dust sampling requirements. Known simply as “dust cheating,” the practice is so pervasive and predictable that even Lynn Martin, Secretary of Labor in the George H. W. Bush Administration, concluded that many operators have “an addiction to cheat[ing].”<sup>31</sup> Although some of the particulars of major dust cheating controversies have varied, there is a remarkably consistent pattern throughout the decades.

1978 Hearings

MSHA heard from miners during hearings the agency held in 1978 about the methods operators used to cheat the system when taking dust samples:

Some of these methods were legal and exploited loopholes in the regulations; miners said, for example, that when dust samples were taken, operators would reduce production, increase ventilation, and assign miners who wore “samplers”—the devices by which dust samples were collected ... —to less dusty jobs. Other ways of cheating were blatantly illegal. Some operators, for example, placed samplers in clean areas of the mine, turned the samplers off before the shift was over, took samples outside the mine, discarded filter cassettes (the part of the sampler on which respirable dust is collected) that looked too dirty, and intentionally voided samples.<sup>32</sup>

Moreover, miners testified in those hearings that a provision of the earliest coal dust sampling rules to check against operator fraud—a requirement that miners sign dust cards accompanying samples—was likewise routinely cheated:

[M]iners testified that they had been asked to sign blank cards before the sample was taken; that cards were switched if they had a “bad” sample (i.e., one with a lot of dust on it); that signatures were forged on data cards; that miners who refused to sign the data card were sent home for the day; that if they turned in a “bad” sample, they were required to continue wearing the sampler until they got a “good” one.

An attorney representing miners for black lung benefits testified that mine operators introduced dust data cards signed by the claimant into hearings in order to discredit the miner’s claim that he was disabled because of dust at the operator’s mine. Though seldom permitted as evidence, it was a nettlesome practice, literally adding

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<sup>31</sup> James L. Weeks, *The Fox Guarding the Chicken Coop: Monitoring Exposure to Respirable Coal Mine Dust, 1969-2000*, 93 AM. J. PUB. HEALTH 1236, 1240 (2003).

<sup>32</sup> *Id.* at 1237.



insult to injury, given the sordid manner in which these cards were filled out and signed. Signatures are now voluntary.<sup>33</sup>

The tactics alleged in the 1978 hearings—temporarily changing practices to create unrepresentatively low-dust conditions, misrepresenting samples from well-ventilated and dust-free areas as samples from other areas of a mine, suppressing high-dust samples, and faking low-dust samples—are particularly worth noting because they show up repeatedly in the other dust cheating cases discussed below.

### Abnormal White Centers Controversy

Another case example well known to MSHA is the controversy over what came to be known as “abnormal white centers” (AWC) on dust sample filters. The AWC issue came to light in 1991 when MSHA realized that approximately one out of three mines submitted sampling filters with improbably clean white centers, for which the most likely explanation was fraud: operators sending reverse air flow through sampling devices to clear a portion of dust collected on the filters.<sup>34</sup>

MSHA was not successful in its efforts to assess civil monetary penalties in these cases. MSHA attempted to pursue the theory that AWCs constituted *prima facie* evidence of a violation and, according to industry lawyers, was “bait[ed]” into arguing that fraud was the *only* possible explanation for AWCs.<sup>35</sup> This “absolutist” argument was successfully rebutted by a well-coordinated battery of attorneys and industry-funded scientists.<sup>36</sup>

Subsequent criminal prosecutions, however, revealed that fraud was indeed at the heart of the AWCs. Defendants were tried and sentenced for, among other things, moving samplers from the face of a mine to a well-ventilated area, placing samplers in supply rooms, taking samples outside the mine, submitting blank filters as though they had been used in sampling, and—as MSHA had argued all along—blowing through the samplers to create AWCs.<sup>37</sup> Further bolstering MSHA’s theory, the incidence of AWCs fell off dramatically after the agency announced that it would not accept AWC samples.<sup>38</sup>

### Upper Big Branch Mine Disaster

Dust cheating figured prominently in the criminal prosecution of Massey Energy CEO Don Blankenship after the Upper Big Branch Mine disaster:

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<sup>33</sup> *Id.* at 1237-38.

<sup>34</sup> *Id.* at 1240-41.

<sup>35</sup> *The AWC Victory—Lessons for the Future*, CROWELL & MORING (Oct. 1, 1998), <https://www.crowell.com/en/insights/publications/the-awc-victory-lessons-for-the-future>.

<sup>36</sup> *Id.*

<sup>37</sup> Weeks, *supra* note 31, at 1241.

<sup>38</sup> *Id.*

Michael Shawn Ellison remembers what miners at Massey Energy's Upper Big Branch Mine would do when it came time to wear the dust pumps. The pumps, which monitor a worker's exposure to coal dust, are supposed to help ensure miners are protected from deadly black lung disease. Pumps measure dust levels, so regulators know if they are above legal limits.

But at Upper Big Branch, Ellison says, he and other miners were told to wear the pumps inside their work bibs, "just to try to get not as true a reading."

Other times, workers would hang the dust monitors in the mine's fresh-air tunnel. "They would be hung in the intake where fresh air was blowing where it wouldn't be near the faces in the dust," Ellison [testified in Blankenship's trial]....

"There were times that we were supposed to be wearing them, but they were placed out back in the intake area or in another area so that the test would come out clearer, cleaner," [miner Bobbie] Pauley told the jury. "It would indicate that there was cleaner air than what there actually was...."

[I]n late June 2009, then-Massey ventilation expert Bill Ross warned Blankenship about cheating on dust sampling at Massey mines.

"Massey is plainly cheating on dust sampling at some of its operations," said a June 25, 2009, memo that then-Massey lawyer Stephanie Ojeda wrote to Blankenship to summarize concerns raised by Ross. The memo warned that federal investigators were onto the cheating, and that "it's only a matter of time" before a possible criminal investigation.<sup>39</sup>

Blankenship may have distinguished himself through his paper trail,<sup>40</sup> but the dust cheating tactics described in his trial are very familiar.<sup>41</sup>

### Shift Sample Methodology

MSHA has even changed its shift sample methodology<sup>42</sup> in order to account for operator dust cheating tactics. Starting in 1972, MSHA adopted a sampling methodology in which dust would be measured during multiple shifts over multiple days and then averaged, on the theory that the multi-day averaging would account for day-to-day variability and enable MSHA to arrive at an

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<sup>39</sup> Ken Ward, Jr., *Don Blankenship on Trial: Former Massey Energy CEO Black Lung Sampling at Issue in Blankenship Trial*, CHARLESTON GAZETTE-MAIL, Nov. 29, 2015, at 1B.

<sup>40</sup> Ken Ward, Jr., *Memos Detail Blankenship's Push for Coal Production*, CHARLESTON GAZETTE-MAIL (Aug. 29, 2015), [https://www.wvgazettemail.com/news/memos-detail-blankenship-s-push-for-coal-production/article\\_981e7dbb-be2d-54f5-ac94-4d11d977b6d8.html](https://www.wvgazettemail.com/news/memos-detail-blankenship-s-push-for-coal-production/article_981e7dbb-be2d-54f5-ac94-4d11d977b6d8.html).

<sup>41</sup> Compare text accompanying note 40 *supra* (citing dust cheating methods) with text accompanying notes 31-38 *supra* (recounting similar allegations of and convictions for dust cheating methods).

<sup>42</sup> Coal Mine Dust Final Rule, *supra* note 30.

accurate measure of typical dust levels.<sup>43</sup> A statistical analysis in the 1990s revealed that the multi-sample methodology actually resulted in non-representative results:

The analysis found that dust concentrations measured on different shifts of the same MSHA inspection were not randomly distributed. The later samples tended to show significantly lower results than earlier samples, indicating that dust concentrations on later shifts of a single inspection may decline in response to the presence of an inspector. Furthermore, the analysis provided evidence that the reduction in dust concentration tends to be reversed after the inspection is terminated. These two results led to the conclusion that averaging dust concentrations measured on different shifts of a multi-day MSHA inspection introduces a bias toward unrealistically low dust concentrations.<sup>44</sup>

In other words, the pattern of decline in dust levels over the multiple days of measurement followed by a post-inspection increase suggested that operators, caught unawares on the first shift when the inspectors arrived unannounced, manipulated conditions on the subsequent shifts in order to lower dust concentrations and game the averaging. The statistical analysis provided new evidence for what miners had been reporting since at least the 1978 hearings.

### Present-Day Reports

Recent convictions for dust cheating neatly parallel the stories of decades past. Just last year, two former Armstrong Coal Company mine managers were sentenced to six months probation for removing dust sampling monitors from miners before the end of the designated sampling period.<sup>45</sup> Earlier this year, a Kentucky coal operator pleaded guilty to dust cheating after MSHA inspectors found a personal dust monitor that should have been worn by a miner inside a Floyd County, Kentucky, coal mine operated by Black Diamond Coal LLC instead running inside a trailer up on the surface.<sup>46</sup> Additionally, a miner in that case reported that, for two days that dust samples indicated he had zero dust exposure, he had actually not been given dust monitors to wear at all.<sup>47</sup>

These cases are not random one-offs but examples of a larger pattern today, according to the medical director of a black lung clinic in Virginia:

Countless miners at the Stone Mountain clinic have shared stories with me of employers hiding evidence of dangerous conditions. Some patients said they were

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<sup>43</sup> For an account of the history of the shift from the 1972 approach to the single sample approach finally adopted in 2014, see *id.* at 24,818.

<sup>44</sup> Determination of Concentration of Respirable Coal Mine Dust, 65 Fed. Reg. 42,068, 42,110 (July 7, 2000).

<sup>45</sup> U.S. Att’y, W.D. Ky., *Two Sentenced for Cheating on Coal Mine Dust Sampling*, U.S. DEP’T OF JUSTICE (Mar. 2, 2022), <https://www.justice.gov/usao-wdky/pr/two-sentenced-cheating-coal-mine-dust-sampling>.

<sup>46</sup> Bill Estep, *Kentucky Coal Company, Official Admit Cheating on Tests Designed to Protect Miners*, LEXINGTON HERALD-LEADER (Feb. 2, 2023), <https://www.kentucky.com/news/state/kentucky/article272014812.html>.

<sup>47</sup> *Id.*

told by supervisors to put dust monitors in closed lunch pails or to wrap them in coffee filters to make the air quality appear clean. Others were told to place air samplers along passageways where fresh air enters the mine. Miners also described incidents of new and improved ventilation systems being temporarily put in place right before government inspectors came for quarterly visits.<sup>48</sup>

This account is recent, but there is nothing new about these tactics.

**B. The Proposed Rule grants operators enormous discretion without guardrails against dust cheating.**

Given this experience, MSHA knows well (and, we hope, has not forgotten<sup>49</sup>) that dust cheating is as inevitable as dust itself. Inexplicably, the Proposed Rule ignores this experience and entrusts operators and industry experts with decisions critical to the effectiveness of the standard.

Reasonable Expectations

The proposed exposure monitoring provisions hinge on the operators' reasonable expectations and conclusions about possible silica exposures:

- The baseline sample provision would require operators to conduct sampling for only “each miner who is or *may reasonably be expected* to be exposed to” silica dust.<sup>50</sup>
- The semi-annual evaluation provision would require operators to evaluate “any changes in production, processes, engineering or administrative controls, or other factors that *may reasonably be expected* to result in new or increased respirable crystalline silica exposures.”<sup>51</sup>
- The post-evaluation sampling provision leaves to operator judgment both whether such sampling is necessary (“If the mine operator *determines* as a result of the semi-annual

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<sup>48</sup> Drew A. Harris, *Deep Inside Mountains, Work Is Getting Much More Dangerous*, N.Y. TIMES (Aug. 2, 2023), <https://www.nytimes.com/2023/08/02/opinion/health/coal-mining-black-lung-silica.html>.

<sup>49</sup> In a bizarre moment during one of the public hearings for this rulemaking, an MSHA spokesperson called for specific evidence of dust cheating:

Commenters stated that operators commit fraud, cheat, manipulate samples and retaliate against miners in connection with dust sampling. I am requesting all commenters who provided these comments and others who may be here today or who may read this opening statement to provide specific evidence of fraud in the coal dust sampling program. This evidence could include dates of sampling, names of mines, type of manipulation or fraud, and any other information and data to support your claim.

Public Hearing Transcript from the 08/21/2023 Denver, CO Hearing—Lowering Miners' Exposure to Respirable Protection (Doc. No. MSHA-2023-0001-1375), Reg. Docket No. MSHA-2023-0001, at 10-11. In response, we suggest that MSHA simply consult its own files.

<sup>50</sup> Proposed Rule, *supra* note 1, at 45,012 (proposed § 60.12(a)) (emphasis added).

<sup>51</sup> *Id.* at 45,012-45,013 (proposed § 60.12(d)) (emphasis added).

evaluation ... that miners *may* be exposed to [silica dust] at or above the action level”<sup>52</sup>) and the extent to which any such sampling shall occur (“the mine operator shall perform sampling ... for each miner who is or *may reasonably be expected* to be at or above the action level”<sup>53</sup>).

- The generic provision for sampling requirements allows operators to identify clusters of miners who perform the same work on the same shifts in the same areas and, in lieu of collecting samples for all of the miners in a cluster, to select at least two of them who “are *expected* to have the highest exposure to respirable crystalline silica.”<sup>54</sup>

If MSHA has some vision about what expectations and determinations are reasonable (and thus enforceable), it is not evident in the plain language of the Proposed Rule itself. MSHA should heed the seasoned advice of Bob Cohen, longtime lawyer and former commissioner through two administrations on the Federal Mine Safety and Health Review Commission (FMSHRC), that this language leaves “the fox guarding the henhouse”:

An operator which seeks to skirt these regulations can simply determine that there are no changes which “may reasonably be expected” to result in increased exposures. Likewise, such an operator will simply conclude that no miners “may” be exposed to silica dust levels above the action level. If an operator somehow is caught, its lawyers will forcefully argue before FMSHRC that the spongy “may reasonably be expected” standard was not reached.<sup>55</sup>

This spongy language is an invitation to dust cheating and multiple rounds of prolonged litigation to determine what obligations under the standard are actually enforceable.

### Typical Mining Activities

A second ambiguously defined term in the Proposed Rule—“typical mining activities”—invites operators to determine another key condition for the exposure monitoring program. The generic provision for sampling requirements calls for sampling to “be performed for the duration of a miner’s regular full shift and during *typical* mining activities.”<sup>56</sup> There is no definition in the text of the Proposed Rule, and the preamble suggests multiple potential meanings.

First, the preamble refers to activities performed under typical environmental conditions, as opposed to atypical conditions that could lead to unrepresentative dust samples:

MSHA proposes to require mine operators to collect a [silica dust] sample for a miner’s regular full shift during typical mining activities. Many potential sources of [silica dust] are present only when the mine is operating under typical

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<sup>52</sup> *Id.* at 45,013 (proposed § 60.12(e)) (emphasis added).

<sup>53</sup> *Id.* (emphasis added).

<sup>54</sup> *Id.* (proposed § 60.12(f)(3)) (emphasis added).

<sup>55</sup> Comment No. MSHA-2023-0001-1372 attachment 1, Reg. Docket No. MSHA-2023-0001, at 6.

<sup>56</sup> Proposed Rule, *supra* note 1, at 45,013 (proposed § 60.12(f)(1)) (emphasis added).

conditions.... In MSHA's experience, for example, environmental conditions such as precipitation (e.g., rain or snow) or wind could affect the actual levels of ... silica exposure at miners' normal or regular workplaces....<sup>57</sup>

Later, the preamble also uses the term to mean activities as such rather than activities performed in typical environmental conditions:

Generally speaking, MSHA inspectors collect respirable dust samples from the common occupations during typical and normal activities at the mine and from the positions that are commonly known to have the highest concentration of respirable dust.<sup>58</sup>

One paragraph, repeating the "conditions" and "activities" meaning, appears also to invoke a third different meaning:

Many potential sources of [silica dust] are present only when the mine is operating *under typical conditions*. If a sample is not taken *during typical mining activities*, the actual risk to the miner may not be known. This proposed requirement would ensure that ... silica exposure data accurately reflect actual levels of ... silica exposure at miners' normal or regular workplaces throughout their *typical workday*, even if there are fluctuations in airborne contaminant concentrations during a work shift.<sup>59</sup>

In order to guarantee the enforceability of the standard from day one and realize the maximum protection attainable for miners, MSHA should more clearly define the term, lest operators enjoy the discretion afforded them by a vague term to define it for themselves.

### **C. MSHA should limit opportunities for fraud in the final rule.**

The final rule should foreclose these opportunities for dust cheating by cabining operator discretion.

First and foremost, MSHA should structure the exercise of discretion in the exposure monitoring program. MSHA should draw on its experience in other standards:

- The radon daughter standard, for example, calls for monitoring in "all active working areas," a term which is immediately followed by specifics.<sup>60</sup>

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<sup>57</sup> *Id.* at 44,856.

<sup>58</sup> *Id.* at 44,862.

<sup>59</sup> *Id.* at 44,908.

<sup>60</sup> 30 C.F.R. § 57.5037(a)(1) ("all active working areas such as stopes, drift headings, travelways, haulageways, shops, stations, lunch rooms, magazines, and any other place or location where persons work, travel, or congregate").

- The respirable coal mine dust standard is even more prescriptive, specifying designated areas, designated occupations expected to have the greatest dust concentration, and other designated occupations to likewise be sampled.<sup>61</sup>
- The respirable coal mine dust standard also requires a dust control plan to be approved by MSHA.<sup>62</sup>

MSHA should further define general terms such as “typical mining activities.” If MSHA sees value in the general term, it should at least follow the general term with specific included activities. The definition should, at a minimum, include construction and development mining activities.<sup>63</sup>

### **III. THE PROPOSED RULE FAILS TO GUARD AGAINST CONFLICTS OF INTEREST.**

The Proposed Rule would effectively invite unscrupulous operators to reduce their exposure monitoring and dust control obligations through the simple expediency of hiring outside scientific and technical experts. DOL certainly knows well that such experts, when hired by regulated industry keen on reducing the costs of a regulation, often produce data that is anything other than objective. MSHA should draw on this experience and not allow the protections of the standard to hinge on data supplied by experts-for-hire.

#### **A. DOL has decades of experience with scientific conflicts of interest.**

MSHA has ready access to decades of DOL knowledge and experience about the risks of expert judgment being affected by relationships with regulated industry. Much of this experience was earned in the course of work handled by agencies other than MSHA, namely MSHA’s sibling DOL agencies the Occupational Safety and Health Administration (OSHA) and the Office of Workers’ Compensation Programs (OWCP). Nevertheless, the Mine Act expressly makes these experiences relevant to this rulemaking in section 101(a)(6)(A): “In addition to the attainment of the highest degree of health and safety protection for the miner, other considerations [in the development of an MSHA standard] *shall be* the latest available scientific data..., the feasibility of the standards, and experience gained under this *and other health and safety laws.*”<sup>64</sup> MSHA is, then, required to take this experience into account.

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<sup>61</sup> *Id.* §§ 70.1 *et seq.* & 71.100 *et seq.*

<sup>62</sup> *Id.* § 71.301.

<sup>63</sup> In light of testimony in the Beckley, West Virginia public hearing, MSHA should perhaps consider at least taking baseline samples in areas not usually considered to have high dust levels at all. *See* Public Hearing Transcript from the 08/10/2023 Beckley, WV Hearing—Lowering Miners’ Exposure to Respirable Protection (Doc. No. MSHA-2023-0001-1364), Reg. Docket No. MSHA-2023-0001, at 86 (“The HVAC system that we use to keep the offices cool and to heat it in the wintertime are—the vents are black. The rock dust, whenever they’re filling the tank up outside, you can see it just in the air.”).

<sup>64</sup> Mine Act § 101(a)(6)(A) (emphasis added). Note that, although this rulemaking is conducted by one specific agency within DOL, the duty under the Mine Act falls to the Secretary of Labor, who through the collective of agencies that make up DOL has the relevant experience with “this and other health and safety laws.” *Id.*

### Black Lung Diagnostics

DOL is well aware from OWCP's experience in the black lung benefits program that conflicts of interest can warp expert judgment.

For example, Pulitzer Prize-winning reporting by the Center for Public Integrity (the Center) revealed that the Johns Hopkins Medical Institutions had for decades operated a radiology unit staffed by "perhaps the most sought-after and prolific readers of chest films on behalf of coal companies seeking to defeat miners' claims."<sup>65</sup> Various radiologists worked in this unit over the years producing reports "almost unwaveringly negative for black lung," but one expert in particular, Dr. Paul Wheeler, was "the leader and most productive reader for decades."<sup>66</sup> The Center found that, in more than 3,400 X-ray readings involving more than 1,500 cases, Dr. Wheeler had never once interpreted an X-ray as positive for complicated pneumoconiosis, preferring instead to apply his own idiosyncratic criteria which were "at odds with positions taken by government research agencies, textbooks, peer-reviewed scientific literature, and the opinions of many doctors who specialize in detecting the disease, including the chair of the American College of Radiology's task force on black lung."<sup>67</sup>

Although Johns Hopkins shut down this program two days after the Center and ABC News exposed Dr. Wheeler's record<sup>68</sup> and DOL issued a bulletin instructing staff not to credit any negative reading by Dr. Wheeler,<sup>69</sup> the damage had been done. In the span of 13 years alone, miners lost more than 800 cases in which doctors found severe black lung while Dr. Wheeler offered a contrary opinion.<sup>70</sup> Ultimately, DOL notified approximately 1,100 miners that their claims may have been wrongfully denied because of Dr. Wheeler's involvement.<sup>71</sup>

It is likely that there are other Dr. Wheelers. DOL commissioned expert evaluators from the University of Illinois at Chicago's School of Public Health to evaluate a pilot project in which

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<sup>65</sup> Chris Hamby *et al.*, *Johns Hopkins Medical Unit Rarely Finds Black Lung, Helping Coal Industry Defeat Miners' Claims*, CTR. FOR PUB. INTEGRITY (Oct. 30, 2013), <https://publicintegrity.org/environment/johns-hopkins-medical-unit-rarely-finds-black-lung-helping-coal-industry-defeat-miners-claims/>.

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> Matthew Mosk & Randy Kreider, *Amid Controversy, Johns Hopkins Quietly Drops Black Lung Program*, ABC NEWS, Sept. 30, 2015, <https://abcnews.go.com/US/amid-controversy-johns-hopkins-quietly-drops-black-lung/story?id=34161753>; Howard Berkes, *Johns Hopkins Halts, Reviews Black Lung Program*, NPR, Nov. 4, 2013, <https://www.npr.org/sections/thetwo-way/2013/11/04/243029509/johns-hopkins-halts-reviews-black-lung-program>; Chris Hamby *et al.*, *Johns Hopkins Suspends Black Lung Program After Center-ABC Investigation*, CTR. FOR PUB. INTEGRITY (Nov. 1, 2013), <https://publicintegrity.org/environment/johns-hopkins-suspends-black-lung-program-after-center-abc-investigation/>.

<sup>69</sup> Michael A. Chance, Off. of Workers' Comp. Programs, U.S. Dep't of Lab., *BLBA Bull. No. 14-09, Weighing Chest X-ray Evidence that Includes a Negative Reading by Dr. Paul Wheeler* (June 2, 2014), <https://www.dol.gov/sites/dolgov/files/owcp/dcmwc/blba/indexes/BL14.09OCR.pdf>.

<sup>70</sup> Hamby *et al.*, *supra* note 65.

<sup>71</sup> Chris Hamby, *Black Lung Claims by 1,100 Coal Miners May Have Been Wrongly Denied*, CTR. FOR PUB. INTEGRITY, July 22, 2014, <https://publicintegrity.org/environment/black-lung-claims-by-1100-coal-miners-may-have-been-wrongly-denied/>.



DOL secured a supplemental medical opinion when an operator disputing a black lung benefits claim submitted medical evidence contrary to a preliminary finding supporting benefits entitlement (Pilot Project). The experts uncovered a troubling bias in some of the medical documentation submitted by operators. In a sample of cases prior to the Pilot Project, the evaluators found that there were “[i]nstances of atypical and non-standard interpretations of medical evidence by Responsible Operators, questions of technical quality, and other inconsistencies that represent potential instances in which a supplemental opinion from the Pilot Project could have affected the outcome of the claim.”<sup>72</sup>

Moreover, a recent study of black lung claims filed from 2000 to 2013 found that doctors hired by coal companies are much less likely to diagnose black lung disease in miners’ X-rays compared to doctors hired by miners and independent doctors. Most B-readers are hired at some point by the government and by either miners or operators, but the researchers found that B-readers who had ever been hired by coal operators read chest X-rays as negative for pneumoconiosis 85 percent of the time, much more often than any B-readers ever hired by a miner (51.3 percent) or those exclusively hired by DOL (63.2 percent).<sup>73</sup> The researchers identified 55 operator-hired B-readers who provided negative readings in *more than 99 percent of their assignments*.<sup>74</sup>

### Mercenary Science

Dr. David Michaels, the Assistant Secretary of Labor for Occupational Safety and Health from 2009 to 2017, reflected on his experience with industry-funded scientific consultants he encountered during OSHA’s silica rulemaking:

When I was running [OSHA] under President Barack Obama, the American Chemistry Council, the chemical industry’s trade association, opposed our efforts to issue a rule protecting more than 2 million workers from exposure to silica, which increases a worker’s risk of silicosis and lung cancer. The ACC hired mercenary scientists to question virtually all the science underpinning the proposed standard; their chief consultant even stood up in a public hearing and asserted that we had not *proven the link between silica and silicosis*....

[C]orporate CEOs [and] their trade associations ... will never say they value profits before the health and safety of their employees.... But decision-makers atop today’s corporate structures are responsible for delivering short-term financial returns to investors, and in the pursuit of these goals a certain dissonance creeps in: profits and growth above all else. Minimizing the costs of cleaning up

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<sup>72</sup> ROBERT COHEN, LEONARD GO & SITHEMBILE MABILA-ABDUBA, U. ILL.-CHI. SCH. OF PUB. HEALTH, BLACK LUNG PILOT EVALUATION STUDY FINAL REPORT 3 (May 4, 2016) (commissioned by Chief Eval. Off., U.S. Dep’t of Lab.).

<sup>73</sup> Lee S. Friedman *et al.*, *Association Between Financial Conflicts of Interest and International Labor Office Classifications for Black Lung Disease*, 18 ANNALS OF AM. THORACIC SOC’Y 1633 (2021).

<sup>74</sup> *Id.* at 1638.

environmental disasters, opposing costly regulations, and defending against litigation are all part of the corporate calculus.

I am not claiming that [such experts] are intentionally fudging numbers or sampling in ways that guarantee finding lower risk from exposure. [As] Upton Sinclair [wrote], “It is difficult to [get] a man [to understand] something[, when] his salary depends [upon his not understanding] it.” Psychologists label this phenomenon “motivated reasoning.” There is no question that being paid by a polluter changes a scientist’s motivations, and thus the way they reason and work—including how they measure exposure and interpret the results.<sup>75</sup>

According to Dr. Michaels, there is not just one firm but an entire industry of “mercenary science”:

At the center of this confusion and doubt are product defense consulting firms. These operations have on their payrolls toxicologists, epidemiologists, biostatisticians, risk assessors, and any other professionally trained, media-savvy experts deemed necessary. Much of their work involves developing scientific materials that purport to show that a product a corporation makes or uses or discharges as air or water pollution is not very dangerous. These “experts” produce impressive-looking reports and publish the results of their studies in supposedly peer-reviewed scientific journals (reviewed, of course, by peers of those writing the articles, not independent scholars). Simply put, the product defense machine cooks the books, and if the first recipe doesn’t pan out with the desired results, they commission a new effort and try again. Since confusion and doubt are the goals, churning out a large volume of low-quality studies is in itself a “success.”

The product defense ploy is public relations disguised as science. Companies’ PR experts provide these scientists with contrarian sound bites that play well with reporters who believe there must be two sides to every story and that both sides are equally worthy of fair-minded consideration. The scientists are deployed to influence regulatory agencies that are tasked with protecting the public.... The corporations and their hired experts market their studies and reports as “sound science,” but in reality, they merely *sound like* science. Corporate leaders venerate such bought-and-paid-for research, while vilifying any academic research that might threaten corporate interests.<sup>76</sup>

In fact, during OSHA’s silica rulemaking, this experience with conflicts of interest in science prompted OSHA to adopt a new policy: asking scientists submitting comments or testifying in

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<sup>75</sup> David Michaels, *Conflicts of Interest Could Undermine the Cleanup Efforts in East Palestine*, TIME (Mar. 14, 2023), <https://time.com/6262343/east-palestine-train-toxic-cleanup-conflicts-of-interest/> (emphasis added).

<sup>76</sup> David Michaels, *Mercenary Science: A Field Guide to Recognizing Scientific Disinformation*, AM. EDUC. (Winter 2021-2022), <https://www.aft.org/ae/winter2021-2022/michaels>.

agency hearings to declare their funding sources and conflicts of interest.<sup>77</sup> “What I’m doing here is essentially saying the information that we will base our standard on has to be of the highest integrity, and we have to do it in a transparent manner,” Dr. Michaels explained at the time, “and conflict-of-interest disclosure is an important component of both of those.”<sup>78</sup>

### Conspiring Consultants

Moreover, MSHA itself has direct experience with outside consultants that progressed beyond conflicted opinions to actual conspiracy. As MSHA knows, operators have retained some firms to provide “bogus, so-called ‘designer’ samples to mine operators that they in turn submitted to MSHA as bona fide samples.”<sup>79</sup> For example, Triangle Research, a consulting firm for coal operators, pleaded guilty to a conspiracy in which it would call a client, confirm that no MSHA inspector had been on site that day, and then send the company dust samples taken from places other than the mine.<sup>80</sup>

#### **B. The Proposed Rule encourages operators to invest in mercenary science.**

In light of DOL’s experience as recounted above, MSHA knows well that operators can find experts on the open market whose opinions will likely align with the operators’ bottom line. MSHA should draw upon that experience to prevent a potential influx of experts-for-hire seeking to exploit the baseline sampling provision.

The baseline sampling provision would require all operators to conduct silica sampling within the first 300 days of publication of a final rule.<sup>81</sup> If the samples show that the mine is below the action level, operators would be able to escape being shifted into the periodic monitoring requirement only if they can confirm the baseline samples with additional evidence.<sup>82</sup> Bracket for the moment our previous objection to this escape hatch, and consider what evidence suffices:

- (1) Subsequent sampling within three months of the baseline sample that likewise shows silica levels below the action level;<sup>83</sup>
- (2) Below-action-level samples conducted by MSHA itself in the prior year;<sup>84</sup>
- (3) Below-action-level samples conducted by the operator in the prior year;<sup>85</sup> or

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<sup>77</sup> Daniel Cressey, *Dust Regulations Trigger Backlash*, NATURE, Mar. 6, 2014, at 18.

<sup>78</sup> *Id.*

<sup>79</sup> Weeks, *supra* note 31, at 1241.

<sup>80</sup> *Guilty Plea Set in U.S. Coal Case*, N.Y. TIMES (Oct. 22, 1991), <https://www.nytimes.com/1991/10/22/us/guilty-plea-set-in-us-coal-case.html>; *Dozens of Coal Firms to Plead Guilty to Fraud in Tests*, L.A. TIMES (Oct. 22, 1991), <https://www.latimes.com/archives/la-xpm-1991-10-22-fi-202-story.html>.

<sup>81</sup> Proposed Rule, *supra* note 1, at 44,5012 (proposed § 60.12(a)) (requiring baseline samples within 180 days of the 120th day following date of publication).

<sup>82</sup> *Id.* (proposed § 60.12(a)(2)).

<sup>83</sup> *Id.* (proposed § 60.12(a)(2)(ii)).

<sup>84</sup> *Id.* (proposed § 60.12(a)(2)(i)(A)).

<sup>85</sup> *Id.* (proposed § 60.12(a)(2)(i)(B)).

(4) Objective data.<sup>86</sup>

The proverbial sore thumb in this list is “objective data,” which the Proposed Rule defines as the following:

information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating miner exposure to respirable crystalline silica associated with a particular product or material or a specific process, task, or activity....<sup>87</sup>

From these pieces of the Proposed Rule, then, this possible scenario arises: if an operator can generate baseline samples below the action level (through testing conducted by the operator itself, with no MSHA oversight and with wide latitude to determine the scope of testing), then that operator can be freed from any additional monitoring until at least the semi-annual evaluation (conducted by the operator itself, again without MSHA oversight and with wide latitude to set the scope of the review that determines whether additional monitoring is required) provided that the operator can supplement the baseline sample result with “objective evidence” provided by an outside expert.

The incentives here are perverse. The Proposed Rule invites unscrupulous operators to invest in the “mercenary science” Dr. Michaels warned about and that DOL took pains to safeguard against in a rulemaking on the exact same hazard that MSHA seeks to regulate here. A bevy of scientific and technical experts, some probably already well known to MSHA, will be available at a moment’s notice and for the right price to conduct “industry-wide surveys” and “calculations based on the composition of a substance” to characterize exposure potentials in ways that happen to align with operators’ desire to escape monitoring and exposure controls. They may come with a variety of pedigrees—toxicology, engineering, geology, biostatistics, epidemiology, you name it—but come they will. The Proposed Rule greets them with open arms.

In addition to undermining the protective potential of the PEL, the objective evidence provision is at odds with the Mine Act’s limitations on exceptions to standards. The Mine Act contemplates that standards may at times need to be re-tailored to fit particular circumstances of specific mines, but it requires proof—established through a process of notice, investigation, public hearings, findings of fact, and publicly declared rulings on the requested exceptions—that an exception will not reduce protection for miners.<sup>88</sup> The Proposed Rule short-circuits that process by allowing operators a partial exemption from exposure monitoring which need never be publicized, on the basis of evidence that need not be publicly aired for scrutiny, developed by experts who need not be questioned in public hearings, much less comply with any conflict-of-interest disclosure requirements at all.

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<sup>86</sup> *Id.* (proposed § 60.12(a)(2)(i)(C)).

<sup>87</sup> *Id.* (proposed § 60.2).

<sup>88</sup> Mine Act § 101(c).

DOL's considerable experience dictated in OSHA's silica rulemaking that such potential conflicts of interest must be brought into the sunlight so that the standard could be developed with integrity on the basis of high-quality information. The Proposed Rule would, by contrast, create a loophole in the operation of the MSHA silica standard for precisely the purveyors of mercenary science that DOL previously sought to guard against.

### **C. MSHA should eliminate the “objective evidence” loophole.**

The solution to correct the “objective evidence” loophole depends on what MSHA intends for this provision. If the premise is that some individual mines could have some particular combination of setting, occupation, and condition in which silica exposures would be nonexistent or very unlikely to ever approach the action level, much less the PEL, then the Mine Act already has a solution: the exceptions process in section 101(c).<sup>89</sup> If the premise is that there are some combinations of setting, occupation, and condition that can be reliably said to have no or low silica exposures for entire categories of mining operations, then they should be identified in the open in the rulemaking process. MSHA could, for example, revise proposed § 60.12 to add an accompanying table listing such areas with provisions for alternatives to exposure monitoring that suffice to provide the level of vigilance necessary to protect miners' health. Any such tabular matter should, though, be published in a Supplemental Notice of Proposed Rulemaking (SNPRM) so that miners, their representatives, and experts dedicated to their health and safety can have an opportunity to weigh in.

The objective evidence provision could be revised, although there does not appear to be a fully satisfactory alternative. MSHA states in the preamble that, in addition to reports and surveys by outside experts, objective evidence could include “historical MSHA sampling data [and] NIOSH Health Hazard Evaluations.”<sup>90</sup> Limiting objective data to these government data would eliminate the expert-for-hire problem; if, however, such historical data included samples taken before the 2014 switch to single shift sampling, the data would likely be biased downward.<sup>91</sup> At a minimum, if MSHA preserves the objective data provision despite the risk of it being exploited to undermine the safety and health objectives of the Proposed Rule, the language should be revised to require transparency and conflict-of-interest disclosure provisions, so that the objectivity of the data can be appropriately assessed by all stakeholders. It would be better to close the loophole completely, but transparency would at least expose its exploitation by unscrupulous operators and their hired experts.

## **IV. THE PROPOSED RULE DOES NOT TAKE ADVANTAGE OF MINERS' EXPERTISE OR EMPOWER THEM TO KEEP MINES SAFE.**

The Proposed Rule could be strengthened by according a greater role to miners themselves. “Because miners know the day-to-day work conditions as well as or better than anyone,” explained mine safety attorney Wes Addington, “obviously they should be encouraged to insist

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<sup>89</sup> *Id.*

<sup>90</sup> Proposed Rule, *supra* note 1, at 44,902.

<sup>91</sup> See *supra* text accompanying notes 42-44.

on maintaining a safe and healthy workplace. They are in a unique position to monitor workplace conditions when inspectors are absent.”<sup>92</sup> When informed and empowered, miners can share information with the agency, identify dust cheating, and take steps to protect their own health.

MSHA should consider the following:

- Operators should be required to keep cumulative exposure records and provide them upon request to the miner, in a manner similar to 30 C.F.R. § 57.5040. This provision could prove particularly valuable for MNM miners who, if they ultimately become disabled by silica exposures, will likely need such concrete evidence to back their workers’ compensation claim.
- The provision regarding a medical evaluation of a miner’s ability to wear a respirator should include provisions parallel to 30 C.F.R. § 57.5060(d)(3)-(4), to give miners an opportunity to discuss the conclusion with the physician or licensed health care professional making the determination.
- Any miner selected for sampling as one of a “representative fraction” of miners on the basis of being “expected to have the highest exposure to respirable crystalline silica”<sup>93</sup> should be specifically informed in writing of that determination. Much as MSHA argues in support of disclosure of sampling records, this information would “encourage [miners] to have heightened awareness of potential health hazards[;] provide them with knowledge to take proactive actions to protect themselves ... through better and safer work practices and more active participation in health and safety programs”;<sup>94</sup> and potentially boost their participation in the medical monitoring program. It could also be useful for MNM miners who later seek workers’ compensation.
- Sampling records and any other information that MSHA requires to have posted on the mine bulletin board should be submitted to any miner representatives.
- In light of MSHA’s proposed improvements to Part 90 protections for coal miners,<sup>95</sup> MSHA should develop a Part 90 program for MNM miners as well.
- Provisions regarding operator-covered medical monitoring should be amended to grant miners the right to choose their own health care provider rather than relying on providers selected by the operators.

## **V. THE PROPOSED RULE MISSES THE OPPORTUNITY TO LEVERAGE INFORMATION.**

DOL has very recently acknowledged the multiple values of having employers report occupational health and safety data. Just two months ago, OSHA published a final rule updating

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<sup>92</sup> *Putting Safety First: Strengthening Enforcement and Creating a Culture of Compliance at Mines and Other Dangerous Workplaces: Hearing Before the S. Comm. on Health, Educ., Lab. & Pensions*, 111th Cong. 49 (2011) (statement of Wes Addington, Deputy Director, Appalachian Citizens Law Center).

<sup>93</sup> Proposed Rule, *supra* note 1, at 45,013 (proposed § 60.12(f)).

<sup>94</sup> *Id.* at 44,910.

<sup>95</sup> *Id.* at 45,018-45,019.

employer electronic injury and illness reports and, in its justification for the rule, explained many benefits from such reporting:

- generating “more accurate statistics” about occupational illness and injury, which “will enhance interested parties’ knowledge regarding specific workplace hazards”;<sup>96</sup>
- identifying any occupational health disparities and guiding researchers to investigate the causes of such disparities;<sup>97</sup>
- enabling employers “to compare case-specific injury and illness data at their establishment with that of comparable establishments and set safety and health goals benchmarked to the establishments they consider most comparable” and, thus, support their voluntary efforts to make workplaces safer;<sup>98</sup>
- making workplaces safer and, as a result, decreasing workers’ healthcare costs and employers’ workers’ compensation costs;<sup>99</sup> and
- enabling OSHA “to better evaluate the effectiveness and efficiency of its various safety and health programs, initiatives, and interventions in different industries and geographic areas.”<sup>100</sup>

MSHA evidently shared this understanding nine years ago, when it required transmission within 24 hours of respirable coal mine dust samples.<sup>101</sup>

MSHA should review these lessons and add a reporting element to the Proposed Rule. Not only would the benefits listed above flow to miners, operators, the agency, and the greater public, but also MSHA would have better information to use for conducting strategic enforcement initiatives. High dust levels can alert MSHA to potential disasters in advance, but MSHA could also be helpfully guided to enforcement targets where an operator submits very low dust samples compared to expected levels in 50 percent or more of samples.<sup>102</sup> Accordingly, MSHA should, after consultation with NIOSH about potentially using reporting of sample and medical surveillance data for occupational health surveillance purposes, revise the Proposed Rule to require submission of dust sampling data.

Additionally, given the latency periods associated with health effects from silica exposure, MSHA should reexamine the records retention requirements and ensure that records are maintained for durations that accommodate the needs of miners, especially MNM miners who might require substantiation for workers’ compensation proceedings.

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<sup>96</sup> Improve Tracking of Workplace Injuries and Illnesses, 88 Fed. Reg. 47,254, 47,280 (July 21, 2023).

<sup>97</sup> *Id.* at 47,317.

<sup>98</sup> *Id.* at 47,284.

<sup>99</sup> *Id.* at 47,281.

<sup>100</sup> *Id.* at 47,280.

<sup>101</sup> Coal Mine Dust Final Rule, *supra* note 30. See also 30 C.F.R. § 70.210.

<sup>102</sup> James L. Weeks, *Estimating Possible Fraud in Coal Mine Operators’ Samples of Respirable Dust*, 56 AM. INDUS. HYGIENE ASS’N J. 328 (2010).

Finally, MSHA should reevaluate whether it has made maximum use of the information available to the agency to inform the public about the necessity and value of this Proposed Rule. For example, a new analysis of data from NIOSH and black lung clinics funded by the Health Resources and Services Administration reveals more than 4,000 cases of the most advanced form of black lung since 2010, as well as more than 1,500 advanced black lung diagnoses in just the last five years.<sup>103</sup> The risk assessment and regulatory impact analysis of the Proposed Rule do not reflect these data, and so the Proposed Rule’s “purported benefits understate the silica risk to coal miners and the urgent need for immediate action.”<sup>104</sup>

## CONCLUSION


We are grateful to see MSHA, after decades of authoritative recommendations and broken promises, stepping forward to protect miners from silica. In this Proposed Rule, MSHA has assembled most of the right ingredients; the main problem is the recipe that puts them all together. We look forward to supporting MSHA as it further improves the Proposed Rule in order to attain the maximum protection attainable for miner health.

Sincerely,



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**ROBERT C. “BOBBY” SCOTT**  
Ranking Member



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**ALMA S. ADAMS**  
Ranking Member  
Subcommittee on Workforce Protections

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<sup>103</sup> Howard Berkes & Justin Hicks, *Federal Fix for Silica Dust Understates That Thousands of Coal Miners Are Still Sick and Dying*, REGISTER-HERALD (Sep. 4, 2023), [https://www.register-herald.com/news/state\\_region/federal-fix-for-silica-dust-understates-that-thousands-of-coal-miners-are-still-sick-and/article\\_baadf2ee-483c-11ee-93e3-1f4c09659703.html](https://www.register-herald.com/news/state_region/federal-fix-for-silica-dust-understates-that-thousands-of-coal-miners-are-still-sick-and/article_baadf2ee-483c-11ee-93e3-1f4c09659703.html).

<sup>104</sup> *Id.*