

CLIENT ALERT

Coal Industry Awaits Oral Argument and Decision on Merits of MSHA's Final Rule for Lowering Miners' Exposure to Respirable Coal Mine Dust

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The federal government regulates the coal mining industry to, among other things, protect miners from work-related health risks. In May 2014, the Mine Safety and Health Administration (MSHA) published a final rule concerning respirable dust in underground and surface coal mines. This complex "Dust Rule"—really, a series of rules—changes the regulatory landscape for coal mining in ways that are certain to have an enormous impact on the industry.

Understandably, the industry has challenged the legality of the Dust Rule. The case has been fully briefed in the U.S. Court of Appeals for the Eleventh Circuit (based in Atlanta). In the litigation, the industry's position, generally stated, is that the Dust Rule is procedurally defective and, in any event, compliance with the rule using current technology is not feasible. Industry also called MSHA's scientific justification for the rule into doubt. Oral argument is anticipated in early 2015, and a decision should issue by spring or early summer.

This article provides an overview of the legislative and regulatory background of mandatory health standards to control respirable dust in coal mines leading up to the May 2014 Dust Rule. We then discuss some of the notable regulatory changes imposed by the rule, along with some of the rule's defects, as identified by the industry in their briefs to the court, that call the Dust Rule's legality into question.

Background

The Statutory Authority

In 1968, a coal-mine explosion in Farmington, West Virginia, killed 78 miners, spurring federal and state governments to act. Action at the federal level included laws covering not just miners' safety but also their health, based on a grassroots national movement aimed at ameliorating coal miners' high incidence of pulmonary diseases. These diseases, collectively called "black lung," included coal workers' pneumoconiosis (CWP). A contemporary House of Representatives report defined CWP as "chronic chest disease, caused by the accumulation of fine coal dust particles in the human lung. In its advance[d] forms, it leads to severe disability and premature death." H.R. Rep. No. 91-563, at 15 (1969).

Congress responded swiftly to these safety and health concerns. On New Year's Eve 1969, President Richard Nixon signed into law the Federal Coal Mine Health and Safety Act of 1969. Central among the 1969 Coal Act's health provisions was regulation of respirable dust in the nation's coal mines. The 1969 Act required "each operator [to] continuously maintain the

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average concentration of respirable dust in the mine atmosphere during each shift to which each miner in the active workings of such mine is exposed." Under section 202(b) of the Coal Act, operators of underground coal mines were required through 1972 to keep the average dust concentration at or below 3.0 milligrams per cubic meter (mg/m³). After 1972, the standard fell to 2.0 mg/m³. Congress based these amounts on "an enormous amount of impressive medical evidence" compiled in Great Britain (H.R. Rep. No. 91-563, at 18). The British had concluded from this data that a miner exposed to 2.0 mg/m³ during a career underground had zero risk of developing disabling CWP.

The Federal Mine Safety and Health Act of 1977 incorporated virtually without change the 1969 Coal Act's health measures, and transferred administration of the program to the newly created Mine Safety and Health Administration, within the Department of Labor. Identical language in both the 1969 and 1977 Acts directed the Secretary of the Interior and, later, Labor, in conjunction with the Secretary of Health, Education, and Welfare (which later became Health and Human Services), to "develop and promulgate improved mandatory health or safety standards to protect the health and safety of the Nation's coal . . . miners."

Over the ensuing decades, the prevalence of CWP among underground miners dropped from 30 percent to just 3 percent. This is a remarkable occupational health success story. But in the mid-1990s, experts saw what appeared to be increases in CWP and other lung diseases among miners. These increases led the Clinton and Bush administrations to propose revamped rules. For a variety of reasons the proposed rules foundered. In 2010, MSHA proposed new regulations that, among other things, would have dropped the dust standard to 1.0 mg/m³.

The 2014 Dust Rule

After a lengthy comment period, with public hearings around the country (including a marathon 13-hour hearing at MSHA headquarters in Arlington, Virginia), and voluminous comments, the rulemaking record finally closed on June 20, 2011. The rule then was debated for almost three years within MSHA and the White House Office of Information and Regulatory Review (part of the Office of Management and Budget (OMB)). One key reason the rule languished so long was that both industry and labor (through the Bituminous Coal Operators' Association and the United Mine Workers of America) had gone hand-in-hand to the White House out of mutual concern about the feasibility and complexity of the proposed rule.

Finally, on May 1, 2014, MSHA published in the *Federal Register* its final rule, *Lowering Miners' Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors*. The final rule adopted a 1.5 mg/m³ standard set to take effect in 2016. The agency pitched this as a compromise between its preferred 1.0 mg/m³ standard and the current 2.0 mg/m³ standard.

And perhaps it would have been seen as a compromise had the rule focused only on the concentration standard. But the Dust Rule does so much more. The most significant change resulting from the Dust Rule is not the lower numeric standard but the fact that compliance determinations, and resulting enforcement measures, will now be based on the results of a single sample taken during a single shift, instead of being based on the average dust concentrations sampled over multiple shifts. As the industry briefs pointed out, this is a game-changer: it cannot be overstated how much more difficult it is to stay in compliance when compliance is determined on the basis of a single sample instead of the average of multiple samples.

Analysis

Replacing Averaging With Single Samples for Compliance

In 1969, Congress recognized that CWP was a chronic disease, not caused by a single excessive exposure. Thus, a high concentration of dust during one shift could be offset by a low one the next shift. Consequently, the 1969 Mine Act initially required that compliance be based on averaging concentrations over multiple shifts.

Nevertheless, Congress required that, 18 months after the Coal Act's passage, the scheme of averaging samples taken over multiple shifts to determine compliance would give way to a single-shift sampling scheme unless the Secretaries of the Interior and Health, Education, and Welfare jointly found that sampling on a single shift would not accurately reflect the dust concentrations to which miners were being exposed. And sure enough, in 1972, these two departments jointly found, after a public notice-and-comment period, that single-shift sampling would not accurately reflect the concentration of dust to which miners were exposed. The scheme of averaging samples gathered across multiple shifts to determine compliance was thus preserved.

The 1972 joint finding has never been rescinded. MSHA and the National Institute for Occupational Safety and Health (an agency within the Department of Health and Human Services) – the dust-program successors to the Departments of the Interior and Health, Education, and Welfare – did try to rescind the finding in a joint rulemaking in 1998. But that rulemaking was vacated that same year by the Eleventh Circuit because MSHA failed to evaluate the feasibility of the rescission, as the Mine Act requires. The agencies tried again, opening a new joint rulemaking in 2000, but it was never completed.

With the Dust Rule, MSHA has again gone down the path of single-shift sampling. This time, however, MSHA walks alone, having unilaterally (and thus unlawfully) rescinded the 1972 joint finding of MSHA and NIOSH. We submit that this is unlawful under both the Mine Act and basic principles of administrative law: one agency cannot undo an official act that it executed jointly with another agency.

Beyond the procedural defects of the single-sample compliance scheme, there is the fact that a single dust sample taken during a single shift is a poor measure of the dust concentrations to which a miner is exposed over the long term of his or her working career. It is a point in time, and offers little or no insight into a miner's occupational exposure to respirable coal mine dust. Indeed, MSHA's sampling program only exacerbates the disconnect between a single sample and the long-term exposures that can lead to CWP by measuring dust concentrations at particular *locations* in a mine, not the *personal exposures* of actual miners. So, with the Dust Rule, MSHA will now cite operators if even just a single sample, taken during a single shift, at a single location measures higher than the legal standard, even if no actual miner personally experienced that exposure during the course of that sampled shift.

Finally, the Dust Rule requires an operator that has been cited for a single out-of-compliance dust sample to submit five post-violation samples, each demonstrating a concentration of respirable coal dust below the legal standard as measured over a single shift, in order to abate the citation and before MSHA will terminate the citation. This is no easy chore; failure to do so could result in a suite of enhanced enforcement tools, including closure orders.

Feasibility

MSHA must demonstrate that standards concerning toxic substances, such as the Dust Rule, are feasible, in both a technological and economic sense. That means the technology exists or soon will exist to enable operators to comply with the standard and that it will not be economically ruinous to the industry to do so. As the industry briefs contended, the Dust Rule fails that test: it is difficult to fathom how operators will be able to achieve compliance on a regular and consistent basis using known technologies.

Maintaining compliance with the dust standard under an enforcement scheme in which a single excessive measurement is grounds for a citation is, statistically, far more difficult than staying in compliance within a scheme based on the average of multiple samples. And the requirement that an operator submit five additional samples, each of which must measure below the legal standard, before MSHA will terminate a citation may well leave operators in a perpetual state of noncompliance.

MSHA also gave short shrift to the cost of production disruptions caused by the rule. When a single sample shows the operator is out of compliance, it will have to take corrective action, requiring it in many instances to stop production. One economic consultant's report filed in the rulemaking record estimated that the costs of work stoppages would be about \$1.6 billion annually in the early years of the rule's existence. MSHA, on the other hand, estimated the costs of abatement and corrective action at just over a million dollars annually. MSHA's estimate is based on untenable assumptions, including that corrective actions will always take place during production or between shifts, and that, in any event, production delays do not result in material economic loss.

Scientific Justification

In addition to demonstrating its feasibility, MSHA is required when promulgating standards such as the Dust Rule to consider the "latest available scientific data in the field." With the Dust Rule, MSHA missed this mark, too, because the rule is premised in large part on mistaken interpretations of incomplete epidemiological data on occupational lung disease among the nation's coal miners. Despite studies showing that the prevalence of coal workers' pneumoconiosis has decreased from about 30 percent in 1970 to about 3 percent now, MSHA points to what it claims are spikes in CWP as grounds for revamping its respirable dust regulations.

The industry pointed out in its briefs that MSHA's alarm over these spikes is overstated because the latest scientific data show a decline in the prevalence and incidence of CWP nationwide. Moreover, the so-called spikes in CWP are actually regional hot spots in eastern Kentucky, southern West Virginia, and southwestern Virginia that are likely caused by respirable silica dust, generated by mining thin seams of coal surrounded by silica-bearing rock. Notable among the public comments on the Dust Rule submitted to MSHA is *A Critical Review of the Scientific Basis for MSHA's Proposal for Lowering the Coal Mine Dust Standard*, a study of the epidemiological evidence on which MSHA relied in crafting the new rule. The authors of the study are recognized experts in occupational lung disease who held senior research positions at NIOSH when that agency developed its own CWP surveillance program. The study concludes that MSHA mischaracterized silicosis localized in these hot spots in central Appalachia as a nationwide problem of rapidly progressing CWP. A contemporary NIOSH report on CWP largely corroborates the *Critical Review's* findings.

Silicosis among coal miners is a legitimate health concern, but the Rule does little to address it. MSHA has needlessly forced coal mine operators nationwide to commit substantial resources to address a misdiagnosed problem.

The Dust Rule's Safety Equipment Paradox

Stubbornly, it seems, MSHA rejected (for compliance purposes) the industry's proposed use of certain personal protective equipment that might actually make the rule feasible.

During the proposed rule's comment period, industry proposed allowing a "hierarchy of controls" to limit miners' exposure to respirable dust. The hierarchy, well accepted in other industrial settings, comprises three tiers of controls:

- 1.** Engineering controls such as water sprays and ventilation operate to suppress dust throughout a mine.
- 2.** Administrative controls such as miner rotations to ensure that individual miners' exposures are minimized where dust suppression is most difficult.
- 3.** Personal protective controls such as NIOSH-approved, powered, air-purifying respirators (PAPRs), to be used only when engineering and administrative controls have been optimized.

MSHA rejected the hierarchy of controls on the ground that the Mine Act does not permit respirators to be substituted for mine-wide engineering controls. But industry proposed (consistent with the hierarchy) that personal controls be allowed to supplement, rather than be substituted for, mine-wide controls. And, in any event, the portion of the Mine Act that MSHA claims precludes the hierarchy (30 U.S.C. § 842(h)) is an interim provision that MSHA may override through rulemaking. Ironically, MSHA has adopted the hierarchy of controls presented above to regulate airborne contaminants and diesel particulate matter in metal and nonmetal mines. MSHA's sister agency, OSHA, relies on the hierarchy to regulate air contaminants in shipyards, marine terminals, and construction sites.

While rejecting the widely accepted hierarchy of controls that might have obviated many of the concerns with its new rule, MSHA has adopted a new and yet unproven technology: the continuous personal dust monitor (CPDM). MSHA touts the CPDM, which underground coal-mine operators must use starting on February 1, 2016, as a "new sampling device that measures continuously, and in real-time, the concentration of respirable coal mine dust and provides sampling results at specific time intervals and at the end of the work shift."

Unfortunately, the CPDM is not yet up to the task. The device is produced by just one manufacturer, and MSHA has acknowledged industry's concern that there will not be enough units produced in time for the 2016 effective date. Operators are also concerned that they will not have enough time to train miners on using and maintaining the CPDM. Nor did MSHA address concerns that miners already must wear and carry too much equipment, increasing the risk of musculoskeletal injuries. Most importantly, MSHA has ignored industry concerns about the CPDM's everyday accuracy and reliability.

Conclusion

The industry believes that MSHA's Dust Rule takes aim at a bogeyman. In the process, MSHA heaps substantial new burdens on an industry already reeling from a plethora of difficult safety and environmental standards and policies. It is because the rule is neither feasible nor justified that the industry has challenged it in court. Stay tuned.

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