

I.

Under the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. § 801 et seq., the Secretary of Labor regulates mining operations through rulemaking and the development of certain mine-specific plans that become mandatory standards upon approval. This case concerns the mandate that an underground coal mine operator adopt a “ventilation system and methane and dust control plan and revisions thereof suitable to the conditions and the mining system of the coal mine and approved by the Secretary.” 30 U.S.C. § 863(o). Such ventilation plans must include, among other things, “the quantity and velocity of air reaching each working face, and such other information as the Secretary may require.” *Id.*

The authority to grant or deny approval of an operator’s mine-specific ventilation plan has been delegated to the MSHA district manager—in this case Carl Boone, District Manager for District 10. *See* 30 C.F.R. § 75.370-75.372. Although the process contemplates informal consultation and good-faith negotiation, the district manager must exercise independent judgment concerning the contents of a mine-specific plan. *See Mach Mining, LLC v. Sec. of Labor*, 728 F.3d 643, 650 (7th Cir. 2013), *petition for cert. filed*, (U.S. Nov. 23, 2013) (No. 13-645); *Sec. of Labor v. Twentymile Coal*, 30 FMSHRC 736, 2008 WL 4287782 (2008). The ventilation plan revisions at issue were required by Boone after the mine ignition as a condition of returning the affected area of the mine to normal. 30 U.S.C. §§ 802(k), 813(k).

The underground ignition occurred at approximately 5:30 p.m., on January 14, 2010, as a continuous mining machine was cutting coal in the Number 8 Entry of the Number 4 Unit at HCC’s Elk Creek Mine. The operator of the continuous miner was making cuts into the coal bed when one of the bits made contact with a pyritic inclusion—a form of hard rock also called a “head” or “kettlebottom”—and caused a spark that precipitated the ignition. The ignition

occurred at the face of the mine, that is, the surface of the unbroken coal bed in the advancing end of the working place. The operator described the ignition as a fire two feet high that rolled back ten to twelve feet across the top of the continuous miner. The ignition lasted a few seconds and resulted in no injuries. There is no dispute that any ignition is a serious and potentially dangerous event in an underground coal mine.

Notice was given promptly to the MSHA, activity was halted in the affected area, and an investigation was conducted that lasted into the early hours of January 15, 2010. The investigation determined, among other things, that a pyritic inclusion had been cut in half just 26 inches from the head of the continuous miner; that 8 of the 39 water sprays on the miner were clogged; and that the methane monitor located six to eight feet from the face was observed to read .8 percent prior to the ignition and 1.7 percent just after the ignition. The investigators' report concluded that "it appears the miner head came into contact with kettlebottoms in the mine roof" and noted "[p]ossible dust/methane ignited." The MSHA modified its control order to prohibit HCC from resuming production on the Number 4 Unit until an addendum to the ventilation plan had been approved.

That same morning, in consultation with the MSHA's assistant district manager, HCC drafted a proposed addendum that would make several changes to the ventilation plan, including: adding an additional sprayer; cooling and wetting the face where bits could hit inclusions; increasing checks to the miner bits and heads to reduce sparks; and requiring more frequent checks and cleaning of the wet-bed scrubber screens on the continuous miner. District Manager Carl Boone rejected HCC's proposed plan as insufficient to address the risk of ignition and requested several additional revisions. Through a back-and-forth exchange that day, some additional revisions were agreed to, others were modified, and at least one was dropped. HCC

continued to object to three of the requested revisions, despite Boone's further offer to limit their application to the Number 4 Unit. Ultimately, Boone insisted that the addendum include those three contested revisions, which would increase the flow of air to the face of the mine by: (1) reducing the maximum setback of the curtain from the face; (2) increasing the minimum volume of air at the end of the curtain; and (3) increasing the minimum volume of air flowing through the wet-scrubber on the continuous mining machine.² Air volume is measured in cubic feet per minute (cfm).

HCC adopted under protest the following revisions applicable to the Number 4 Unit, only:

- The maximum distance the face may be advanced from the end of the wing curtain shall not exceed 40ft. [instead of prior maximum of 45 ft.]
- 7000 cfm of air will be required at the end of the wing curtain before the scrubber is started. This shall be the only reading required. [instead of prior minimum of 7000 cfm when the scrubber was running and 5800 cfm when the scrubber was not running.]
- The minimum scrubber volume shall be at least 7000 cfm. [instead of the prior minimum of 5000 cfm.]

The revised ventilation plan was approved at the end of the day on January 15, 2010, and a technical citation was issued at HCC's request to allow it to challenge the contested revisions. After conducting an evidentiary hearing, the ALJ issued a written decision upholding the revisions and affirming the violation. The Federal Mine Safety and Health Review Commission denied HCC's petition for discretionary review, and the ALJ's decision became final on February 27, 2013. This petition for judicial review followed.

² A line or wing curtain—material cut to fit the mine and hung from floor to ceiling—is used to deflect air onto the working place or face of the mine to dissipate, dilute, or sweep away any coal dust or methane. The scrubber located on the continuous mining machine draws air away from the face through twenty screens that are sprayed with water to capture coal dust.

II.

The factual findings of the Commission, set forth in the ALJ's decision, are conclusive "if supported by substantial evidence on the record considered as a whole." 30 U.S.C. § 816(a)(1); see *Olson v. FMSHRC*, 381 F.3d 1007, 1011 (10th Cir. 2004). The ALJ's application of law is reviewed de novo, and substantial evidence is that which a reasonable mind might accept as adequate to support the ALJ's conclusions. *Pendley v. FMSHRC*, 601 F.3d 417, 422-23 (6th Cir. 2010).

Here, both parties have accepted that our review is of the ALJ's determination that the district manager's decision to insist upon the contested revisions was not arbitrary or capricious. See *Mach Mining*, 728 F.3d at 658; *Twentymile Coal*, 2008 WL 4287782, at *10. HCC argues that the ALJ misapplied the standard by failing to properly assess whether the explanations included a "rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (citation omitted). In reviewing the explanation, the ALJ must consider "whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Id.* (citation omitted). Without belaboring the record by reciting all of the ALJ's findings, we are satisfied that substantial evidence supports the ALJ's determination that the district manager's insistence that HCC make the challenged revisions to the existing plan provisions setting the maximum line curtain distance, the minimum line curtain air volume, and the minimum scrubber air volume was not arbitrary or capricious.³

The evidence supports the finding that Boone had a rational basis to conclude that an accumulation of coal dust and possibly methane provided the fuel for the ignition and that the

³ The parties' dispute about whether HCC or the Secretary carries the burden of proof before the ALJ makes no difference to the present case. Both sides presented evidence and argument before the ALJ.

measures proposed by HCC would not adequately address the risk of a future ignition. Boone's initial rejection letter explained that the fact that there was an ignition demonstrated that the existing precautions were not sufficient and several standards relevant to air flow would need to be made at least as stringent as the conditions present at the time of the ignition. The ignition required an ignition source, a fuel source, and oxygen. Several witnesses testified that the ignition at the face of the mine demonstrated the presence of a fuel source—whether it was methane, coal dust, or a combination of both—and that increasing the air flow to the face would better sweep away any coal dust or methane and reduce the risk of future fuel accumulation.

To increase the air flow to the face, Boone insisted that HCC make modest adjustments to the existing standards for maximum curtain setback and the minimum volume of air both at the end of the line curtain and passing through the miner's wet-scrubber. The ALJ's findings explain how each variable played a role in increasing the air flow so as to dissipate, dilute, and sweep away the coal dust produced and methane liberated during the mining process. One of the arguments HCC makes is that it was arbitrary and capricious to demand a maximum line curtain setback of 40 feet when the line curtain was only 35 feet from the face at the time of the ignition. This is disingenuous at best, as it is clear that Boone sought to reduce the maximum setback from 45 feet to 35 feet and agreed to a setback of 40 feet as a concession to HCC during negotiations.⁴

There is no dispute that increasing the volume of air at the line curtain directly increases the rate at which coal dust and methane would be swept away from the face. After the ignition, one investigator took a reading and found 6700 cfm of air at the end of the line curtain. Boone explained that although that volume exceeded the minimum required at the time of the ignition, it had not been enough to prevent a buildup of fuel for the ignition—whether it was coal dust,

⁴The ALJ properly rejected HCC's claim that it was arbitrary and capricious for the contested revisions to apply only to the Number 4 Unit. The ignition at the Number 4 Unit prompted the revisions, and Boone agreed to limit application of the contested revisions to the Number 4 Unit in response to HCC's objections.

methane, or a combination of both as he believed. The evidence supports the finding that a rational connection exists between the facts and the decision to require HCC to increase the minimum volume of air when the scrubber was off from 5800 cfm to the same minimum of 7000 cfm that already applied under the prior plan when the scrubber was running.

Relatedly, there was evidence that the volume of air flowing through the scrubber located on the continuous miner should be about the same as the volume of air behind the line curtain in order to more effectively draw coal dust from the face and avoid recirculating dirty air in the working place. After the ignition, investigators measured the air volume of the scrubber and found it to be 5039 cfm before being cleaned and 7932 cfm after being cleaned. In addition, a minimum volume of 7000 cfm of air was consistent with manufacturer specifications. The ALJ correctly found that the decision to require an increase in the minimum volume of air passing through the scrubber from 5000 cfm to 7000 cfm was not arbitrary or capricious.

Finally, HCC asserts that it was error for the ALJ to have relied upon, or taken judicial notice of, the determination in *Secretary of Labor v. Texasgulf, Inc.*, 10 FMSHRC 498, 501 (1998), by citing it for the proposition that: “The Commission has already found that methane is ignitable at a one to two percent concentration and is explosive at a five to fifteen percent concentration.” HCC has not demonstrated how this finding may have improperly skewed the ALJ’s judgment with respect to the changes in the ventilation plan, and the particular finding is cited in the discussion of HCC’s abandoned claim that the MSHA was without jurisdiction if the ignition was caused solely by coal dust. More importantly, however, the ALJ’s determination that there was a rational connection between the facts and the requested revisions does not depend on a precise finding that methane is ignitable in the presence of coal dust at

concentrations below two percent. The revisions were aimed at preventing the accumulation of any kind of fuel at the face—whether it is methane, coal dust, or both.

The petition for review is **DENIED** and the ALJ's decision is **AFFIRMED**.