

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES
1331 PENNSYLVANIA AVE., N.W., SUITE 520N
WASHINGTON, DC 20004-1710
TELEPHONE: 202-434-9950 / FAX: 202-434-9949

October 22, 2015

SECRETARY OF LABOR
MINE SAFETY AND HEALTH
ADMINISTRATION (MSHA),
Petitioner

v.

CONSOLIDATION COAL COMPANY,
Respondent

CIVIL PENALTY PROCEEDINGS

Docket No. VA 2012-42
A.C. No. 44-04856-269664

Docket No. VA 2013-192
A.C. No. 44-04856-311828

Mine: Buchanan Mine #1

DECISION AND ORDER

Appearances: Eric Johnson, Esq., Office of the Solicitor, U.S. Department of Labor,
Nashville, Tennessee, for the Petitioner

Billy R. Shelton, Esq., Jones, Walters, Turner & Shelton PLLC,
Lexington, Kentucky, for the Respondent

Before: Judge Rae

I. STATEMENT OF THE CASE

These cases are before me upon two petitions for assessment of civil penalties filed by the Secretary of Labor (“the Secretary”) pursuant to section 105(d) of the Federal Mine Safety and Health Act of 1977, as amended, (“the Mine Act”), 30 U.S.C. § 815(d). At issue are three citations issued to mine operator Consolidation Coal Company (“Consol”) under section 104(a) of the Mine Act: Citation 8189820 in Docket Number VA 2012-42 and Citations 8202408 and 8197859 in Docket Number VA 2013-192.

A hearing was held in Kingsport, Tennessee on November 18, 2014, at which time testimony was taken and documentary evidence was submitted. The parties also filed post-hearing briefs. I have reviewed all of the evidence at length and have cited to the testimony, exhibits and arguments I found critical to my analysis and ruling herein without including a detailed summary of the testimony given by each witness. Based upon the entire record and my observations of the demeanor of the witnesses, I uphold or uphold and modify each of the citations as set forth below.

II. BACKGROUND

The three citations at issue in this docket were issued at different times by different MSHA inspectors at the Buchanan Mine #1, which is a large underground coal mine located in Buchanan County, Virginia. The factual circumstances surrounding each of the alleged violations are set forth in the body of my decision below. The parties have stipulated to the following facts:

1. During all times relevant to this matter, Consolidation Coal Company (Respondent) was the operator, as defined in Section 3(d) of the Mine Act, 30 U.S.C. § 802(d), of the Buchanan No. 1 mine, Mine ID No. 44-04856.
2. The Buchanan No. 1 mine is a “mine” as that term is defined in Section 3(h) of the Mine Act, 30 U.S.C. § 802(h).
3. At all material times involved in this case, the products of the Buchanan No. 1 mine entered commerce or the operations or products thereof affected commerce within the meaning and scope of Section 4 of the Mine Act, 30 U.S.C. § 803.
4. Respondent is large in size, having produced 5,654,353 tons of coal at its Buchanan No. 1 mine in 2011 and 3,506,216 tons in 2012.
5. The proceeding is subject to the jurisdiction of the Federal Mine Safety and Health Review Commission and its designated Administrative Law Judges pursuant to Sections 105 and 113 of the Mine Act, 30 U.S.C. §§ 815 and 823.
6. MSHA Inspectors Jason D. Hess, William G. Ratliff, and Paul E. Smith, whose signatures appear in Block 22 of Citation Numbers 8202408, 8189820, and 8197859, respectively, were acting in their official capacity and as authorized representatives of the Secretary of Labor when they issued the citations.
7. The citations at issue in this proceeding were properly served by duly authorized representatives of the Secretary of Labor, Mine Safety and Health Administration, upon an agent of Respondent.
8. The total proposed penalties for the citations will not affect Respondent’s ability to continue in business.

Joint Exhibit 1; Tr. 6.¹

III. LEGAL PRINCIPLES

A. Gravity/Significant & Substantial (S&S) Designation

An S&S violation is a violation “of such nature as could significantly and substantially contribute to the cause and effect of a ... mine safety or health hazard.” 30 U.S.C. § 814(d). A violation is properly designated S&S “if, based upon the particular facts surrounding the violation, there exists a reasonable likelihood that the hazard contributed to will result in an injury or illness of a reasonably serious nature.” *Cement Div., Nat’l Gypsum Co.*, 3 FMSHRC 822, 825 (Apr. 1981).

In *Mathies Coal Company*, the Commission set forth the following four-part test to determine whether a violation is properly designated S&S:

¹ In this decision, the abbreviation “Tr.” refers to the transcript of the hearing. The Secretary’s exhibits are numbered S-1 to S-11 and the Respondent’s exhibits are numbered R-3 and R-4.

In order to establish that a violation of a mandatory safety standard is significant and substantial under *National Gypsum*, the Secretary of Labor must prove: (1) the underlying violation of a mandatory safety standard; (2) a discrete safety hazard – that is, a measure of danger to safety – contributed to by the violation; (3) a reasonable likelihood that the hazard contributed to will result in an injury; and (4) a reasonable likelihood that the injury in question will be of a reasonably serious nature.

6 FMSHRC 1, 3-4 (Jan. 1984); *accord Buck Creek Coal, Inc. v. FMSHRC*, 52 F.3d 133, 135 (7th Cir. 1995); *Austin Power, Inc. v. Sec’y of Labor*, 861 F.2d 99, 103 (5th Cir. 1988); *Consolidation Coal Co. v. FMSHRC*, 824 F.2d 1071, 1075 (D.C. Cir. 1987). The inspector’s judgment is also an important element of an S&S determination. *Wolf Run Mining Co.*, 36 FMSHRC 1951, 1959 (Aug. 2014); *Mathies*, 6 FMSHRC at 5. The S&S determination must be based on the particular facts surrounding the violation at issue. *Peabody Coal Co.*, 17 FMSHRC 508, 511-12 (Apr. 1995); *see, e.g., Wolf Run*, 36 FMSHRC at 1957-59.

It is the third element of the S&S criteria that is the source of most controversies regarding S&S findings. This element is established only if the Secretary proves “a *reasonable likelihood* the hazard contributed to will result in an event in which there is an injury.” *U.S. Steel Mining Co.*, 6 FMSHRC 1834, 1836 (Aug. 1984). Evaluation of the reasonable likelihood of injury should be made assuming “continued normal mining operations,” *U.S. Steel Mining Co.*, 6 FMSHRC 1573, 1574 (July 1984), i.e., the evaluation should be made “in consideration of the length of time that the violative condition existed prior to the citation and the time it would have existed if normal mining operations had continued.” *Black Beauty Coal Co.*, 34 FMSHRC 1733, 1740 (Aug. 2012); *Rushton Mining Co.*, 11 FMSHRC 1432, 1435 (Aug. 1989).

The S&S nature of a violation and the gravity of the violation are not synonymous. Gravity is generally expressed as the degree of seriousness of the violation. The gravity assessment and a finding of S&S are frequently based upon the same or similar factual circumstances, *Quinland Coals, Inc.*, 9 FMSHRC 1614, 1622 n.11 (Sept. 1987), but the focus of the inquiries differs. The Commission has pointed out that the focus of the gravity inquiry “is not necessarily on the reasonable likelihood of serious injury, which is the focus of the S&S inquiry, but rather on the effect of the hazard if it occurs.” *Consolidation Coal Co.*, 18 FMSHRC 1541, 1550 (Sept. 1996).

B. Negligence

Negligence is conduct that falls below the standard of care established under the Mine Act. Under the Mine Act, an operator is held to a high standard of care and is required to be on the alert for conditions and practices that may cause injuries and to take necessary precautions to prevent or correct them. 30 C.F.R. § 10.0(d). Moderate negligence is defined by the Secretary as having occurred in connection with a violation when “[t]he operator knew or should have known of the violative condition or practice, but there are mitigating circumstances.” *Id.* § 100.3, Table X. If the mitigating circumstances are “considerable,” the Secretary considers the level of negligence to be low. *Id.*

IV. FINDINGS OF FACT AND ANALYSIS

A. Citation Number 8202408² (Ventilation Plan Violation)

1. The Violation

This citation was issued by MSHA Inspector Jason D. Hess³ on November 9, 2012 and alleges the operator violated the mandatory health and safety standard at § 75.370(a)(1) by failing to maintain the required number of operable water sprays on a continuous mining machine, in contravention of the mine's approved ventilation plan. Ex. S-1. The Secretary has proposed a penalty of \$1,203.00 for the alleged violation.

The cited safety standard provides that each operator of an underground coal mine shall develop and follow a ventilation plan that is designed to control methane and respirable dust in the mine and is approved by the MSHA district manager. 30 C.F.R. § 75.370(a)(1). Once a ventilation plan has been approved and adopted, its provisions are enforceable at the mine as mandatory safety standards. *Martin County Coal Corp.*, 28 FMSHRC 247, 254 (May 2006).

The ventilation plan for the Buchanan Mine #1 requires continuous mining machines to utilize a specified configuration of 38 dust control sprays that are strategically placed around the machine in blocks in order to wet the machine's ripper drums, tamp down dust, and facilitate air movement. Tr. 36-40, 45, 91; Ex. S-3. A certain number of sprays must remain operable during each cut. Part 1.R of the ventilation plan provides in pertinent part:

Prior to starting every cut on all CM [continuous miner] sections, the water sprays on the miner will be visually examined to insure that all 38 sprays are operating. Once the cut has started, a minimum of 80% of the sprays which are supposed to be operating for that cut must be maintained (no less than 50% of the sprays in each spray block must be operating).

Ex. S-3 at 3. These requirements are reiterated in Part 3.A.5.a and in Part 10, Sketch 9 of the ventilation plan. Ex. S-3 at 6, 19.

Inspector Hess discovered a violation of the ventilation plan while he was investigating a methane ignition that had occurred on the 20 Right development panel during the evening production shift on November 8, 2012. Tr. 20, 93. Continuous miner operator Will Reedy had

² The citations were not presented at trial in numerical or chronological order. They are addressed herein in the order in which they were presented at trial.

³ Hess worked in the mining industry as an equipment operator, electrician, and foreman for eleven or twelve years before he was hired by MSHA to serve as a coal mine inspector in April 2007. He underwent about 22 weeks of training at MSHA's Mine Academy in Beckley, West Virginia to receive his Authorized Representative card. Since early 2012 he has served as a ventilation specialist, in which capacity he reviews mine ventilation plans, assists operators in developing such plans, and advises the district manager on ventilation issues. He also holds collateral training and certification as an accident investigator. Tr. 16-20.

been performing a cleanup run in the No. 1 entry (i.e., clearing the slag and spilled cuttings from the working place after taking a cut of coal) when a large piece of sandstone had fallen from the mine roof. Tr. 27. As Reedy was using his continuous miner to cut the sandstone slug, an orange flame had flared up at the continuous miner and traveled across the floor and up the coal rib before Reedy was able to extinguish it with the wash-down hose. Tr. 28, 67, 100.

Inspector Hess arrived at the mine several hours later to investigate the cause of the ignition. Although the Buchanan Mine #1 is an extremely gassy mine, Reedy denied obtaining any abnormal methane readings or noticing anything else out of the ordinary before the ignition. Tr. 21-22, 26, 65-66. Air readings taken after the ignition had revealed methane concentrations of 0.3 to 04.%, which are normal levels for this mine, and Hess confirmed that the ventilation system in the working place was functioning as intended. Tr. 32-35, 115. The sole exception was that when a baffle curtain that had been hung after the ignition was taken down, methane accumulated in the roof cavity left behind by the sandstone slug. Tr. 32-35, 68-71. Hess speculated that when the slug fell, methane had been released from the roof and pulled down into the working place, where it had accumulated to a concentration of greater than 5% and combined with oxygen to produce a combustible mixture that was ignited when the continuous miner's drill bits sparked on the sandstone while cutting it. Tr. 78, 80.

When Hess examined the continuous miner for conditions that could have contributed to the ignition, he observed that 8 of the machine's 38 water sprays were clogged and inoperable. Ex. S-1. Each spray is set into a recess on the surface of the machine. Tr. 48. Hess discovered that coal was packed into some of the recesses such that a screwdriver was needed to remove the clogged spray assemblies, and they still would not spray even after they had been cleaned and reattached, indicating internal clogging. Tr. 48-49. Based on these observations, Hess issued the citation, which was terminated about forty minutes later when the inoperable sprays had been cleaned. Ex. S-1.

The fact that eight of the sprays were clogged means that only thirty sprays were operable during the last cut unless one or more of the inoperable sprays somehow became clogged while the machine was sitting idle after the cut, as suggested by Consol. Resp.'s Post-Hr'g Br. 18. Hess indicated this was highly unlikely. He saw no way the sprays could have become completely packed with coal during the brief amount of time the machine was cutting the sandstone slug or while it was idled afterward. Tr. 49, 62, 87, 90. I agree with his assessment. It is much more likely that the sprays became clogged with coal dust while the machine was cutting coal earlier in the shift. Consol presented testimony from Donald Sparkman, manager of safety for the company's Central Appalachian operations, that the mine and the continuous miner had been out of service for about two months until five days before the ignition, which could have allowed particles to accumulate in the water lines due to the corrosive, acidic nature of the water at the mine. Tr. 151-54. However, even accepting Sparkman's suggestion that the sprays became clogged when the bumping of the machine as it was cutting the sandstone dislodged accumulated sediment in the water lines, this would have occurred while the machine was operating, not after it had been shut off. Tr. 90. I find that while the continuous miner was cutting the sandstone slug, only 30 of its 38 sprays (78.9%) were operable. This was a violation of the ventilation plan's requirement that 80% of the sprays be maintained during every cut.

In addition, the operator violated the requirement that 50% of the sprays in each spray block remain operable during every cut. All four of the sprays in the two ripper side spray blocks, which are located on either side of the ripper head, were completely clogged. Ex. S-1; Tr. 40, 44. Furthermore, only one of the three sprays in the right pan side spray block was functioning. Ex. S-1; Tr. 44-45. Counsel for the Respondent has called attention to the fact that Inspector Hess said the pan side sprays were on left side of the machine during a deposition but later said they were on the right. However, Hess credibly explained that he simply made a mistake during the deposition because he was referring to a mirror-image sketch of the continuous mining machine at the time. Tr. 39, 55-59, 81; *see* Ex. S-3, Part 10, Sketch 9 (bearing legend “Right side miner shown, left side miner is mirror image”). Regardless, the ventilation plan’s 50% requirement was violated by the fact that neither of the ripper side spray blocks contained a single operable spray.

Because two of the ventilation plan’s requirements were violated, a violation of § 75.370(a)(1) occurred.

2. Gravity and S&S Findings

Parties’ Positions

Inspector Hess marked this violation as S&S and reasonably likely to cause an injury that would result in lost workdays or restricted duty for two miners. Ex. S-1. Hess believed that the inoperable sprays, and particularly the complete failure of all the sprays in both of the ripper side spray blocks, had caused the November 8 ignition. Tr. 37-38, 46, 51, 89. Although the ignition did not result in any injuries, Hess believed that a greater quantity of fuel could have easily allowed a fire to propagate back to burn the miner operator and the nearby hauler operator, or the ignition could have even led to a fatal explosion. Tr. 50-53.

Consol argues that the S&S designation is inappropriate because the Secretary has failed to establish that an injury-causing event was reasonably likely and therefore has failed to satisfy the third *Mathies* element. Resp.’s Post-Hr’g Br. 17-18.

S&S Analysis

A violation of a mandatory safety standard occurred, satisfying the first element required to sustain an S&S finding under the *Mathies* test.

The second *Mathies* element, the existence of a discrete safety hazard contributed to by the violation, is also satisfied because this violation contributed to the discrete hazard that an ignition, fire, or explosion would occur. As explained by Inspector Hess, who was a ventilation specialist with more than fifteen years of experience in underground mining at the time he issued this citation, the violative condition contributed to the likelihood of an ignition both by impairing the system by which the continuous miner’s drill bits are wetted down and by inhibiting the air movement that is needed to sweep dust and gases away from the face area and to prevent methane from accumulating to ignitable levels around the continuous miner while it is working. Tr. 36-38, 45-47, 91. Hess was especially concerned about the complete inoperability of all the sprays in both ripper side spray blocks. One of the functions of these particular sprays is to

create a Venturi effect that aids the mine's ventilation system by pulling air across the continuous mining machine. Tr. 37-38, 91. In addition, these sprays keep the outside ring of bits cool on the ripper head. Tr. 37, 46. The loss of these two functions contributed to the discrete hazard that methane would accumulate around the machine while it was in service and would be ignited by a spark from the hot drill bits, leading to an ignition, fire, or explosion.

For violations that contribute to the hazard of an ignition, fire, or explosion, the third *Mathies* element is satisfied when a "confluence of factors" existed that could have triggered an ignition, fire, or explosion with continued normal mining operations. *Paramont Coal Co. Virginia, LLC*, 37 FMSHRC 981, 984 (May 2015); *Texasgulf, Inc.*, 10 FMSHRC 498, 501 (Apr. 1988). Such factors include the presence of potential ignition sources, such as nearby equipment that might spark or create frictional heat, and the presence of any substances that are ignitable or that could provide a fuel source to propagate a fire or explosion, such as methane or accumulations of coal dust. *See, e.g., Consolidation Coal Co.*, 35 FMSHRC 2326, 2338-41 (Aug. 2013) (upholding S&S finding for ventilation violation when ignition sources and methane were present).

An ignition actually occurred in this case. Hess attributed the ignition to the loss of function of the continuous miner's side sprays, for the reasons discussed above. Given Hess's convincing testimony and his training and experience as a ventilation specialist, I credit his opinion in this regard and find that the hazard contributed to by this violation resulted in an actual ignition.

Even if an ignition had not actually occurred, a confluence of factors existed at the time of the violation that was reasonably likely to trigger an ignition or fire. The Buchanan Mine #1 liberates twelve million cubic feet of methane per day, making it the gassiest mine in its MSHA district and placing it on a five-day methane spot inspection cycle under section 103(i)⁴ of the Mine Act. Tr. 21-22, 155, 207. The mine also has a history of methane ignitions and two explosions have occurred there in the past ten years. Tr. 52, 64, 155, 176, 207. The violation occurred at the working face, where methane is known to be liberated, and a large rock had separated from the roof just before the violation, which likely released methane. Methane was present and available to mix with oxygen in the ambient air and serve as a fuel source for a fire. Ignition sources were also present. Although Hess did not identify any permissibility violations, the face equipment in use at this location could have generated heat and sparks with continued normal mining operations. In particular, the continuous miner's drill bits were likely to generate sparks as they were cutting sandstone, which sparks easily and was present in the mine roof in the area where the violation occurred. Tr. 117, 143-44, 150, 154-55. The violation increased the likelihood that a spark produced by the miner's drill bits would lead to an ignition or fire because the clogged sprays would not have been able to properly cool the outer ring of drill bits, extinguish sparks, and move air across the machine to prevent methane from accumulating. Because a confluence of factors existed which were reasonably likely to trigger an ignition or fire with continued normal mining operations, the third *Mathies* element is satisfied.

⁴ Section 103(a) mandates that whenever a mine "liberates excessive quantities of methane or other explosive gases," the Secretary shall perform a spot inspection of the mine at least once every five days. "Excessive quantities" of gases are defined as more than one million cubic feet of gases liberated during a 24-hour period. 30 U.S.C. § 813(i).

Turning to the fourth *Mathies* element, a fire at the working face would be reasonably likely to cause serious or fatal injuries, such as burns or injuries from smoke inhalation, to any miners working there. See *McCoy Elkhorn Coal Corp.*, 36 FMSHRC 1987, 1992-93 (Aug. 2014) (noting “common sense” proposition that an ignition or fire in an underground coal mine presents a risk of serious injury).

Because the four *Mathies* criteria are met, this violation is S&S.

Gravity Analysis

This was a serious violation because it exposed at least two miners, the continuous miner operator and the nearby hauler operator, to potentially fatal injuries from a fire.

3. Negligence

Inspector Hess charged Consol with moderate negligence because he believed that mine management was not taking the initiative to ensure the continuous miner’s sprays were being properly cleaned throughout the shift. Tr. 53-54. Consol does not directly dispute the moderate negligence designation, but has presented testimony that continuous miner operators are trained to follow a sandstone cutting plan and to always check the machine’s sprays before beginning a cut and that miner operator Reedy was a competent employee who would have followed these requirements. Tr. 92, 110, 116-18, 132-33, 144.

I agree with Hess. Under the ventilation plan, Consol is responsible for checking the condition of the continuous miner’s sprays before each cut is made. Mine management should have been particularly alert to the need to keep the sprays clean because they were aware that the water at the mine carried particulate matter that could clog the water lines and that the continuous miner had been idled for two months before being placed back in service recently. Tr. 111, 131-32, 151-54. Based on the amount of material clogging the exterior of the sprays and the level of compaction described by Hess, it is evident that the sprays were not checked before the sandstone slug was cut and had been clogged since at least the previous cut, leading to a methane ignition. Miner operator Reedy and section foreman Tommy Proffitt are to be commended for reacting quickly and appropriately to contain the fire, reflecting proper training, and fortunately no one was injured. Tr. 113-14. However, the miners’ after-the-fact actions were not appropriate measures on management’s part to guard against the violation occurring in the first place. I find that moderate negligence is appropriate under the circumstances.

B. Citation Number 8197859 (Accumulation Violation)

1. The Violation

This citation was issued by MSHA Inspector Paul E. Smith⁵ just before noon on December 5, 2012 and alleges that there was an accumulation of combustible materials in the

⁵ Inspector Smith worked in the mining industry for more than twenty years as an equipment operator, foreman, and electrician before he was hired by MSHA in 2008. He trained at the

form of float coal dust along the No. 3 belt flight on the 21 Right section, in violation of the mandatory health and safety standard at § 75.400. Ex. S-4. The Secretary has proposed a penalty of \$19,793.00 for the alleged violation.

The cited standard states: “Coal dust, including float coal dust deposited on rock-dusted surfaces, loose coal, and other combustible materials, shall be cleaned up and not be permitted to accumulate in active workings, or on diesel-powered and electric equipment therein.” 30 C.F.R. § 75.400. Recent, minor coal spillages may be exempted from the regulation, but if “the quantity of combustible materials is such that ... it could cause a fire or explosion if an ignition source were present,” the regulation has been violated. *Old Ben Coal Co.*, 2 FMSHRC 2806, 2808 (Oct. 1980); see *Black Beauty Coal Co. v. FMSHRC*, 703 F.3d 553, 558-59 (D.C. Cir. 2012).

Inspector Smith issued this citation after traveling the mine on the morning of December 5 to inspect the mine’s water system and carbon monoxide (CO) monitoring system. Tr. 160-61. Accompanied by assistant general maintenance foreman Elmer Deel and one other miner, Smith traveled underground and visited each of the working sections. Tr. 161, 197-200. The last section the inspection party visited was the 21 Right section, which was actively producing coal at the time. Tr. 200, 219. The men entered the section through the belt/track intake entry, rode to the end of the track in a mantrip, and walked to the dumping point so that Smith could check the CO sensor and water pressure at the belt tailpiece. Tr. 200; Ex. S-5 at 12-15.

Inspector Smith testified that as he was walking back out of the entry, he noticed that the area underneath the belt flight was “pretty dark.” Tr. 162. This can be a sign of inadequate rock dusting, since properly rock-dusted surfaces should be white (the color of rock dust) or gray (the color of rock dust mixed with coal) rather than black. Tr. 164, 192, 206, 222. Looking more closely, Smith observed an eight-foot-wide layer of float coal dust resting along the belt structure and the mine water line for a distance of eleven crosscuts, or approximately 1,650 feet, with a few short gaps. Tr. 162-64. By measuring the accumulated material with a tape measure and a pocket screwdriver serving as a dipstick, Smith determined the accumulation ranged in depth from paper-thin to an eighth of an inch thick. Tr. 163. The National Institute of Occupational Safety and Health determined in a 2006 study⁶ that a paper-thin layer of float coal dust is substantial enough to propagate a fire or explosion if it is not mixed thoroughly with rock dust. Tr. 162. Accordingly, Smith issued a citation identifying a hazardous condition.

Consol argues that the citation should be dismissed because its three witnesses testified they saw no evidence of a 1,650-foot-long coal dust accumulation. Resp.’s Post-Hr’g Br. 18-19. However, two of Consol’s witnesses, section foreman Terry Hamilton and ventilation foreman Ricky Rose, did not actually observe the cited area during the operative timeframe. Hamilton was working inby at the face at the time the citation was issued and expressly denied observing the cited accumulation. Tr. 219-20. Rose testified he saw no float coal dust during the pre-shift examination for the cited area, but he had performed the exam six hours before the citation was

Mine Academy and received his Authorized Representative card in March 2009. He inspects underground and surface coal mines. Tr. 157-59.

⁶ “Float Coal Dust Explosion Hazards,” DHHS (NIOSH) Pub. No. 2006-125 (Apr. 2006), available at www.cdc.gov/niosh/mining/UserFiles/works/pdfs/2006-125.pdf.

issued. Tr. 188, 191. Foreman Deel was the only witness who was present when Inspector Smith issued the citation and who saw the material that Smith deemed to be an accumulation.

Deel, who has more than forty years of coal mining experience, opined that the citation was unwarranted because the area under the belt flight “was real lightly gray and there [weren’t] any real deposits that I could see.” Tr. 196, 203. His testimony raises factual disputes as to the composition and extensiveness of the cited material. However, there was testimony from both Smith and Consol’s witnesses that the cited area had not been rock dusted in accordance with the mine’s normal rock dusting schedule because the track duster that was ordinarily used in that area had broken down. Tr. 168, 202, 210. Deel conceded he did not know when the area had last been dusted. Tr. 210. These facts lend credence to Smith’s assertion that float coal dust had been allowed to accumulate on previously rock dusted surfaces, which can occur quickly along belt lines. Tr. 169. The accumulated material may have contained some rock dust, but only a small amount of float coal dust is needed for an ignition, as conceded by foreman Deel. Tr. 206. I credit Smith’s testimony that the accumulation was dark enough to indicate it was mostly coal dust and that the amount of coal dust present was substantial enough to cause or propagate a fire or explosion if an ignition source were present.

I find that a violation of § 75.400 occurred.

2. Gravity and S&S Findings

Parties’ Positions

Inspector Smith marked this violation as S&S and reasonably likely to cause fatal injuries to twelve miners. Ex. S-4. His concern was that if a “methane event” were to occur in the face area and travel to the belt entry, the accumulated float coal dust could cause a powerful dust explosion that would endanger the entire twelve-man crew working on the section. Tr. 166-68.

Consol argues that the third *Mathies* factor is not met, and therefore the violation is not S&S, because there were no ignition sources or methane in the cited area and the area was properly rock dusted, making the likelihood of an ignition or explosion minimal or nonexistent. Resp.’s Post-Hr’g Br. 19-20.

S&S Analysis

A violation of a mandatory safety standard occurred, satisfying the first *Mathies* element.

The violation contributed to the discrete hazard that an ignition, fire, or explosion would occur and would be propagated along the belt entry. As the Commission has long recognized, float coal dust serves as a fuel source for fires and explosions because it is combustible and is easily placed into suspension in the air, allowing it to propagate explosions in enclosed spaces. *See, e.g., Utah Power & Light, Mining Div.*, 12 FMSHRC 965, 970 (May 1990), *aff’d*, 951 F.2d 292 (D.C. Cir. 1991). Thus, float coal dust that has not been adequately mixed with rock dust so as to render it inert increases both the risk of and the dangers posed by an ignition, fire, or explosion. The accumulated float coal dust observed by Inspector Smith clearly had not been adequately mixed with rock dust because it was dark in color and it was located in an area that

had not been rock dusted according to schedule. The accumulation was approximately 1,650 feet long, eight feet wide, and ranged from paper-thin to an eighth of an inch deep, which was substantial enough to cause or propagate a fire or explosion. Although the coal dust was not heavily deposited in some spots and was slightly damp in others, Inspector Smith explained that an explosion could jump over any gaps and a fire could easily dry out the damp patches. Tr. 164, 167. Considering all of the facts, I find that the accumulation of float coal dust contributed to the hazard of a mine fire or explosion, satisfying the second *Mathies* element.

However, the third *Mathies* element is not satisfied. As noted above in my discussion of Citation Number 8202408, the pertinent inquiry is whether consideration of all the facts surrounding the violation reveals that a confluence of factors existed that could have triggered an ignition, fire, or explosion with continued normal mining operations. In arguing that the “confluence of factors” test is met, the Secretary points to factors such as the mine’s history of methane liberation and ignitions, the sandstone strata in the mine’s roof, and the 1,650-foot distance spanned by the cited accumulation. Sec’y’s Post-Hr’g Br. 16-19. Yet the Secretary has failed to identify any likely ignition sources. Consol’s witnesses testified and Inspector Smith conceded that there were no ignition sources in the cited area or at the dumping point, which was 450 feet away. Tr. 174-75, 178, 190, 203, 221. The Secretary has echoed Inspector Smith’s concern that a methane ignition at the working face would travel into the belt entry, and from there a fire or explosion could be propagated by the accumulated float coal dust. Sec’y’s Post-Hr’g Br. 16. But Smith was “not really sure” how far the accumulations were from the face and could not say whether ignition sources were present there because he had not traveled in by the dumping point. Tr. 164-65, 173, 181. Consol’s witnesses testified there were no permissibility problems or excess methane at the face that day and sandstone was not being mined. Tr. 207-08, 219. The absence of these conditions decreases the likelihood of an ignition occurring at the face. Even if an ignition were to occur at the face, Deel testified that the accumulations were more than 900 feet away, and Inspector Smith offered no facts or explanation as to how an ignition could have blown out by more than 900 feet to the cited area to ignite the accumulated coal dust. Tr. 206. In short, although the accumulated coal dust contributed to the hazard of a mine fire or explosion by supplying a potential fuel source, there is no evidence of any ignition sources that could have caused the coal dust to combust. Furthermore, there was likely rock dust from the mine’s routine rock dusting regimen mixed in with the coal dust. After considering all the evidence, I find that the Secretary has failed to establish a confluence of factors existed that were reasonably likely to trigger an ignition, fire, or explosion.

Because the third *Mathies* element is not satisfied, this violation is not S&S.

Gravity Analysis

The gravity of this violation is serious in that the float coal dust could have propagated a mine fire or explosion, which could have caused serious or fatal injuries to all twelve miners on the section, if an ignition source had been present.

3. Negligence

Inspector Smith charged the operator with moderate negligence in connection with this violation because the cited area had not been rock-dusted on schedule even though there were

four rock dusting machines at the mine. Tr. 168; Ex. S-4. However, the Secretary concedes that mitigating factors existed in that the area had been examined six hours earlier and float coal dust can accumulate quickly. Sec’y’s Post-Hr’g Br. 20; Tr. 169.

I find that the negligence associated with this violation is more properly described as low. The cited layer of coal dust was paper-thin at some points and only an eighth of an inch deep at its thickest, indicating it had existed for a short period of time. In addition, Deel indicated that the belt was not being run while the rock duster was down. Tr. 202, 211-12. Under these circumstances, the mine operator’s negligence was low.

C. Citation Number 8189820 (Roof Control Violation)

1. The Violation

This citation was issued by MSHA Inspector W. Gregory Ratliff⁷ on July 14, 2011 and alleges that the inspector observed a cut of coal that exceeded the maximum depth allowed under the mine’s roof control plan, in violation of § 75.220(a)(1). Ex. S-6. The Secretary has proposed a penalty of \$3,405.00 for the alleged violation.

The cited safety standard provides in pertinent part: “Each mine operator shall develop and follow a roof control plan, approved by the District Manager, that is suitable to the prevailing geological conditions, and the mining system to be used at the mine.” 30 C.F.R. § 75.220(a)(1). As is the case for ventilation plan provisions, the provisions of a mine’s approved roof control plan are enforceable as mandatory safety standards at the mine. *Martin County Coal Corp.*, 28 FMSHRC at 254.

The provision at issue in this case is Part 1, Section K of the mine’s approved roof control plan, which provides that the standard cut depth at the mine is 20 feet. Ex. S-8 at 3. Although cuts up to 25 feet deep may be taken under some circumstances when a prescribed set of procedures is followed, Subsection K.7 limits cut depth to 20 feet in certain situations, including in the presence of “[a]ny detectable condition which is known to indicate the presence of adverse roof conditions.” *Id.* at 4.

Ratliff issued this citation after traveling to the mine around 5:00 AM on the morning of July 14 to investigate an unrelated complaint. Tr. 227-28. Company safety inspector Robert Baugh accompanied him into the mine. Tr. 286. While Ratliff was conducting an imminent danger run on the 17 Right development panel, he observed adverse roof conditions and a cut that appeared to exceed 20 feet in depth in a crosscut that was being developed between the No. 3 and No. 2 entries. Tr. 229. The crosscut had punched through to the No. 2 entry and the roof had partly collapsed. Tr. 267-69, 291. Miners were in the process of bolting the unsupported roof using 6-foot resin bolts. Tr. 241, 259-60. Ratliff said he waited until the cut was bolted

⁷ Inspector Ratliff has worked for MSHA as a coal mine inspector since February 2008. He worked in the mining industry as an equipment operator, shop foreman, and fireboss for approximately 24 years before being hired by MSHA in 2007 and subsequently completed about a year of field training and coursework at the Mine Academy to become certified as an inspector. Tr. 225-26.

then measured it with a tape measure, which revealed a depth of 23.5 feet measured from the last row of roof bolts (which contained several damaged bolts) and 26 feet measured from the next-to-last row. Tr. 229-30, 244; Ex. S-11. He cited the condition at 11:38 AM and the citation was terminated at 2:00 AM the next day with notation that the roof had been supported. Ex. S-6.

The citation states that the cut depth was limited to 20 feet due to adverse roof conditions in the previous cut. Both Ratliff and Baugh observed adverse conditions in the cited area in the form of cracks in the mine roof, cracks in test holes from the prior cut, and areas where the roof had fallen. Tr. 232-33, 287, 306. Baugh speculated that the adverse conditions may not have been detectable until after the cut had been taken and the roof had fallen. Tr. 309. However, section foreman Hamilton, who was in charge on the section when the cut was taken, testified that he would not have knowingly taken a 22 or 23 foot cut in that area. Tr. 271-72. The area was being bolted on a “tiger pattern” and extra bolts were being added between rows, which are measures taken to increase roof support under adverse conditions. Tr. 312-13. I find that the cut depth was limited to 20 feet under the mine’s approved roof control plan due to adverse roof conditions in the area.

Because the cut depth was limited to 20 feet, Inspector Ratliff’s 26-foot and 23.5-foot measurements could each support a finding that the roof control plan was violated. Consol’s witnesses have disputed these measurements on several grounds.

First, Consol’s witnesses testified that Ratliff had measured from the wrong row of roof bolts in obtaining the 26-foot figure. Tr. 303. The depth of a cut is measured starting from the last full row of undamaged roof bolts installed on the previous cut. Tr. 230, 278, 308. Ratliff took the prudent course of measuring from the next-to-last row of bolts because at least two of the bolts in the last row were damaged. Tr. 234. However, Hamilton said he had checked the area before the cut was initiated and all the roof bolts were intact at that time, meaning that the last row should have been used as the starting point for measuring the cut. Tr. 269-70. I find Hamilton’s testimony to be credible. The bolts were likely dislodged or otherwise damaged by the roof fall or by the continuous miner as it was trimming the roof afterward, as Hamilton and Baugh stated. Tr. 269-70, 292-93. The cut depth should be measured from the last row of bolts because it was fully intact when the cut was taken.

Consol’s witnesses also disputed Inspector Ratliff’s finding that the cut was 23.5 feet deep when measured from the last row of bolts. Foreman Hamilton had initially projected the cut would be 19 feet deep but later learned that his calculation was off by one foot due to a misplaced spad. Tr. 270-78; *see* Ex. R-4. He testified that the cut had not been fully bolted until the day after the citation was issued, at which time he had measured it and found it to be just a few feet deeper than projected. Tr. 280. Similarly, Baugh testified that he had returned to the cited area the day after the citation was issued when the roof was fully supported, which allowed him to walk into the cut and take measurements along each wall and along the centerline. He found that the cut was 22 feet deep along each wall and 22 feet 4 inches deep down the middle and memorialized these findings in a detailed six-page report that contains four demonstrative drawings. Tr. 294-95; Ex. R-3. Baugh conceded that a 22-foot cut violates the roof control plan but opined that this cut may have been compliant until the roof fell and caused the face to collapse with it, thereby extending the depth of the cut. Tr. 308. This scenario is possible, but

there is no clear evidence that it occurred. Based on the available evidence, I find that the cut was between 22 and 23.5 feet deep, in violation of the mine's approved roof control plan.

Because the roof control plan was violated, a violation of § 75.220(a)(1) occurred.

2. Gravity and S&S Findings

Parties' Positions

Inspector Ratliff assessed this violation as S&S and reasonably likely to fatally injure two miners. Ex. S-6. He explained that the violation contributed to the hazard of the roof "breaking back in through the adverse conditions" to the bolted areas where miners were working, which could allow miners to be struck by falling rock weighing approximately 150 pounds per square foot. Tr. 239-40.

Consol contends that it was unlikely a roof fall would travel far enough outby the cited area to cause injury because no miners would come close to the cited area before the roof was bolted except the roof bolters, who are protected by the ATRS (automated temporary roof support) systems on their machines. Resp.'s Post-Hr'g Br. 20-21.

S&S Analysis

A violation of a mandatory safety standard occurred, satisfying the first *Mathies* element.

This violation contributed to the discrete safety hazard of a roof fall occurring due to the extended span of unsupported roof at an intersection. Thus, the second *Mathies* element is satisfied.

However, the third *Mathies* element is not satisfied. The Secretary has not established that a roof fall was likely to result in injury in this case. It is unlikely that miners would have accessed the area affected by the hazardous condition because they work a substantial distance back from the unsupported roof and are not permitted to enter the "red zone" beyond the next-to-last row of bolts. Tr. 307. The continuous miner operator normally stands at least 20 feet back from the last row of bolts and is not permitted to go beyond the next-to-last row of bolts even when performing gas checks. Tr. 297-98, 314. Miners generally are not allowed underneath the last row of bolts except to extend ventilation, in which case the continuous miner's ripper head must be placed against the roof to exert upward pressure, or to operate the roof bolting machine, in which case the ATRS provides supplemental roof support. Tr. 298. Moreover, the mine was employing a tiger bolting pattern in the cited area at the time of the violation, meaning that additional resin bolts had been installed to support the top and to combat any existing adverse roof conditions. Tr. 312-13. This supplemental roof support decreased the likelihood that a roof fall originating in the extended cut would be able to spread into or significantly affect the bolted roof areas behind it. Inspector Ratliff provided no explanation as to how a crack or roof fall would work its way back to where miners were located given the supplemental roof support and tiger bolting pattern that was being used. Furthermore, assuming that normal mining operations had continued without being interrupted by the issuance of the citation, the hazardous condition would not have exposed miners to danger for a lengthy period of time because the unsupported

roof was already being bolted by the time Inspector Ratliff arrived. Based on all the foregoing facts, I find that the hazard contributed to by this violation was not likely to result in an injury-causing event with continued normal mining operations.

Because the third *Mathies* element is not met, this violation is not S&S.

Gravity Analysis

The gravity of this violation is serious in that the cited condition contributed to the risk of a potentially life-threatening roof fall which could affect miners working at the face such as the roof bolters or the miner operator.

3. Negligence

Inspector Ratliff charged the operator with moderate negligence because he believed an on-shift examiner should have noticed the condition. Tr. 241; Ex. S-6. I agree with his assessment. Members of mine management were aware of adverse roof conditions and that when a crosscut breaks through into an entry, there is an increased risk that coal will fall away from the ribs and face, extending the depth of the unsupported roof. Tr. 272, 281, 296, 308. It is not unusual at the mine to reduce cut depth in order to avoid leaving a lengthy stretch of unsupported top next to a small column of coal that is likely to collapse. Tr. 272, 283. Here, the circumstances known to mine management should have spurred them to reduce the cut depth to less than 20 feet, but they failed to take this measure. Moderate negligence is appropriate under these circumstances.

V. PENALTIES

The Commission has reiterated in *Mize Granite Quarries, Inc.*, 34 FMSHRC 1760, 1763-64 (Aug. 2012):

Section 110(i) of the Mine Act grants the Commission the authority to assess all civil penalties provided under the Act. 30 U.S.C. § 820(i). It further directs that the Commission, in determining penalty amounts, shall consider:

The operator's history of previous violations, the appropriateness of such penalty to the size of the business of the operator charged, whether the operator was negligent, the effect on the operator's ability to continue in business, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of a violation.

30 U.S.C. § 820(i).

The Commission and its ALJs are not bound by the penalties proposed by the Secretary, nor are they governed by MSHA's Part 100 regulations, although substantial deviations from the proposed penalties must be explained using the section 110(i) criteria. *See Sellersburg Stone Co.*, 5 FMSHRC 287, 293 (Mar. 1983). In addition to considering the 110(i) criteria, the judge

must provide a sufficient factual basis upon which the Commission can perform its review function. *See Martin County Coal Corp.*, 28 FMSHRC at 247.

Size of Operator; Ability to Continue in Business; Violation History

The parties have stipulated that Consol is large in size, having produced more than five million tons of coal in 2011 and more than three million tons of coal in 2012, and that the penalties proposed by the Secretary will not impair Consol's ability to remain in business. Joint Exhibit 1. Consol has an average, moderate number of prior violations that is proportionate to its size. *See Exs. S-9, S-10.*

Good Faith

The Secretary credited Consol with good faith in abating all three violations at issue in this case. Good faith is also reflected in the portion of each citation that describes the actions taken to abate the condition and in the testimony regarding the operator's abatement efforts.

Negligence and Gravity

The gravity of each violation and Consol's negligence with respect to the violations are discussed at length within the body of my decision above.

Conclusion

After considering the six statutory penalty criteria, I assess the following penalties for the three violations at issue in this case:

Citation Number 8202408 (ventilation violation) - \$1,203.00

Citation Number 8197859 (accumulation violation) - \$1,700.00

Citation Number 8189820 (roof control violation) - \$1,500.00

ORDER

Consol is hereby **ORDERED** to pay the sum of \$4,403.00 within thirty (30) days of the date of this Decision and Order.⁸



Priscilla M. Rae
Administrative Law Judge

⁸ Payment should be sent to: Mine Safety and Health Administration, U.S. Department of Labor, Payment Office, P.O. Box 790390, St. Louis, MO 63179-0390.

Distribution:

Eric Johnson, Esq., U.S. Department of Labor, Office of the Solicitor, 211 Seventh Avenue North, Suite 420, Nashville, TN 37219

Billy R. Shelton, Esq., Jones, Walters, Turner & Shelton PLLC, 151 N. Eagle Creek Drive, Suite 310, Lexington, KY 40509