

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

OFFICE OF ADMINISTRATIVE LAW JUDGES
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August 19, 2019

KNIGHT HAWK COAL, LLC,
Contestant

v.

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

CONTEST PROCEEDING

Docket No. LAKE 2019-0087-R
Citation No. 9035600; 11/14/2018

Mine: Prairie Eagle – Underground
Mine ID: 11-03147

AMENDED DECISION AND ORDER

Appearances: R. Henry Moore, Jackson Kelly PLLC, Pittsburgh, PA for the Contestant¹
Travis W. Gosselin, Office of the Solicitor, U.S. Department of Labor,
Chicago, IL for the Respondent

Before: Judge McCarthy

This proceeding is before the undersigned on a Notice of Contest and Motion to Expedite filed November 15, 2018, by Knight Hawk Coal, LLC, pursuant to § 105(d) of the Federal Mine Safety and Health Act of 1977, as amended, 30 U.S.C. § 815(d) (“Mine Act”) and Commission Procedural Rule 20(b). The contest challenges technical Citation No. 9035600-01, as modified, issued to Contestant on November 14, 2018 for operating without an approved ventilation plan under 30 C.F.R. § 75.370(a)(1), which states that “[t]he operator shall develop and follow a ventilation plan approved by the district manager. The plan shall be designed to control methane and respirable dust and shall be suitable to the conditions and mining systems at the mine.”

A hearing was held in St. Louis, Missouri, on March 28-29 and April 1, 2019. During the hearing, the parties offered lay and expert witness testimony and documentary evidence.²

¹ Although Mr. Moore was with Jackson Kelly, PLLC, when the contest was filed, he is currently at Fisher Phillips LLP, Pittsburgh, PA.

² In this Decision, “Tr.” refers to the hearing transcript, “P. Ex. #” refers to the Contestant’s exhibits, and “G. Ex. #” refers to the Respondent’s exhibits. P. Exs. 13-28, 30, and 34-40, and G. Exs. 1-12 and 14-18, were received into evidence. Tr. 281-82.

Witnesses were sequestered. The parties submitted post-hearing and reply briefs, the latest of which was filed on June 7, 2019.

Based on a careful review of the record, including the parties' post-hearing and reply briefs, and observation of the demeanor of witnesses,³ the undersigned makes the following findings of fact and conclusions of the law and orders that the technical citation be vacated and the previously approved ventilation plan be reinstated.

I. STIPULATIONS

The parties submitted the following stipulations, which have been accepted into the record:

1. The Prairie Eagle Underground Mine (PEUG) is a "mine" as that term is defined in Section 3(h) of the Mine Act.
2. Knight Hawk is engaged in mine operations in the United States, and its mining operations affect[ed] interstate commerce.
3. Knight Hawk is the operator of the PEUG, MSHA ID No. 11-03147.
4. Knight Hawk is subject to the jurisdiction of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. §801 et seq.
5. The Administrative Law Judge has jurisdiction in this matter.
6. Citation No. 8429603 was issued to the mine operator on November 14, 2018, and subsequently modified to correct the citation number – Citation No. 9035600.
7. The subject Citation was properly served by a duly authorized representative of the Secretary upon an agent of Knight Hawk on the date and place stated therein, and may be admitted into evidence for the purposes of establishing its issuance.
8. The Prairie Eagle Underground Mine mines coal utilizing continuous miners.
9. The PEUG began production in August 2006 with a single MMU. Since that time, it has implemented four (4) additional MMU's; each of them going through the extended cut evaluation process where they began at 20-foot cuts and worked their way to 40-foot cuts. These evaluations, as outlined in [Procedure Instruction Letter] I12-V-11 (Reissue of I10-V-09,

³ In evaluating testimony, the undersigned has taken into consideration the nature of the questioning and testimony given in response, the demeanor of the witnesses, their evasiveness or forthrightness, their interests in this matter, the inherent probability of their testimony in light of other events, corroboration or lack of corroboration for their testimony, their experience and credentials, and their consistency or lack of consistency vis-à-vis their own testimony and the testimony of other witnesses.

I08-V-03, I06-V-6), consisted of a mine history evaluation, plan provisions, training requirements, on-site evaluation, ventilation plan approval, and supplemental information pertaining to cut depth, ventilation, respirable dust, methane, and roof support. All five MMU's operate with extended cut plans and each of them conducted perimeter mining. Specifically, each extended cut plan, including perimeter mining, was approved by a District Manager, including the current one. The Ventilation Plan for each MMU is identical.

10. [Procedure Instruction Letter] 112-V-11 is marked as [G. Ex. 14] and may be admitted into evidence.

11. Program Policy Letter P13-V-12 is marked as [G. Ex. 13] and may be admitted into evidence.

12. Knight Hawk has conducted perimeter mining since January 2007.

13. During the initial startup of the mine, the Roof Control Plan and the Ventilation Plan [were] subject to an initial evaluation of both plans, including perimeter mining. That continued for 22 months for the Roof Control Plan and 41 months for the Ventilation Plan.

14. Roof bolting is generally eliminated during perimeter mining because after the entry is mined and the continuous miner withdrawn, it is barricaded off. Some limited roof bolting is still performed during perimeter mining in approaches to evaluation points. Per the approved roof control and ventilation plans, installation of four props/jacks [were] required prior to beginning each perimeter cut and the props/jacks must be left in place or removed remotely after a cut is completed.

15. Specifically, each MMU began at the following date and the extended cut plan, including perimeter mining, was approved by the following District Manager on the following dates:

* MMU 002 – June 2008, Acting DM Mary Jo Bishop (March 1, 2010)

* MMU 003 – December 2011, DM Robert Simms (August 17, 2012)

* MMU 004 – July 2013, DM Robert Simms (December 9, 2013)

* MMU 005 – August 2017, DM Ronald Burns (September 27, 2017)

16. The Roof Control Plan timeline is as follows:

* 01/26/06 – Conditional approval with no perimeter mining. MSHA stated, “an in-mine evaluation, to evaluate the mine’s specific mining conditions and the effectiveness of the plan in addressing those conditions will be required before any such approval can be considered.” The plan expired 07/26/06.

* 07/31/06 – Extension of the conditional approval until 01/26/07.

* 01/18/07 – Received a conditional approval for perimeter mining and an extension of the base plan; both until 07/18/07.

- * January 2007 – Perimeter Mining begins at PEUG.
- * 07/02/07 – Knight Hawk requested, “Due to the extent of mining completed to date, the multiple visitations/evaluation from Mr. Jeff Williams, and the successful implementation of the plan, we are hereby requesting removal of the ‘conditional’ approval of the Roof Control Plan and that the plan be placed into effect.”
- * 07/10/07 – Conditional approval extended another 6 months for further evaluation until 01/18/08.
- * 01/11/08 – Knight Hawk requested removal of the ‘conditional’ approval.
- * 03/11/08 – Conditional approval extended until 05/12/08.
- * 04/11/08 – Consolidated plan submitted as per MSHA request.
- * 05/30/08 – Plan approved without the ‘conditional’ constraint; including perimeter mining.

17. The Ventilation Plan timeline is as follows:

- * 08/02/06 – Conditional approval with perimeter mining. The plan expired 11/03/06.
- * 10/31/06 – Request to either remove the ‘conditional’ approval or extend the date.
- * 11/08/06 – Extension of the conditional approval until 02/03/07.
- * January 2007 – Perimeter Mining begins at PEUG.
- * 01/29/07 – Request to either remove the ‘conditional’ approval or extend the date.
- * 02/01/07 – Extension of the conditional approval until 05/03/07.
- * 05/02/07 – Request to either remove the ‘conditional’ approval or extend the date.
- * 05/02/07 – Extension of the conditional approval until 08/02/07.
- * 07/23/07 – Request to either remove the ‘conditional’ approval or extend the date.
- * 08/04/07 – Extension of the conditional approval approved until 10/09/07.
- * 10/02/07 – Request to either remove the ‘conditional’ approval or extend the date.
- * 12/28/07 – Extension of the conditional approval until 03/28/08.
- * 03/17/08 – Request to either remove the ‘conditional’ approval or extend the date.
- * 04/11/08 – Consolidated plan submitted as per MSHA request. The same date [Contestant] submitted a consolidated Roof Control Plan per MSHA’s request as well. No approval received.

- * 12/08/08 – Consolidated plan submitted as per MSHA request. No approval received.
- * 11/12/09 – Consolidated plan submitted as per MSHA request.
- * 03/01/10 – Plan approved without the ‘conditional’ constraint; including perimeter mining.

18. A typical Perimeter Mining Panel is 1 mile in length and 1,240 feet in width; approximately 150 acres. It takes approximately 11 months to complete a Perimeter Mining Panel and PEUG typically seals each panel within 30 days from completion of mining.

19. At the request of District Manager Ronald Burns, on December 19, 2017, the MSHA Pittsburgh Safety and Health Technology Center (“Tech Support”) performed an evaluation of the bleeder system which includes areas where perimeter mining was conducted at Prairie Eagle Underground on January 9-10, 2018. A report was prepared and submitted to the District Manger on or about February 8, 2018 and is marked as [G. Ex. 1] and may be admitted into evidence.

20. Similar evaluations were requested by District Manager Burns at the Viper Mine operated by ICG Illinois LLC and of the Gateway North Mine operated by Peabody Gateway North Mining LLC and are marked as [P. Exs. 35 and 34] respectively and may be offered into evidence at the hearing in this matter, subject to the objections outlined in the Secretary’s Motion in Limine.⁴

21. On January 29, 2018, Knight Hawk met with MSHA to discuss the preliminary findings of Tech Support’s evaluation of the mine’s bleeder system. During that meeting[,] District Manager Ronald W. Burns requested that Knight Hawk address the issues raised by those preliminary findings.

22. On March 7, 2018, Knight Hawk received a copy of Tech Support’s report. A copy of the report is marked as [G. Ex. 1]. A copy of the analytical gas sampling results from the Tech Support evaluation is marked as [G. Ex. 16] and may be admitted into evidence.

23. Knight Hawk’s ventilation plan including perimeter mining was last approved on February 15, 2015. A copy is marked as [G. Ex. 12] and may be admitted into evidence.

24. On March 13, 2018, Thomas Hasenstab[, a mining engineer and the current superintendent for Knight Hawk,] sent a letter to Mr. Burns outlining Knight Hawk’s response concerning perimeter mining. Such letter is marked as [G. Ex. 2] and may be admitted into evidence.

⁴ The undersigned denied the Secretary’s Motion in Limine. Order Denying the Secretary’s Motion in Limine, 41 FMSHRC 217 (Mar. 2019) (ALJ).

25. On April 12, 2018, Mr. Burns wrote Mr. Hasenstab directing Knight Hawk to revise its ventilation plan. Such letter is marked as [G. Ex. 3] and may be admitted into evidence.

26. On April 22, 2018, Mr. Hasenstab sent a letter to Mr. Burns submitting a response to his letter of April 12, 2018 with an attached copy of Knight Hawk's March 13, 2018 letter. Such letter is marked as [G. Ex. 4] and may be admitted into evidence.

27. On May 3, 2018, Mr. Burns wrote Mr. Hasenstab as a follow-up to a conference call on April 30, 2018. Such letter is marked as [G. Ex. 5] and may be admitted into evidence.

28. On May 15, 2018, Mr. Hasenstab wrote Mr. Burns responding to his May 3, 2018 letter. Such letter is marked as [G. Ex. 6] and may be admitted into evidence.

29. On June 7, 2018, Mr. Burns wrote Mr. Hasenstab responding to his letter dated May 15, 2018. Such letter is marked as [G. Ex. 7] and may be admitted into evidence.

30. On July 5, 2018, Mr. Hasenstab wrote Mr. Burns in response to his letter of June 7, 2018. Such letter is marked as [G. Ex. 8] and may be admitted into evidence.

31. On October 22, 2018, Mr. Burns wrote Mr. Hasenstab in response to his July 5, 2018 letter. Such letter is marked as [G. Ex. 9] and may be admitted into evidence.

32. On November 14, 2018, Mr. Burns wrote Mr. Hasenstab revoking Knight Hawk's approved ventilation plan. Such letter is marked as [G. Ex. 10] and may be admitted into evidence.

33. In order to abate the Citation and to continue to operate[,] Knight Hawk submitted a ventilation plan which MSHA approved. A copy of such Interim Plan is marked as [G. Ex. 15] and may be admitted into evidence.

34. Citation No. 9035600 was issued on November 14, 2018, pursuant to section 104(a) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 814(a) alleging a violation of Section 75.370(a)(1).

35. Under the heading and caption "Condition or Practice" the Citation alleges as follows:

The mine operator is mining without a ventilation plan approved by the District Manager. The operator's plan is revoked on this date because it fails to address existing, identified deficiencies. The parties' negotiations have reached impasse. In numerous discussions, and by letters dated April 12, May 3, June 7, and October 22, MSHA advised Knight Hawk Coal of concerns and of certain issues required to be addressed in its ventilation plan. Specifically:

1. The designs of the typical bleeder system does not control the air direction through all individual "blocks", including the air direction in the pillared area

within each “block”. [30 CFR Sections 75.334(b)(1), 75.334(c)(4), 75.371(bb), and 75.372(b)(9).]

Section 75.334 requires a bleeder system to be used to control the air passing through the area and to continuously dilute and move methane-air mixtures and other gases....Both conditions must be addressed in the bleeder system design.

The bleeder system in this case is not controlling the air in an effective manner as determined by the ventilation survey conducted in January 2018.

Effective ventilation requires sufficient air movement in appropriate directions. The ventilating device intended to control air movement through the area did not effectively control the air movement.

Air movement was not perceptible in portions of the pillared areas, including many extended-depth perimeter cuts. The air direction through the rooms from which the perimeter cuts were mined w[as] not always consistent throughout the length of the room, nor with the net direction of airflow through the block. No perceptible air movement was observed in approximately 57 of the 138 perimeter cuts examined. A few of the bolted perimeter cuts were examined in greater detail. Movement of air was observed in approximately 57 of the 138 perimeter cuts examined. A few of the bolted perimeter cuts were examined in greater detail. Movement of air was detected in parts of some of these cuts near the adjacent rooms, but not near the faces. Air movement was not perceptible in some perimeter cuts in which air flowed past the front of the cut. Where air movement was detected in perimeter cuts, it appeared to be intermittent and/or the result of eddy currents created by air flowing past the front of the cut, rather than the result of ventilation control devices directing airflow into the perimeter cuts. Observations indicated the stronger the air flowing past the front of the cut, the more pronounced the movement of air at the test location within the perimeter cut. Movement of air caused by eddy currents for which no tests could practically be conducted in all the perimeter cuts (some were not accessible due to their location with respect to accessible areas) is not considered [an] appropriate or reliable means to control air movement.

Air movement was not adequately controlled through all sets of bleeder entries. Direction of air movement was not uniformly consistent in adjacent bleeder entries within a block or throughout the entire length of individual bleeder entries. Air moved in opposing direction across an individual bleeder entry at several locations. No perceptible air movement was observed in portions of bleeder entries in several locations. The direction of the net airflow through many blocks was difficult to discern; in some blocks it could not be determined due to inconsistent airflow direction. Tests for airflow directions using chemical smoke in the rooms across the front and back of each completed block did not consistently determine the direction of airflow through the block. Comparisons of air quantity measurements between blocks (in the cut-through connections and in the former section entries) were not always conclusive in determining air

direction within a block due to the net flow of air through the block being less than reasonable inaccuracies in air quantity measurements.

2. The method to control air movement to ventilate the unbolted extended-depth perimeter cuts within the pillared area is not provided. The extended cuts are part of the pillared area within the worked-out area, and the air must be controlled to ensure effective ventilation of the extended-depth cuts. [30 CFR Sections 75.334(b)(1), 75.334(c)(4), 75.371(bb), and 75.372(b)(9)]

3. The air direction through all individual “blocks”, including the air direction in the pillared area within each “block”, is not shown in the ventilation plan drawings or on the ventilation map. [30 CFR Sections 75.364(a)(2)(iii) and 75.372(b)(9)]

The direction of airflow through bleeder entries and pillared areas, as well as at evaluation point (EP) locations, must be defined to determine whether a proposed means of evaluation will result in proper evaluation of the effectiveness of the bleeder system, including the pillared areas. Definition of the proper direction of airflow through bleeder entries and pillared areas, as well as at EP locations, also is necessary for the mine examiner to determine if air is moving in the proper direction while conducting tests during the weekly examination to evaluate the effectiveness of the bleeder system.

4. The air direction at EP locations is not shown in the ventilation plan drawings or on the ventilation map. [30 CFR Sections 75.364(a)(2)(iii), 75.371(y), 75.371(z), and 75.372(b)(9)]

The direction of airflow through bleeder entries and pillared areas, as well as at EP locations, is necessary to determine whether a proposed means of evaluation results in proper evaluation of the effectiveness of the bleeder system. Definition of the proper direction of airflow through bleeder entries and pillared areas, as well as at EP locations, is necessary for the mine examiner to determine if air is moving in the proper direction while conducting tests during the weekly examination to evaluate the effectiveness of the bleeder system.

5. The specified means of evaluation of the worked-out area does not provide sufficient information to determine the effectiveness of the bleeder system, including (a) whether air was moving in the proper direction through all “blocks,” including the bleeder entries and pillared areas in each “block”; (b) the means to reasonably assure ventilation of the extended-depth portions of the pillared areas; or (c) the effectiveness of ventilation through the worked-out area. [30 CFR Sections 75.334, 75.364(a)(2)(iii), 75.364(a)(2)(iv), 75.371(y), and 75.371(z)]

In letters dated April 22, May 15, and July 5, 2018, Knight Hawk Coal failed to provide adequate responses to MSHA’s concerns. In MSHA’s October 22, 2018 letter, Knight Hawk Coal was informed of the district manager’s intent to revoke the ventilation plan if the stated deficiencies were not addressed.

Standard 75.370(a)(1) was cited 22 times in two years at mine 1103147 (22 to the operator, 0 to a contractor).

36. The Citation was terminated on November 13, 2018. A copy of such Citation is marked as [G. Ex. 11] and may be admitted into evidence.

37. The parties have identified [G. Exs. 1-20] for the Secretary and [P. Exs. 1-39] for Knight Hawk and such exhibits may be offered into evidence without objection except [P. Exs. 34-35 and G. Exs. 19-20].

Jt. Ex. 1.

II. FINDINGS OF FACT

At Prairie Eagle Underground Mine (“PEUG” or “mine”), Knight Hawk conducted perimeter mining—a form of second coal mining⁵ where a series of extended-depth cuts⁶ are made around the perimeter of a block, including the area between blocks. Perimeter mining involves the reduction in pillars.⁷

Perimeter mining developed in Illinois where a high percentage of the land on the surface of underground mines is prime farmland. P. Ex. 37 at 1. As a result, Illinois has strict limitations on subsidence in mining. *Id.*⁸ Perimeter mining has been used since at least the 1990s. *Id.* at 2.

At the mine, each block consists of several rooms.⁹ Once the rooms are mined out through continuous, advance mining, cuts are made into the solid coal around the perimeter of

⁵ Hasenstab testified that second mining is also known as retreat mining. Tr. 339; *see also*, Tr. 337 (“I agree that perimeter mining is second mining.”).

⁶ If perimeter cuts measure more than 20 feet from the nearest row of permanent roof supports, they are considered extended-depth cuts. Tr. 75.

⁷ The *Dictionary of Mining, Minerals, and Related Terms* (2d ed. 1997) defines “pillar” as “a column of coal . . . left to support the overlying strata or hanging wall in a mine.” Hasenstab credibly testified that the areas between the blocks were pillars. Tr. 334-35 (“[W]e all have agreed [it] is a pillar, albeit a very large pillar, and we are partially recovering from that pillar.”).

⁸ The *Dictionary of Mining, Minerals, and Related Terms* (2d ed. 1997) defines “subsidence” as “[t]he sudden sinking or gradual downward settling of the Earth’s surface with little or no horizontal motion. . . . Subsidence may be caused . . . by human activity such as subsurface mining or the pumping of oil or groundwater.”

⁹ The parties presented differing and contradictory evidence as to the precise definition of a room. *Compare* G. Ex. 1 at 5 (describing multiple rooms within a single block) *with* Tr. 357 (“A block is a room.”). However, the precise definition of a room is not material to this Decision.

the block. These perimeter cuts are unsupported and contain no permanent roof supports, except for two cuts per block that are bolted in order to maintain access for examination of the cut-through connection that will join a subsequent block. G. Ex. 1 at 5-7.

On March 1, 2010, MSHA approved a ventilation plan for the mine, without conditions. Jt. Ex. 1, ¶17. The ventilation plan included 40-foot, extended-cut perimeter mining. G. Ex. 12 at 38. The ventilation plan required a bleeder system to continuously dilute and move methane-air mixtures and other gases, dusts, and fumes from a worked-out area away from active workings and into a return air course or to the surface of the mine. Tr. 83, 325; *see* 30 C.F.R. § 75.334(b)(1). The approved ventilation plan stated that it “contains the minimum ventilation system designed to control methane and respirable dust . . . in accordance with 30 C.F.R. § 75.370. The methods and practices are considered to be suitable for the mining systems employed at this mine, and upon [approval], shall be followed until such time that a revised method or methods are submitted for review and approved for use by the MSHA District Manager.” G. Ex. 12 at 1.

Under the ventilation plan, the bleeder system consisted of a single bleeder entry into each room and a bleeder connector—connecting the bleeder entry to the mined-out area—as well as stoppings and curtains to control the airflow through the area. Tr. 500; *see generally* G. Ex. 12.¹⁰ In order to evaluate the effectiveness of the bleeder system, the ventilation plan included evaluation points (“EPs”). Tr. 320; P. Ex. 30 at 9. Examination of the bleeder system involved traveling in each block to EPs to test the concentrations of methane and oxygen as well as the direction and quality of airflow at the EPs. Tr. 319-21; P. Ex. 30 at 8, 9; *see* 30 C.F.R. § 75.364(a)(2)(iii).

Although MSHA approved the ventilation plan in 2010, former District 8 supervising mining engineer and ventilation supervisor, Mark Eslinger,¹¹ credibly testified that “District 8 want[ed] to get rid of perimeter mining.” Tr. 416. Eslinger testified about multiple occasions since 2010 where MSHA employees of District 8 expressed the view that District 8 was attempting to “get rid” of perimeter mining, including conversations that Eslinger had with Stan Reider, an engineer in District 8, and Doug Herndon, the District 8 Roof Control Supervisor,

¹⁰ Although Dennis Beiter, Respondent’s expert (*infra* note 15), testified that there were up to five bleeder entries into a room, the undersigned does not credit this testimony. Tr. 61-63. Beiter equivocated and was evasive on this point, stating that some of what he identified as bleeder entries “are not necessarily called bleeder entries, but they function as bleeder entries.” Tr. at 61. Beiter’s testimony also relies on the definition of bleeder entry from Policy P13-V-12, discussed further below in Section III.C. As explained below, Policy P13-V-12 improperly made a substantive change to regulations. Beiter’s reliance on Policy P13-V-12 further indicates the unreliability of Beiter’s testimony on this point.

¹¹ Eslinger worked at MSHA or its predecessor agency for 38 years. Based on his experience as an MSHA ventilation supervisor, registered professional engineer, committee member that rewrote subpart D (the §75.300 series) of the MSHA ventilation regulations from 1983 through the final rule in 1996, Eslinger was qualified, absent objection, as an expert witness in mine ventilation and regulation for the Contestant. Tr. 399-410.

who told Eslinger that District 8 was “going to say [perimeter mining]’s illegal.” Tr. 417. Eslinger also credibly testified that he served a 90-day detail in 2001 in Arlington, Virginia, where he had discussions that led him to believe “that people in MSHA headquarters want to get rid of perimeter mining.” Tr. 444. When pressed for names on extended cross-examination by the Secretary, Eslinger credibly testified that “I have had discussions with Kevin Stricklin[, the Administrator for Coal Mine Health and Safety (Tr. 470),] and he did not seem to be in favor of perimeter mining.” Tr. 445. On the other hand, Thomas Hasenstab, a mining engineer and the current superintendent for Knight Hawk, testified that he did not think that District Manager Ronald Burns was trying to eliminate perimeter mining (Tr. 354), and Burns testified that he “ha[d] not told anybody that [he’s] trying to keep them from doing perimeter mining” (Tr. 212). The undersigned discounts this testimony from Hasenstab and Burns in light of the motivations of the witnesses and the totality of the evidence in the record. In his role as the superintendent for Knight Hawk, Hasenstab regularly interacts with District 8 and must maintain an ongoing relationship with its District Manager. Furthermore, it is irrelevant what Hasenstab thinks or Burns may have said; the important consideration is the actions, not the words, of MSHA and District Manager Burns.

On December 30, 2013, after the approval of the mine’s ventilation plan, Stricklin issued Program Policy Letter No. P13-V-12 (“PPL P13-V-12”) “to clarify and improve the examination and evaluation of bleeder systems by mine operators.” G. Ex. 13 at 1. PPL P13-V-12 states that “[i]t is anticipated that District Managers would not suggest changes to the relevant portions of existing approved ventilation plans absent conditions affecting the safety or health of miners that arise following the issuance and effective date of” PPL P13-V-12. *Id.* PPL P13-V-12 defines a bleeder system to “include[] the area from which pillars are wholly or partially recovered, bleeder entries, bleeder connectors, and all associated ventilation control devices that control the air movement through the area.” *Id.* at 2. PPL P13-V-12 also states that

some entries and/or rooms surrounding the pillared area may not have been routinely identified as traveled bleeder entries. These entries and/or rooms have been commonly referred to as primary internal airflow paths, open areas within the worked-out area, inner bleeders, mine foreman entries, part of the gob, or by other names. However, these entries and/or rooms around the pillared area are an inherent part of many bleeder systems and function as entries.

Id. at 3-4.

Contestant’s expert, Gary Hartsog,¹² credibly testified that PPL P13-V-12 changed the definition of a bleeder system. Specifically, Hartsog testified that PPL P13-V-12 included as

¹² Hartsog was qualified, absent objection, as an expert witness in mine ventilation for the Contestant based on his experience and education, including a Master of Science in mine engineering with a thesis in mine ventilation, his status as a registered professional engineer in West Virginia, and his experience teaching classes in mine ventilation, including bleeder systems, for groups such as state mine inspectors and engineers. Tr. 458-471; *see also* P. Ex. 36 (resume for Hartsog).

part of the bleeder system “any pillar that’s left untouched Commonly, we don’t refer to certain pillars next to the gob or around the gob as being part of the bleeder system. It’s part of the gob.” Tr. 513. Hartsog testified that perimeter cuts “are in the abandoned area. Once those are mined, I would not expect them to be re-examined once left.” Tr. 480. Hartsog also credibly testified that PPL P13-V-12 redefined what constituted a bleeder entry. Tr. 493-94. He stated that PPL P13-V-12 “defines bleeder entries as being any entries that . . . are between or around blocks that have not been second mined. Before this [policy] document came out, that was not the case.” Tr. 523.

In 2017, Gateway North, operated by Peabody Gateway North Mining, LLC (“Peabody”), was also conducting perimeter mining under an approved ventilation plan that included 20-foot perimeter cuts. Tr. 159-160. When Gateway North submitted a plan for 40-foot perimeter cuts, Burns talked with MSHA Arlington headquarters and Pittsburgh Tech Support about performing a ventilation survey at Gateway North because “we had concerns that those 40-foot cuts could be ventilated properly.” Tr. 160.¹³ From February 8 through March 1, 2017, MSHA conducted a ventilation survey of the Gateway North Mine bleeder system and “determined that there [were] deficiencies in the design of perimeter mining.” Tr. 159; P. Ex. 34. As a result of the Gateway North investigation, MSHA found that

[a]ll methane concentrations detected were less than 0.1%; [a]ll oxygen concentrations detected were greater than 20.6%; [t]he outby room of the first pod was not ventilated; [t]he direction of airflow through most pods was difficult to discern; [i]n ten of the eighteen pods, the general direction of airflow was opposite the direction indicated in the mine ventilation plan; [t]here was no perceptible air movement found in almost all perimeter cuts probed; [t]he total ventilating pressure differential between the belt air course and the left side return entries at the front of the 2nd North Panel was less than 0.2 inches of water gauge; [and t]he pressure differential across MPL regulator was less than 0.1 inches of water gauge.”

P. Ex. 32 at 2.

Although MSHA did not revoke Gateway North’s extant ventilation plan, MSHA never approved a ventilation plan that included 40-foot perimeter cuts. Tr. 164-65. Shortly after the ventilation survey, Gateway North ceased conducting perimeter mining entirely. Tr. 223, 235-36, 246-47.

After conducting the ventilation survey at Gateway North, MSHA decided to conduct a ventilation survey at Viper Mine, another mine conducting perimeter mining, and at PEUG. Tr. 160. MSHA chose to inspect PEUG first because MSHA “felt the hazards may be more for

¹³ Prior to working for District 8, Burns had never worked in or inspected any mines that had perimeter mining. Tr. 219.

Prairie Eagle than Viper.” Tr. 165. In particular, the Viper mine was only engaged in doing perimeter cuts around, not between blocks. Tr. 166, 239.¹⁴

On January 9 and 10, 2018, Respondent’s expert, Dennis Beiter,¹⁵ headed a team from MSHA Tech Support¹⁶—Bradley R. Wurl, Diane M. Doyle-Coombs, Gaetano J. Iannacchione, A. Zharif MdAzmi, and George N. Aul—as well as John Hohn, District 8 ventilation specialist supervisor, and Michael Pritchard and Bernard Reynolds, District 8 ventilation specialists. G. Ex. 1. Hasenstab and Bill Jankousky, the corporate safety director for Knight Hawk, assisted the MSHA team on January 9, 2018. Tr. 297.

As part of the survey, the MSHA team measured air quality for methane and oxygen levels through handheld devices and bottle samples and used chemical smoke to determine airflow direction at various locations in the mine. G. Ex. 1 at 2. This included testing air quality and airflow in the perimeter cuts themselves. Beiter testified that perimeter mining offered a “unique opportunity” to conduct a survey in a pillared area because a survey team would not ordinarily be able to access a mined-out area in second mining, such as longwall mining or full pillar extraction. Tr. 563. Burns also testified that, when conducting a ventilation survey, “as a general rule,” one does not go into or analyze the ventilation in pillared areas. Tr. 222.

When conducting tests in unbolted perimeter cuts, the MSHA team would not themselves go into the unbolted perimeter cuts, which are areas where miners do not normally work or travel. Tr. 298-99. The team would send a probe into the cut with one tube that would collect an air sample and a second tube that would release smoke. This smoke was created using a chemical reaction that resulted in heat, making the smoke rise. Tr. 536-37. The MSHA team then attempted to observe the movement of the smoke from approximately 44 feet away in order to determine whether, and in what direction, there was air movement in the perimeter cut. Tr. 52-53, 257. To aid these attempts in the dimly lit perimeter cut, an MSHA representative would point a light from outside the perimeter cut into the cut, while a pair of lights on the probe itself also provided some level of illumination. Tr. 122, 520. The results of the chemical smoke tests were not always repeatable. Tr. 561-62.

While conducting the PEUG ventilation survey, the members of the MSHA team were not always in agreement as to the results of the chemical smoke tests. Tr. 543. Hasenstab

¹⁴ After the ventilation survey at PEUG, MSHA conducted a ventilation survey at Viper Mine. Tr. 168, 212, 215. Burns testified that he was diligently working with Viper in order to approve 40-foot cuts based on good-faith negotiations. Tr. 216. However, the Secretary never provided evidence that Viper presented a situation different than Gateway North or PEUG to the point that it could satisfy District 8’s ventilation requirements for extended-cut perimeter mining.

¹⁵ Through his experience, including earning a Bachelor of Science in mining engineering, working as a mining engineer for MSHA, and overseeing underground ventilation in a mine, Beiter qualified as an expert in underground mine ventilation for the Respondent. Tr. 32.

¹⁶ The technical support group provides consultative support for MSHA’s coal mine safety and health branch and metal and nonmetal safety and health branch.

testified about disagreements within the survey team regarding perceptible movement and a “general uncertainty in regards to movement or no movement” among MSHA personnel. Tr. 299. Hasenstab also testified that “there were several times [Doyle-Coombs from the MSHA survey team] said that there was perceptible movement and Mr. Beiter would come up and say no, that’s not movement.” Tr. 378. Hasenstab also credibly testified that during the ventilation survey:

There w[ere] definitely some varying interpretations of movement of the smoke. . . . I do recall Mr. Beiter arriving and very quickly making a determination that the current perimeter cut we were in when smoke was released was no perceptible movement. I disagreed with that interpretation of that particular cut. From that point forward, MSHA personnel—I’ll just say they seemed to be very quick as to a determination if there was movement or not.

Tr. 349-50.

Similarly, Jankousky credibly testified that at least one member of the survey team, Doyle-Coombs, observed perceptible movement, but became visibly upset when Beiter overruled her observations and then directed that some of her notes be rewritten and some of her observations, or those of Knight Hawk’s representatives, be changed in accordance with Beiter’s interpretations. Tr. 378-79, 389-90, 567-68. Beiter also acknowledged that MSHA personnel were not able to come to a consensus as to the results of these smoke tests until he intervened and imposed his explanation of the “expected phenomenon.” Tr. 104-105.

MSHA’s survey team did not use tracer gas, a technique for determining air movement by releasing a certain gas in one area and then sampling for that gas in another area to assess how long it takes the tracer gas to move and to assess its concentration level. Tr. 533, 560. MSHA did not use tracer gas despite the fact that Beiter admitted that “[u]sually you would use tracer gas when we can’t confirm that there is airflow.” Tr. 573. Hartsog testified that he believed that the chemical smoke tests were not valid tests but “an attempt by District 8 to get rid of perimeter mining.” Tr. 415. Based on the record evidence, further stated below, bolstering this opinion, including the unique and sui generis use of the smoke tests, the actions of Beiter during the ventilation survey that resulted in overruling other members of the survey team, and the fact that the smoke tests were at times unrepeatable, the undersigned finds Hartsog’s expert opinion to be persuasive.

District Manager Burns testified about three particular concerns that he had with regard to perimeter mining as a result of the PEUG ventilation survey and Beiter’s subsequent report. First, Burns was concerned about the possibility of a spontaneous combustion¹⁷ event occurring due to a general lack of ventilation. Tr. 239. Although at the time of the November 14, 2018 plan revocation there had been no spontaneous combustion events at PEUG (G. Ex. 2 at 6),

¹⁷ The *Dictionary of Mining, Minerals, and Related Terms* (2d ed. 1997) defines “spontaneous combustion” as “[t]he heating and slow combustion of coal and coaly materials initiated by the absorption of oxygen.”

Burns relied on heating events that he identified as spontaneous combustion events, and he was focused on preventing a first spontaneous combustion event from occurring. Tr. 174-75.

Burns' second concern involved the possibility of the release of methane from a roof fall due to the fact that the perimeter cuts themselves were unbolted. Tr. 182. Hartsog testified that, if there were a roof fall, any methane liberated in the roof fall would be effectively "diluted and rendered harmless by the ventilation system." Tr. 488; *see also* Tr. 149. The ventilation survey, which found roof falls in some perimeter cuts but no elevated levels of methane, bolsters this testimony. G. Ex. 18-1.

Burns' third concern dealt with methane and oxygen levels within the general area of the perimeter cuts. Tr. 177. Burns based this concern on a single bottle sample showing a concentration of methane of 4.7% where a roof support drill hole penetrated a "bleeder" in the roof of an active area not subject to perimeter mining. Burns relied on this event as "evidence that methane may be encountered at any time." Tr. 177; *see also* Tr. 149. Under the approved ventilation plan, the methane from the bleeder was effectively diluted to less dangerous levels. Tr. 149. Additionally, Hartsog testified that there were no ignition sources in the mine that might contribute to the dangers of methane buildup. Tr. 492. The Secretary failed to rebut this testimony.

On January 29, 2018, Beiter and Burns met with, and gave the preliminary results of the survey to, Hasenstab, Jankousky, Dale Winter, Kyle Griggs, Bernie Kern, Brian Wallace, and other staff from Knight Hawk. Tr. 93, 290-91. At this meeting, MSHA showed Knight Hawk maps of the mine indicating the findings of the ventilation survey, including levels of methane and oxygen as well as the presence and direction of airflow at specific locations. Tr. 167. These maps were introduced into evidence as G. Ex. 18. After reviewing Beiter's report, Burns determined that there were deficiencies in Knight Hawk's ventilation plan and the bleeder system was not adequate and effective to ventilate the mine. Tr. 171-72. Burns requested that Knight Hawk submit a revised ventilation plan to address the deficiencies. Tr. 168.

On February 8, 2018, Beiter and the MSHA team drafted an internal report summarizing the results of the survey. G. Ex. 1. Concerning air quality, the report stated that the highest concentration of methane was 0.12% and that the lowest concentration of oxygen was 20.2%. *Id.* at 1-2. These results were well within the allowable limit of methane below 1% under 30 C.F.R. § 75.323(c)(1), and the allowable minimum level of oxygen above 19.5% under 30 C.F.R. § 75.321(b). *See also* G. Ex. 16 at 2. Both Beiter and Hasenstab testified that the mine had a low oxidation rate. Tr. 98, 326. The oxidation of coal results in a reduction in the level of oxygen. Tr. 510.

Concerning air movement, the report set forth several alleged deficiencies, including: 1) "The direction of net airflow direction through many blocks was difficult to discern; in some blocks it could not be determined"; 2) "No perceptible air movement was observed in approximately 57 of the perimeter cuts examined"; 3) "The air directions through the rooms . . . were not always consistent throughout the length of the room, nor with the net direction of airflow through the block"; 4) the "[d]irection of air movement was not always consistent in adjacent bleeder entries within a block, or the entire length of individual bleeder entries"; and

5) “[n]o perceptible air movement was observed in portions of bleeder entries in a few locations.” G. Ex. 1 at 2-3.¹⁸ The report and Beiter’s testimony discounted air movement observed in perimeter cuts as a result of “eddy currents created by air flowing past the front of the cut.” G. Ex. 1 at 2; Tr. 81. Beiter opined that he did not “think eddy current[s] would be an appropriate means of actually providing ventilation for that extended cut because the eddy currents are depend[ent] upon the amount of airflow moving by [the cut] and there is nothing in the ventilation plan that indicated there had to be a certain amount of airflow or certain velocity of airflow in the airflow moving in that room in front of there.” Tr. 81. The previously approved ventilation plan required 7,000 cubic feet per minute of airflow over the continuous miner during perimeter mining. G. Ex. 12 at 7; G. Ex. 1 at 6. The previously approved ventilation plan did not require any specific amount of airflow across perimeter cuts. G. Ex. 12. Nor is there any evidence that MSHA suggested any minimum amount of airflow across perimeter cuts during negotiations with Knight Hawk or listed this as a deficiency in the approved ventilation plan.

On March 13, 2018, Knight Hawk sent a letter in response to the concerns raised by MSHA in the January 29, 2018 meeting and those raised in Beiter’s February 8 report, which Knight Hawk did not receive until March 7, 2018. G. Ex. 2. According to Knight Hawk, the short period of time since the receipt of the report limited its ability to comment, or to retain an expert, if further evaluation became necessary. G. Ex. 2 at 6. Knight Hawk alleged that Beiter’s February 8 report contained opinion and speculation and used “assumed definitions and designation” of the terms “pillared areas, bleeder entries, partial recovery second mining, and return air split” as well as differing interpretations among MSHA investigators as to the definition of “no perceptible movement.” *Id.* at 7. The March 13 letter also stated that the February 8 report contained conflicting information and inaccuracies between the report and the sketches of the ventilation plan. *Id.* at 7.

Knight Hawk’s March 13 letter also documented, with extensive detail, the safety record of perimeter mining and established that “[p]erimeter mining results in a lower miner exposure to respirable dust, lower citations, a lower injury rate, a lower exposure to noise, and a lower exposure to red zone/danger zone” and did not involve roof bolting in most perimeter cuts, eliminating all hazards associated with that process. *Id.* at 2. The letter further noted that the mine had never experienced any spontaneous combustion events. *Id.* at 6.

Testimony bolstered the safety benefits of perimeter mining. Burns conceded that perimeter mining “is a safe form of mining” and provides less exposure to certain hazards released into the air than other forms of mining. Tr. 173. Hasenstab agreed that the previously approved ventilation plan has “significant” safety benefits. Tr. 337. Jankousky echoed this sentiment. Tr. at 370-71. Contestant’s expert Hartsog testified that perimeter mining was not only a safe form of mining, but that it was safer than continuous mining. P. Ex. 37 at 2; *see also* Tr. 371 (Jankousky) (“Definitely perimeter mining is safer.”). Burns admitted that perimeter mining was a safer form of second mining. Tr. 224.

On April 12, 2018, MSHA sent a letter to Knight Hawk that listed the alleged deficiencies in the mine’s ventilation plan for the first time. G. Ex. 3. Although this letter does

¹⁸ The bleeder entries referenced were those redefined in Policy P13-V-12. G. Ex. 13 at 3-4.

not reference Knight Hawk's March 13 letter, Burns testified that he considered that letter before sending the April 12 letter. Tr. 136-37. The undersigned discredits this testimony. Burns' April 12 response belies actual consideration of and fails to specifically address the safety and health benefits of perimeter mining or whether revocation of the previously approved ventilation plan would result in less protection under the interim plan. *See generally* G. Ex. 3. As Mine Superintendent Hasenstab noted in his April 22 correspondence with Burns, "[w]e have attached [our March 13] letter as we are currently unsure if you have received and/or read the letter because your letter did not refer to it. We believe that it sets out the many safety and health benefits of our current mining system that you should consider as well as supporting the mine specific nature of the plan." G. Ex. 4 at 1.

Apart from self-serving trial testimony elicited in an attempt to show that MSHA considered the important safety and health advantages of perimeter mining and did not summarily discount them and leave them unanswered, there is no evidence during negotiations that Burns actually addressed or expressly considered such arguments that he acknowledged at trial were irrelevant. Rather, Burns testified that such purportedly considered arguments were not relevant considerations during his ventilation plan review because they dealt with mining conditions while the perimeter cuts were made (Tr. 173-74), and did not address MSHA's specified deficiencies that the bleeder system was being adequately ventilated, examined and evaluated. Tr. 171-72. According to Burns, his concern was "after the bleeder system was established, after they left there." Tr. 174.

Burns failed to explain how or why he would actually consider safety and health concerns that he deemed irrelevant. Furthermore, the Citation relied on § 75.334(b)(1), which concerns the bleeder system during pillar recovery, not "after they left there." Tr. 174. The undersigned remains unconvinced by Burns' post hoc rationalization at trial, which was never explained to Contestant during negotiations. In these circumstances, the undersigned finds Burns' testimony that he actually considered the significant safety and health protections afforded by perimeter mining under the revoked plan to be disingenuous and not credible.

The April 12 letter lists six alleged deficiencies in the mine's previously approved ventilation plan:

- The design of the typical bleeder system does not control the air direction through all individual "blocks," including the air direction in the pillared area within each "block."
- The method to control air movement to ventilate the unbolted extended-depth perimeter cuts within the pillared area is not provided.
- The air direction through all individual "blocks," including the air direction in the pillared area within each "block," is not shown in the ventilation plan drawings or on the ventilation map.

- The air direction at EP locations is not shown in the ventilation plan drawings or on the ventilation map.
- The use of permanent ventilation control devices, such as regulators and stoppings, to control air movement through the worked-out area would be prudent. Temporary control devices such as curtains are more susceptible to damage and/or inadvertent change than permanent control devices.^[19]
- The specified means of evaluation of the worked-out area does not provide sufficient information to determine the effectiveness of the bleeder system.

G. Ex. 3 at 1. This letter also indicated that a bottle sample, taken on March 1, 2018, found a concentration of methane of 4.7% where a roof support drill hole penetrated a “bleeder” in the roof of an active area not subject to perimeter mining, “which is evidence that methane may be encountered at any time.” *Id.*; *see also* Tr. 149. Under the approved ventilation plan, that methane was effectively diluted to less dangerous levels by the air used to ventilate the section. Tr. 149.

On April 22, 2018, Knight Hawk sent another letter to MSHA. G. Ex. 4. Knight Hawk contended that the ventilation system in the worked out area “does not fit readily into the term ‘bleeder’ in 30 C.F.R. § 75.334(b) because the area at issue does not involve ‘pillar recovery.’” *Id.* at 2 n.2. Knight Hawk did not advance this position at the hearing or in its post-hearing brief, and the undersigned rejects it.

Addressing the alleged deficiencies listed in MSHA’s April 12 letter, Knight Hawk explained how the approved ventilation plan does indicate airflow direction and ventilation controls such as stoppings, regulators, and curtains. *Id.* at 2. Furthermore, Knight Hawk explained that the ventilation plan was working effectively and preventing the accumulation of gases, dusts, or fumes, as shown by the low levels of methane. *Id.* Knight Hawk also addressed the concentration of methane found on March 1, 2018, stating that the bleeder was penetrated in an active unit—not during perimeter mining—and reiterated that no roof penetration occurs during perimeter mining. *Id.* at 1.

In its April 22 letter, Knight Hawk also stated that “[t]he ability to continue to use the current plan is consistent with MSHA Program Policy Letter No. P13-V-12, which addresses the evaluation of bleeder systems and states, ‘[i]t is anticipated that District Managers would not suggest changes to the relevant portions of existing approved ventilation plans absent conditions affecting the safety or health of miners.’” *Id.* at 2. Knight Hawk’s April 22 letter also reiterated the contention that the definition of “perceptible movement” “varied among the MSHA

¹⁹ MSHA later removed this alleged deficiency as a violation of a mandatory regulation and acknowledged it as prudent, but not mandatory. G. Ex. 9.

personnel” and different interpretations of “no perceptible movement” “was evident and apparent” among the MSHA investigation team. *Id.* at 3. This letter closed by stating that “[i]t appears we may be at an impasse in discussions about the plan.” *Id.* at 4.

On May 3, 2018, MSHA responded to Knight Hawk’s April 22 letter. G. Ex. 5. MSHA reiterated the six alleged deficiencies identified in its April 12 letter, but, for the first time, included citations to regulations for each alleged deficiency. Specifically, the letter alleged that:

- the bleeder system does not control the airflow direction through all blocks, including in the “pillared area,” citing 30 C.F.R. §§ 75.334(b)(1), 75.334(c)(4), 75.371(bb), and 75.372(b)(9);
- the method to control air movement to ventilate the perimeter cuts is not provided, citing 30 C.F.R. §§ 75.334(b)(1), 75.334(c)(4), 75.371(bb), and 75.372(b)(9);
- the airflow direction is not shown through the blocks, citing 30 C.F.R. §§ 75.364(a)(2)(iii) and 75.372(b)(9);
- the airflow direction at EPs is not shown on the ventilation plan, citing 30 C.F.R. §§ 75.364(a)(2)(iii), 75.371(y), 75.371(z), and 75.372(b)(9);
- the plan should use permanent ventilation control devices rather than temporary ones, citing 30 C.F.R. §§ 75.333(b)(5) and 75.334(c)(4); and
- the specified means of evaluation do not provide sufficient information to determine the effectiveness of the bleeder system, citing 30 C.F.R. §§ 75.334, 75.364(a)(2)(iii) and (iv), and 75.371(y) and (z).

The letter ended by granting Knight Hawk two weeks to submit a ventilation plan in response to the alleged deficiencies.²⁰

On May 15, 2018, Knight Hawk responded and addressed each of the alleged deficiencies and cited regulations in detail. G. Ex. 6. Knight Hawk’s May 15 letter goes into great depth referencing each cited regulation, and even addresses those regulations that are not applicable. This letter further elucidated Knight Hawk’s earlier contentions, stating that: 1) the current ventilation plan dilutes and moves methane, other gases, dust, and fumes out of the worked-out area; 2) controls such as stoppings, regulators, curtains, and connectors are illustrated on the ventilation plan; and 3) the ventilation map indicates the airflow direction within the entirety of the mine. Knight Hawk offered that it would also add more statements to the plan to help make the exact airflow patterns more clear, such as, “[t]he direction of airflow for the worked[-]out area in the 5W/3N/2ME is from EP4 to EP3 to EP2 to EP1.” *Id.* Knight

²⁰ MSHA originally granted Knight Hawk a two-week grace period for abatement, beginning on May 3, 2018. Although the record does not indicate that MSHA explicitly granted Knight Hawk extensions, MSHA did not issue the technical citation until November 14, 2018.

Hawk also argued that the mine's ventilation system does not fit within the definition of "bleeder" under 30 C.F.R. § 75.334(b) because the area does not involve "pillar recovery." *Id.* at 5.²¹ Finally, Knight Hawk emphasized that when MSHA "Tech Support performed their evaluation of airflow in the mined out entries," they entered "barricaded/dangered off" areas "where miners do not normally travel." *Id.* at 7.

On June 7, 2018, MSHA responded to Knight Hawk's May 15 rejoinder and alleged that Knight Hawk "**did not** address the noted deficiencies" and "did not provide any other revisions to the currently approved ventilation plan to address the 30 CFR standards." G. Ex. 7 at 1. MSHA then offered its explanation of why Knight Hawk's responses were inadequate and relied on the January 2018 ventilation survey and § 75.334(b)(1) to allege for the first time that the bleeder system was not controlling the air passing through the area. *Id.* The letter specifically emphasized that "[t]he location of current ventilating devices does not control the air movement **throughout the entire** worked-out area" and "[t]he worked-out area is not ventilated **throughout** the entire pillared area, as determined by the ventilation survey conducted in January 2018." *Id.* at 2. The word "throughout" is not found in the regulations cited in MSHA's May 8 letter, but it does appear in 30 C.F.R. § 75.334(a)(1), a different regulation than what the Citation relies on. Despite Burns' earlier May 3 letter citing specific regulations, Burns testified that the use and emphasis of the word "throughout" in his June 7 letter was not referring to any specific regulation, but it "was just my term there to make sure they understand that I'm not just talking about the mouth [of a panel]. I mean from the active working section to the mouth of the panel. Throughout the entire area has got to be done." Tr. 205. The undersigned does not credit this testimony. Rather, Hasenstab credibly testified that the term "throughout" does not capture the intent of the plain meaning of the regulation, "I believed we complied in so far as the intent of the law is to ventilate through the worked out area, not throughout." Tr. 335.

MSHA's June 7 letter also rejected Knight Hawk's offer to add statements describing the direction of airflow. G. Ex. 7. Specifically, the letter stated that "[s]tatements on maps are not a substitute for showing the actual direction of airflow." *Id.* at 1. The letter provided no support for this assertion. At the hearing, Burns testified that written statements were not adequate because "the way we read the regulation in plain language it says you show the direction on the maps and you show the direction at EP[s]." Tr. 204. Hartsog testified that he had seen approved ventilation plans that described airflow direction with words rather than arrows. Tr. 501-02.

After the June 7 letter, Knight Hawk spoke with MSHA personnel by conference call on June 14 and in person on June 19, 2018. G. Ex. 8. Burns could not remember or testify about either discussion. Tr. 206. At these meetings, two alternative methods for ventilating perimeter cuts were discussed: 1) connecting two perimeter cuts from opposite sides by holing together angled cuts with straight cuts so air would flow through there, and 2) "sawtooth" cutting. Tr. 329-31. Knight Hawk rejected connecting angled and straight perimeter cuts because roof control and subsidence issues were unfavorable, the geometry would not work with regard to

²¹ As noted, the undersigned rejects this pre-hearing position. As found above, perimeter mining involves second mining and pillar recovery. Consequently, perimeter mining at the mine squarely falls under § 75.334(b)(1) and its requirements that "[d]uring pillar recovery a bleeder system shall be used."

crosscut distances, and the combined cuts would exceed 40 feet. Tr. 332-33, 362. At the time, the term “sawtooth” cutting was never defined by MSHA, nor did Knight Hawk ask for clarification of the term. Tr. 333, 344.²²

On July 5, 2018, Knight Hawk sent a letter in response to MSHA’s June 7 letter and the subsequent discussions with MSHA personnel. G. Ex. 8. Knight Hawk opined that its May 15 letter offered changes to the currently approved ventilation plan that addressed the alleged deficiencies and the parties were at apparent impasse. In anticipation of MSHA’s issuance of a technical citation, Knight Hawk requested that abatement be extended until an ALJ ruled on the validity of the existing plan because the mine “has operated safely and effectively under the current plan since 2007 and it provides significant safety benefits.” *Id.* Otherwise, Knight Hawk requested discussions about what was acceptable to abate the technical citation and operate under an interim ventilation plan during litigation. *Id.*

On October 22, 2018, MSHA sent another letter to Knight Hawk. G. Ex. 9. This letter again laid out the alleged deficiencies, but listed only five deficiencies. *Id.* MSHA revised one of the previously identified deficiencies—the alleged requirement that the ventilation plan use permanent rather than temporary ventilation controls—as “prudent” rather than mandatory. Burns’ letter stated that “[a]bsent modification of the ventilation plan to provide the miner protection outlined above, I will revoke your currently approved plan on November 12, 2018.” *Id.* at 3. The letter concluded that MSHA “will be more than happy to discuss a plan, which would be consistent with the provisions addressed above[, which] would permit mining to be conducted until a resolution is reached.” *Id.*

The record establishes that MSHA did not consider the experiential opinions and learning from District 8’s own ventilation specialists and inspectors intimately familiar with the mine during the plan revocation process. District Manager Burns, who was generally unfamiliar with and had limited experience with perimeter mining (Tr. 240-41), confirmed that he did not talk to or seek input from his own inspectors during the plan revocation process, despite the fact that his ventilation specialists would regularly perform six-month plan reviews on site and review mine maps to identify problems and ensure the plan was still “adequate.” Tr. 155-58, 233-34. During such reviews, “[a]n evaluation of the bleeder system was done in accordance with what the plan was as far as one of the evaluation points. We did not go to any area that the mine examiners would not go to during that time.” Tr. 158. District 8 ventilation specialist, Mike Pritchard, regularly performed such ventilation plan reviews. Tr. 383. Specifically, “he walks the air courses, walks intakes, returns, bleeders, and he . . . evaluates the bleeders.” Tr. 387. In January 2019, shortly after revocation of the plan, safety director Jankousky discussed perimeter mining and MSHA’s revocation of the ventilation plan with Pritchard during an underground, six-month

²² Hasenstab testified that sawtooth cutting involved making perimeter cuts where two of them intersected at the back end, although the design and layout would be much different than holing perimeter cuts together. Tr. 359.

ventilation review. Tr. 381-82. Pritchard told Jankousky that he did not see anything wrong with the revoked system of ventilation for perimeter mining. Tr. 381, 383, 385-86.²³

By attachment to letter dated November 5 and attached revisions to letter dated November 6, 2018, Knight Hawk submitted an interim ventilation plan that did not include perimeter mining. G. Ex. 15; *compare* G. Ex. 12 with G. Ex. 15. By separate letters both dated November 14, 2018, MSHA approved the interim plan (G. Ex. 15), which does not permit perimeter mining (Tr. 354), and formally revoked the mine's ventilation plan, which included perimeter mining (G. Ex. 10). On November 14, 2018, MSHA also issued the technical citation at issue under 30 C.F.R. § 75.370(a)(1) for mining without a ventilation plan approved by the District Manager. G. Ex. 11.²⁴ Under questioning from the undersigned, Burns verified that nothing had changed at all since 2010, except for the ventilation survey. Tr. 240-41.²⁵

²³ Former District 8 ventilation supervisor Eslinger testified based on extensive experience with numerous district managers that a district manager would consult with his own ventilation specialists when contemplating revocation of a ventilation plan, and could not recall any instance in which MSHA "just yanked a plan on somebody, disapproved a plan." Tr. 424-26. When asked by the undersigned whether a district manager ever consulted with him about revoking a perimeter mining plan, Eslinger testified:

When Robert Phillips became the district manager in about 2007, he made some comments about perimeter mining. And he expressed his desire to get rid [of] and eliminate perimeter mining. He brought up some issues. I responded to some of the issues. The roof control supervisor responded to some of the issues. We had some discussions. The plans for perimeter mining were not revoked while I was the supervisor. We had some new mines going in, and they had a heck of the time trying to get perimeter mining approved, but we did not revoke any of the plans for the mines that had perimeter mining in them.

Tr. 425.

²⁴ When MSHA first issued the citation, the citation number used was already in use for another violation, and MSHA modified the original citation to change the citation number. G. Ex. 11; Tr. 267.

²⁵ Q. What changed, if anything, between approval of the plan and revocation?

A. We done our investigation and found out that areas of the mine was not being ventilated. And so the plan needed to address it at that time. Before we done the investigation in 2018 for them and 2017 for Prairie Eagle. I don't think we had ever done any kind of same type of ventilation survey on perimeter mining. When I got there in 2015, and this was like two months after I had been there, maybe less than two months, we approved the plan. Yeah, I knew—I had questions about it, about perimeter mining because I had never seen it before. I was used to from eastern Kentucky, full pillar extraction or something, but at that time, I did not know enough about this to know exactly how I guess the

Subsequent to the revocation of the mine's ventilation plan, two alleged spontaneous combustion events occurred at the mine, one underground and one on the surface. Tr. 175, 376, 492, 512. The evidence as to the cause of these events was inconclusive. Tr. 376. Having considered arguments and evidence as to the progeny of the events, the undersigned credits Jankousky's conclusion that it could not be determined whether the events were spontaneous combustion. Tr. 376. Furthermore, perimeter mining was not involved in either event, and both events occurred after the revocation of the ventilation plan. Tr. 225. Consequently, the undersigned finds that these events have little material bearing on resolution of the issues presented.

III. LEGAL PRINCIPLES AND ANALYSIS

The Secretary contends that the sole issue in this case is whether MSHA acted arbitrarily and capriciously when it revoked the mine's previously approved ventilation plan. Tr. 11. Knight Hawk contends, instead, that there are four issues: 1) whether the previously approved ventilation plan was suitable; 2) whether the revocation was improper and contrary to law; 3) what is the Secretary's burden of proof in this matter; and 4) how should the decisions in *Prairie State Generating Co., LLC*, 35 FMSHRC 1985 (July 2013) (*Prairie State I*), *aff'd*, 792 F.3d 82 (D.C. Cir. 2015) (*Prairie State II*), and *Signal Peak Energy, LLC*, 40 FMSHRC 1059 (Aug. 2018), *appeal docketed*, No. 18-72837 (9th Cir. 2018), be considered with *Peabody Coal Co.*, 18 FMSHRC 686 (1996). Tr. 11.

As noted in the undersigned's Order Denying the Secretary of Labor's Motion in *Limine*, Commission case law regarding the standard of review applicable to determining whether a district manager's rejection of a ventilation plan appears to be in a state of flux. 41 FMSHRC 217 (Mar. 2019) (ALJ). MSHA alleges that Knight Hawk operated without a suitable ventilation plan as required by § 303(o) of the Mine Act. 30 U.S.C. § 863(o);²⁶ *see also Zeigler Coal Co. v.*

ventilation system and everything would work or where it would not be working. So when we done the ventilation survey starting at Gateway North, we found out a lot. *I went through this and developing—not developing concerns, but looking at concerns we found that yes there is areas that's not ventilated.* That's what happened between when this was approved and when we revoked.

Tr. 240-41 (emphasis added). The undersigned finds Burns' verbal leak that they were "developing . . . concerns" to be telling. This verbal leak adds credence to the inference that Burns' concerns arose out of a preconception of what he expected to find at PEUG after Gateway North, rather than treating PEUG independently, and to the inference that MSHA wanted to get rid of perimeter mining.

²⁶ "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 shall be adopted by the operator and set out in printed form within ninety days after the operative date of this title. The plan shall show the type and location of mechanical ventilation equipment installed and operated in the mine, such additional or improved equipment as the Secretary may require, the quantity and velocity of air reaching each working face, and such other information

Kleppe, 536 F.2d 398, 406-07 (D.C. Cir. 1976). If I were working from a clean slate, I would find that the burden of proof that lies with the Secretary is the same as any violation the Secretary brings before this tribunal. It is a burden of proof the Secretary must satisfy before this fact-finding body and not a standard of review as if the undersigned merely functions as an appellate body for the Secretary's decision. As the Court of Appeals for the District of Columbia found in *Zeigler*,²⁷ ventilation plans are enforceable as mandatory standards. 536 F.2d at 409. Consequently, during the enforcement of such a plan, the Secretary would have to satisfy the same burden for a violation of § 303(o) as any other mandatory standard found in the Mine Act. *Id.* (“[W]e conclude that requirements of duly adopted ventilation plans are generally enforceable under § 104(b) and the statute's other enforcement provisions.”). The revocation of a ventilation plan in its entirety should not provide a means for the Secretary to avoid this burden. I would reject the position that the Commission must defer to the Secretary because to act otherwise would be to “displace entirely the expertise of the Secretary.” *Mach Mining, LLC v. MSHA*, 728 F.3d 643, 658 (7th Cir. 2013) (*Mach Mining II*), *aff'ing*, *Mach Mining*, 34 FMSHRC 1784 (Aug. 2012) (*Mach Mining I*). This position gives short shrift to the expertise inherent in the Commission itself. 30 U.S.C. § 823(a) (“The Commission shall consist of five members . . . who by reason of training, education, or experience are qualified to carry out the functions of the Commission.”).²⁸

If I were working from a clean slate, I would apply the standard as articulated in *Peabody*. Under this standard, the Secretary bears the burden of proof to establish by a preponderance of the evidence that “(1) the previously approved [ventilation] plan is no longer suitable to the conditions and the mining system of the coal mine, and (2) the new plan provision is suitable.” 18 FMSHRC at 690. To be blunt, the Secretary utterly fails to satisfy this burden. As more fully explained below, the Secretary relies on evidence—the smoke tests and the ventilation survey overall—that I find unreliable. Of note, the Secretary failed to establish the propriety or reliability of the smoke tests when used in second mining, and substantial evidence demonstrated that the smoke tests as conducted at the mine were unreliable. Tr. 52-53, 561-62. Credible evidence demonstrated that the ventilation at the mine effectively ventilates the mine according to 30 C.F.R. § 75.334(b)(1). This evidence includes levels of methane and oxygen that were described as “excellent.” Tr. 428. Furthermore, I found the Secretary's expert to be, by and large, unreliable. He was evasive and frequently avoided answering questions directly.

as the Secretary may require. Such plan shall be reviewed by the operator and the Secretary at least every six months.” 30 U.S.C. § 863(o).

²⁷ Although *Zeigler* did not explicitly adopt the arbitrary and capricious standard, *Zeigler* began the path that ultimately led to the application of the arbitrary and capricious standard of review seen in *Mach Mining, LLC v. MSHA*, 728 F.3d 643, 657-58 (7th Cir. 2013) (*Mach Mining II*), *aff'ing*, *Mach Mining*, 34 FMSHRC 1784 (Aug. 2012) (*Mach Mining I*).

²⁸ I see the same flaws inherent in *Martin v. Occupational Health & Review Commission*, 499 U.S. 144, 152-53 (1991) (“[T]he Secretary is more likely to develop the expertise relevant to assessing the effect of particular regulatory interpretation.”).

Turning to the merits of Burns' three concerns regarding perimeter mining, the concentrations of methane and oxygen established that the previously approved ventilation plan continuously diluted and moved methane-air mixtures and other gases, dusts, and fumes from the worked-out area. G. Ex. 1 at 1-2. The evidence also established that, prior to the revocation of the ventilation plan, PEUG did not experience any spontaneous combustion events. G. Ex. 2 at 6. Finally, the plan adequately mitigates any risk of a roof fall, and testimony established that a hypothetical roof fall would be effectively rendered harmless. Tr. 488. In other words, Burns' concerns were unwarranted. The record demonstrates that the previously approved plan continues to be suitable to the conditions and mining system of the mine. Consequently, the Secretary failed to satisfy by a preponderance of the evidence that Knight Hawk's previously approved ventilation plan was unsuitable.

However, the undersigned is not working from a clean slate. In *Signal Peak*, the Commission split 2-2 on what standard of review applies when considering an MSHA district manager's revocation of a ventilation plan, creating no precedential decision.²⁹ Then-Chairman Jordan and Commissioner Cohen affirmed the judge's application of the arbitrary and capricious standard of review of the district manager's decision to reject a ventilation plan submitted by the operator. *Signal Peak*, 40 FMSHRC at 1064.³⁰ They relied on *Mach Mining*, where the Seventh Circuit found that that a Commission majority correctly determined that a district manager's refusal to approve a ventilation plan should be reviewed under an arbitrary and capricious standard, and on *Prairie State II*, where the D.C. Circuit held that the arbitrary and capricious standard of review applied by the Commission majority to the Secretary's plan-suitability determination "was at least a permissible one." *Id.* at 93.

By contrast, Commissioners Young and Althen found that the judge applied the wrong legal standard and that substantial evidence did not support a finding that the operator's plan was unsuitable to provide safe and healthful ventilation at the specific mine. *Signal Peak*, 40 FMSHRC at 1074. They opined that *Mach Mining I* and *Prairie State I* were wrongly decided; however, they acknowledged that those Commission decisions were upheld by the circuit courts as permissible interpretations. *Id.* at n.10.³¹ In the end, Commissioners Young and

²⁹ Accordingly, the judge's decision to apply the arbitrary and capricious standard of review was affirmed under *Pennsylvania Electric Co.*, 12 FMSHRC 1652 (Aug. 1990), *aff'd on other grounds*, 969 F.2d 1501 (3d Cir. 1992).

³⁰ Generally, under the arbitrary and capricious standard of review, a district manager's decision will be set aside only where MSHA "relied on factors which Congress [had] not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Signal Peak*, 40 FMSHRC at 1065, citing *Motor Vehicle Mfrs. Ass'n of U.S. Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983).

³¹ Commissioners Young and Althen declined to characterize their view on the Secretary's burden of proof as a "standard of review," stating that "the outcome of a suitability determination in this case does not depend upon a didactic characterization of the standard of review as beyond a preponderance of the evidence or abuse of discretion." *Id.* at 1079.

Althen stated that it was unnecessary to reject such circuit court precedent because substantial evidence did not support rejection of the operator's proposed ventilation plan when analyzed under the safety standard at issue. They observed that the Commission has taken conflicting positions on the Secretary's burden of proof, comparing the *Peabody* and *C.W. Mining*, 18 FMSHRC 1840 (Oct. 1996), cases cited by Contestant in his Response, with both the *Mach Mining* and *Prairie State I* cases cited by the Secretary in his Motion. *Signal Peak*, 40 FMSHRC at 1075-76.³²

Thus, given the apparent evolving Commission precedent concerning the appropriate standard of review for evaluating a district manager's revocation of a mine's ventilation plan, the recent change in Commission composition,³³ and the prerogative of the new Commission to rationally explain reversal of existing precedent,³⁴ even in light of appellate court or Supreme Court affirmation of existing precedent,³⁵ the undersigned concludes that the most recent Commission precedent follows the permissible interpretation that applies an arbitrary and capricious standard in these circumstances. Although the Commission split 2-2 in *Signal Peak*, creating no precedential decision and leaving the judge's decision below in place, this is a

³² *But see Mach Mining II*, 728 F.3d at 658 n.21, cursorily noting that further explanation regarding departure from precedent by the Commission was unnecessary given the court's conclusion that the statute's regulatory scheme requires a more deferential standard of review. In doing so, however, the court in *Mach Mining II* failed to require the Commission to give any reasoned explanation as to its change in interpretation. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (*FCC*) ("An agency may not . . . depart from a prior policy *sub silentio* or simply disregard rules that are still on the books. And of course the agency must show that there are good reasons for the new policy."). I also reject the notion that the more deferential standard of review is required, rather than simply permissible, under the statute. As noted above, the court in *Mach Mining II* based its finding on the assumption that "[t]o permit the Commission to substitute its view for that of the Secretary simply would displace the expertise of the Secretary," an assumption that discounts the expertise of the Commission itself. *Mach Mining II*, 728 F.3d at 658.

³³ Chairman Marco M. Rajkovich, Jr. and Commissioners William I. Althen and Arthur R. Traynor, III were sworn into office on Monday, March 25, 2019. They join Commissioners Mary Lu Jordan and Michael G. Young to form a new five-member Commission.

³⁴ *See e.g., Mach Mining II*, 728 F.3d at 658 n.21, citing *Lone Mountain Processing, Inc. v. Sec'y of Labor*, 709 F.3d 1161, 1164 (D.C. Cir. 2013) ("As we have long held, an agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored.").

³⁵ *See, e.g., John Deklewa & Sons*, 282 N.L.R.B. 1375 (1987), *enforced sub nom. Int'l Ass'n of Bridge, Structural & Ornamental Iron Workers Local 3 v. NLRB*, 843 F.2d 770, 780-81 (3d Cir. 1988), *cert. denied*, 488 U.S. 889 (1988) (overruling previous Board interpretation of section 8(f) of the National Labor Relations Act despite the Supreme Court's affirmance of the Board's previous interpretation in *NLRB v. Iron Workers*, 434 U.S. 35 (1978)).

permissible interpretation and one that the Commission may, upon a reasoned explanation, change. *FCC*, 556 U.S. at 514.

Accordingly, applying the arbitrary and capricious standard as a permissible interpretation, the Secretary must establish that MSHA's revocation of the mine's previously approved and presumptively suitable ventilation plan was not arbitrary, capricious, an abuse of discretion, or otherwise contrary to law ("arbitrary and capricious"). 5 U.S.C. § 706(2)(A); *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *Prairie State*, 792 F.3d at 82; *Mach Mining I*, 34 FMSHRC at 1790.

It is of critical note that the agency bears the burden of articulating a "rational connection between the facts found and the choice made." *Bowman Transp., Inc. v. Arkansas-Best Freight System, Inc.*, 419 U.S. 281, 285 (1974) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)). This inquiry involves "examining the reasons for agency decisions—or, as the case may be, the absence of such reasons." *Judulang v. Holder*, 565 U.S. 42, 52-53 (2011); see *FCC*, 556 U.S. at 515 (noting "the requirement that an agency provide reasoned explanation for its action").

As delineated in *Motor Vehicle Mfrs.*, an agency action is arbitrary and capricious when it: 1) relies on factors that were not intended to be considered; 2) entirely failed to consider an important aspect of the problem; 3) offered an explanation for its decision that runs counter to the evidence before the agency; or 4) is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. 463 U.S. at 43. MSHA acted arbitrarily and capriciously under these factors.

A. MSHA relied on inappropriate factors.

MSHA revoked the previously approved ventilation plan by technical citation citing five major deficiencies that Knight Hawk allegedly failed to address or include in a modified or revised plan submission. MSHA grounded the alleged deficiencies in mandatory ventilation standards set forth in 30 C.F.R. §§ 75.334(b)(1); 75.334(c)(4); 75.364 (a)(2)(iii) and (iv); 75.371(y), (z), and (bb); and 75.372(b)(9). Although the Secretary mentions seven other regulations, discussed further below in Section III.C, the citation largely rests on § 75.334(b)(1) to revoke the ventilation plan.³⁶ This regulation states that

During pillar recovery a bleeder system shall be used to control the air passing through the area and to continuously dilute and move methane-air mixtures and other gases, dusts, and fumes from the worked-out area away from active workings and into a return air course or to the surface of the mine.

³⁶ While § 75.334(b)(1) applies "[d]uring pillar recovery," § 75.334(b)(2) applies "[a]fter pillar recovery." Although both arguably apply to the mine, the Citation and the Secretary's theory of the case—as supported by testimony (Tr. 190, 194) and the Secretary's briefs—rely exclusively on § 75.334(b)(1). See G. Ex. 11. Therefore, this Decision will only consider the alleged violation of § 75.334(b)(1) and not § 75.334(a)(1) or (b)(2).

30 C.F.R. § 75.334(b)(1). This regulation has two requirements: 1) that the bleeder system “control the air passing through the area”; and 2) that the bleeder system “continuously dilute and move methane-air mixtures and other gases, dusts, and fumes from the worked-out area.” There is no question that the mine has low levels of methane and adequate levels of oxygen. G. Ex. 1 at 1-2; Tr. 25, 70, 141-42, 296, 421, 485-86. However, MSHA alleges that the bleeder system fails to control the air passing through the mine. *See, e.g.*, G. Ex. 9 at 1. To support this allegation, MSHA relies on the ventilation survey. G. Ex. 3 at 1. This included the use of chemical smoke tests inside the extended-depth perimeter cuts. Tr. 120-21.

As noted above, an agency action is arbitrary and capricious if it relies on factors that were not intended to be relied upon. *Motor Vehicle Mfrs.*, 462 U.S. at 43. Here, MSHA improperly relied on two factors: unreliable smoke tests conducted inside the perimeter cuts, and a bias against perimeter mining that is supported by substantial record evidence.

In using the smoke tests inside the perimeter cuts, MSHA gathered data that would not have been considered in other forms of second mining or in the consideration of a bleeder system under § 75.334(b)(1). Tr. 559-60, 573. As Respondent’s expert Beiter repeatedly testified, the ability to go into a perimeter cut presented a “unique opportunity” because a survey team would not be able to access a mined-out area in second mining. Tr. 563; *see also* Tr. 50, 117, 559, 571. As Beiter further testified, because a survey team could not access a mined-out area in longwall or full pillar recovery mining, a ventilation survey would only include taking measurements from the crosscut leading up to and coming out of the mined-out area. Tr. 116. Beiter agreed that he had “never done a ventilation survey actually in a pillared area, either full extraction, partial extraction, or longwall.” Tr. 116-17. Burns echoed this sentiment and testified that, “as a general rule,” one does not go into or analyze the ventilation in pillared areas. Tr. 222.

In revoking the mine’s ventilation plan, MSHA improperly relied on a “unique” opportunity to apply a different standard—requiring perimeter mining to pass a test not required of any other form of second mining—without explanation; “where an agency applies different standards to similarly situated entities and fails to support this disparate treatment with a reasoned explanation and substantial evidence in the record, its action is arbitrary and capricious and cannot be upheld.” *Burlington Northern & Santa Fe R. Co. v. Surface Transp. Bd.*, 403 F.3d 771, 777 (D.C. Cir. 2005). Accordingly, MSHA’s revocation of the mine’s ventilation plan was arbitrary and capricious.³⁷

Despite the inability to obtain comparable measurements from inside a pillared area in other forms of second mining, MSHA relied heavily on the measurements taken from inside the perimeter cuts at the mine. In doing so, MSHA applied a different test to perimeter mining than it applied to any other types of second mining under § 75.334(b)(1). Other than describing the situation as “unique,” there was no explanation given as to why perimeter mining was subject to requirements that were not applied to any other type of second mining.

³⁷ MSHA’s heavy reliance on the smoke tests in the perimeter cuts alone is sufficient to find that the revocation of the ventilation plan was arbitrary and capricious.

In addition, MSHA exhibited a bias against perimeter mining, and there is substantial evidence in the record to warrant the inference that MSHA was engaging, by incremental steps, in an attempt to eradicate perimeter mining. This bias led MSHA to conduct the ventilation survey seeking a predetermined result. *Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 711 (10th Cir. 2010) (using arbitrary and capricious standard in reviewing predetermination claim). The most probative evidence and credible testimony demonstrate that District 8's true aim was to "get rid" of perimeter mining and declare it "illegal." Tr. 417. Former MSHA District 8 supervising engineer, Mark Eslinger, credibly testified that he served a 90-day detail in 2001 in Arlington, Virginia, where he had discussions that led him to believe "that people in MSHA headquarters want to get rid of perimeter mining." Tr. 444. When pressed for names on further cross-examination by the Secretary, Eslinger credibly testified that he "had discussions with Kevin Stricklin and he did not seem to be in favor of perimeter mining." Tr. 445. Stricklin executed PPL P13-V-12, without notice-and-comment rulemaking. Eslinger also testified that Reider, an engineer in District 8, warned that District 8 was trying to "get rid" of perimeter mining. Tr. 417. Furthermore, MSHA roof control supervisor, Doug Herndon, told Eslinger during a December 2018 meeting presented by Tech Support that MSHA was going to declare perimeter mining was "an illegal system of mining. That's how they are going to get rid of it." Tr. 441-42.

This bias was evidenced not only from testimony, but also from the June 7, 2018 letter where MSHA specifically emphasized that the ventilation plan was inappropriate because "[t]he worked-out area is not ventilated throughout the entire pillared area." G. Ex. 7 at 2. As noted above, the undersigned discredits Burns' post hoc rationalization for the emphasis of a word that does not appear in § 75.334(b)(1). Far from simply being Burns' "term to make sure they understand that I'm not just talking about the mouth" of the panel, the term implies a standard not found in the cited regulation, but the standard found in § 75.334(a)(1). Tr. 205. The use and emphasis of the word "throughout," which does not appear in the cited regulation, demonstrates an application of that regulation outside normal bounds and suggests some motive other than an unbiased application of the proper regulation.

The application of the smoke tests also indicates MSHA's bias and result-driven conclusions. As found above, Hartsog persuasively testified that the chemical smoke tests were not valid tests, but "an attempt by District 8 to get rid of perimeter mining." Tr. 415. MSHA's bias was also evident from Beiter's actions, discussed below, overruling Doyle-Coombs when she made notations documenting perceptible movement. Rather than consider the observations of a member of the survey team or even those from the operator's representatives, Beiter intervened and directed changes to those recorded observations that reflected less favorably on the previously approved ventilation plan.

The record establishes that MSHA also failed to consider the experiential opinions and expertise from District 8's own ventilation specialists and inspectors, who are intimately familiar with the mine, during the plan revocation process. Although Burns was generally unfamiliar with and had limited experience with perimeter mining (Tr. 240-41), he did not talk to or seek input from his own inspectors during the plan revocation process, despite the fact that his ventilation specialists would regularly perform six-month plan reviews on site and review mine maps to identify problems and ensure that the plan was still "adequate." Tr. 155-58, 233-34. These inspectors included Mike Pritchard, who told safety director Jankousky that he did not see

anything wrong with the revoked system of ventilation for perimeter mining at PEUG. Tr. 381, 383, 385-86.

MSHA's unexplained failure to consider the expertise found in its own agency demonstrates that MSHA failed to consider an important aspect of the problem and supports the inference that MSHA was motivated by a desire to chip away at and to ultimately eradicate perimeter mining.

Although Hasenstab testified that he did not believe that Burns was trying to get rid of perimeter mining, the testimony and the actions of MSHA when confronted with requests for approval of ventilation plans that included perimeter mining demonstrate that District 8 was attempting to get rid of perimeter mining. Tr. 354. As noted above, the undersigned discounts Hasenstab's testimony on this point because he would not want to generate ill will with District 8, complicating a key relationship in operating a mine in that district. Other testimony from disinterested witnesses and the actions of MSHA establish that there was an active effort by District 8 against perimeter mining. While none of this evidence alone indicates a bias, taken together, the evidence—including the credited testimony, the use of inapplicable language, the use of the unreliable smoke tests, and the failure to consider the opinions of District 8's ventilation specialists intimately familiar with the ventilation plan at the mine—demonstrates a pattern of bias against perimeter mining that infected the decision-making process, leading to a predetermined, and thus arbitrary and capricious, decision. *Forest Guardians*, 611 F.3d at 711.

Either of these, the use of the unreliable smoke tests and the demonstrated bias against perimeter mining, would alone render MSHA's decision arbitrary and capricious. *Motor Vehicle Mfrs.*, 462 U.S. at 42 (An agency acts arbitrarily and capriciously when it relies on improper factors when making its decision.).

B. MSHA failed to consider important factors.

An agency action is arbitrary and capricious if the agency failed to consider an aspect of the problem. *Motor Vehicle Mfrs.*, 462 U.S. at 42. In revoking the mine's ventilation plan, MSHA failed to consider several important factors including the no-less-protection standard; using tracer gas; and the disagreements within the survey team and from Knight Hawk's representatives concerning the varied and inconsistent results of the smoke tests.

At the outset, MSHA overlooked and failed to consider that its regulatory authority to revoke the previously approved ventilation plan is subject to a unique statutory limitation: “[n]o mandatory health or safety standard . . . shall reduce the protection afforded miners by an existing mandatory health or safety standard.” 30 U.S.C. § 811(a)(9); see *United Steel v. Mine Safety & Health Administration*, 925 F.3d 1279, 1288 (D.C. Cir. 2019). “This unusual limitation ‘expressly mandates that no reductions in the level of safety below existing levels be permitted, regardless of the benefits accruing from improved efficiency.’” *Id.* at 1282 (quoting *United Mine Workers of Am., Int’l Union v. Dole*, 870 F.2d 662, 666 (D.C. Cir. 1989)). This is the no-less-protection standard. The Mine Act requires that MSHA “state the basis for its conclusion” that a new health or safety standard satisfies the no-less-protection standard. *Id.* at 1282-83. Ventilation plans are the equivalent of safety and health regulations promulgated

through notice-and-comment rulemaking. *Prairie State Generating Co. LLC v. Sec’y of Labor*, 792 F.3d 82, 86 (D.C. Cir. 2015). Accordingly, when revoking the previously existing plan that provided for perimeter mining, MSHA could not approve an interim plan without perimeter mining that provided less protection, and MSHA needed to state the basis for its conclusion that revocation of the status quo would not result in less protection for miners under the interim plan.

Knight Hawk presented substantial evidence to MSHA establishing that perimeter mining was a safe and effective method of mining at the mine that resulted in lower exposure to respirable dust, noise, and red or danger zones; a lower citation and injury rate; elimination of all hazards associated with roof bolting; superior overall ventilation of the entire perimeter panel, as compared to longwall gob and pillared areas; and adequate ventilation to ensure that methane-air mixtures and other gases, dusts, and fumes from worked-out areas are continuously diluted and routed away from active workings into a return air course or to the surface. G. Ex. 2 at 3-7; Tr. 301. Burns conceded that perimeter mining “is a safe form of mining” and provides less exposure to certain hazards released into the air than other forms of mining. Tr. 173. Additional testimony bolstered the fact that perimeter mining is a safe form of mining. Tr. 337 (Hasenstab) (agreeing that the previously-approved ventilation plan has “significant” safety benefits); Tr. 370-71 (Jankousky). Hartsog went further and stated that not only was perimeter mining a safe form of mining, but it was safer than continuous mining. P. Ex. 37 at 2. Jankousky agreed. Tr. 371 (“Definitely perimeter mining is safer.”). Even Burns conceded that perimeter mining was a safer form of second mining. Tr. 224.

Despite substantial evidence that perimeter mining is a safe and likely safer form of mining with regard to recurring hazards, the credited, probative evidence in the record establishes that MSHA failed to even consider, much less address, the comparative safety advantages of perimeter mining under the previously approved ventilation plan. As noted above, the undersigned has discredited Burns’ testimony at trial that he actually considered the safety and health benefits of perimeter mining first raised by Knight Hawk in its March 13 letter.

More importantly, the Mine Act requires that MSHA “state the basis for its conclusion” that safety and health standards prevailing under the interim plan satisfies the no-less-protection standard. *United Steel*, 925 F.3d at 1282 (quoting *Nat’l Min. Ass’n v. MSHA*, 116 F.3d 520, 536 (D.C. Cir. 1997)). Any such statement by MSHA “is subject to review under the Administrative Procedure Act and must manifest that MSHA engaged in reasoned decisionmaking.” *Id.* (citing *Nat’l Min. Ass’n v. MSHA*, 116 F. 3d at 536).

Here, MSHA made no statement or analysis that the significant and uncontroverted safety and health protections afforded by perimeter mining under the revoked ventilation plan were actually considered or outweighed by safety and health standards that gave no less protection against respirable dust, noise, red zone, and roof bolting under the interim ventilation plan. MSHA failed to consider whether revoking the ventilation plan would result in Knight Hawk’s performance of more advance continuous mining than it would have performed if the ventilation plan remained in place. Because there is substantial evidence in the record demonstrating that advance continuous mining is less safe than perimeter mining, MSHA failed to consider an important factor in making its decision. Specifically, MSHA failed to consider the unique statutory limitation, which cabined its revocation discretion.

Such unexplained agency action in excess of statutory limitations found in 30 U.S.C. § 811(a)(9) is arbitrary and capricious decision making. *Motor Vehicle Mfrs.*, 463 U.S. at 43 (finding that an agency action is arbitrary and capricious “if the agency has . . . entirely failed to consider an important aspect of the problem”); see also *International Union, United Mine Workers of America v. U.S. Department of Labor*, 358 F.3d 40, 44-45 (D.C. Cir. 2004) (finding that MSHA’s failure to provide an adequate explanation for its decision to withdraw an air quality proposal was arbitrary and capricious action). Here, MSHA failed to offer any explanation, let alone an adequate one, as to why the revocation of the previously approved ventilation plan satisfied the limitations of the statutory no-less-protection standard. *United Steel*, 925 F.3d at 1282-83. This is a sufficient basis, standing alone, to vacate MSHA’s revocation action and reinstate the previously approved ventilation plan.

In addition to failing to consider the no-less-protection standard, MSHA acted in an arbitrary and capricious manner when it failed to consider a tracer gas test, which is usually employed to confirm airflow. In fact, MSHA failed to even consider the use of tracer gas to confirm its unreliable smoke tests. As noted above, tracer gas is a method of determining air movement by releasing a certain gas in one area and then sampling for that gas in another area. Beiter acknowledged that “[u]sually you would use tracer gas when we can’t confirm that there is airflow.” Tr. 573. Hartsog confirmed that tracer gas would be the “proper tool for the task” of determining the effectiveness of a bleeder system. Tr. 532-33.

However, in deviation from acknowledged usual practice, MSHA’s survey team did not use tracer gas, despite being unable to confirm airflow in the perimeter cuts. MSHA did not provide any reasoned explanation as to why it did not use tracer gas. Such an explanation is necessary, especially where testimony establishes that it was MSHA’s usual practice to use tracer gas where airflow could not be confirmed. At the very least, MSHA should have used this acknowledged usual practice to back up or confirm the findings of the smoke tests. This deviation meant that MSHA did not consider an important factor, the use of tracer gas, when revoking the mine’s ventilation plan. When such an aberration from usual practice in agency action goes unexplained, it is arbitrary and capricious. *Encino Motors, LLC v. Navarro*, 136 S.Ct. 2117, 2120 (2016) (citing *FCC*, 556 U.S. at 515). Consequently, MSHA’s unexplained departure from a usual practice was arbitrary and capricious.³⁸

Finally, as noted above in Section III.A, MSHA did not properly consider differences in the opinions and observations from the survey team and the contrary opinions and observations from Knight Hawk’s representatives concerning the varied and inconsistent results of the smoke tests. The survey team made observations of smoke rising approximately 44-feet away in dimly lit perimeter cuts from areas that miners do not normally work or travel. Tr. 52-54. This unique and questionable practice resulted in disagreements among the survey team and from Knight Hawk’s representatives, which Beiter actively suppressed, directing some notes to be rewritten. Tr. 104, 299, 349-350.

³⁸ Due to MSHA’s heavy reliance on a ventilation survey that did not use tracer gas, this deviation from an acknowledged usual practice alone is sufficient to find that the revocation of the ventilation plan was arbitrary and capricious.

Additionally, MSHA failed to consider that the smoke tests provided varied and inconsistent results regarding the direction and movement of airflow. As noted, Hasenstab credibly testified that there was “[g]eneral uncertainty in regards to movement or no movement.” Tr. 299-300. At times, the tests were not even capable of being repeated. Tr. 561-62.

Even if the undersigned were to overlook the aberrant use of unreliable smoke tests inside the perimeter cuts, MSHA failed to consider the limitations placed on the survey team in conducting the smoke tests, disagreements among the survey team and Knight Hawk representatives concerning perceptible air movement in such cuts, and the varied and inconsistent results of the survey. By not considering these important factors, MSHA acted in an arbitrary and capricious manner. *Motor Vehicle Mfrs.*, 463 U.S. at 43 (An agency action is arbitrary and capricious where the agency “entirely failed to consider an important aspect of the problem.”).

In short, MSHA revoked a previously approved ventilation plan through results-oriented, unreliable, and suspect investigation techniques that failed to consider several important aspects of the problem to ensure the reliability of data and observations relied upon and to ensure compliance with an important statutory limitation. MSHA failed to consider the no-less-protection standard; the simple use of tracer gas to validate or confirm the smoke tests; and the disagreements within the survey team and from Knight Hawk’s representatives concerning the varied and inconsistent results of the smoke tests. These failures demonstrate that MSHA acted in an arbitrary and capricious manner in a unique and unprecedented scenario to revoke a previously approved plan found suitable by four District 8 managers or acting district managers and by District 8 ventilation specialist Pritchard, who inexplicably was never consulted about the revocation decision or called as a rebuttal witness. Any one of these three failures is sufficient to find the revocation of the ventilation plan arbitrary and capricious.

C. MSHA offered explanations counter to the evidence before it.

MSHA cited regulations that had no support in the record to justify its revocation of the mine’s ventilation plan. MSHA revoked the previously approved plan by technical citation citing five major deficiencies that Knight Hawk allegedly failed to address or include in a modified or revised plan submission. The Secretary grounded the alleged deficiencies in mandatory standards set forth in 30 C.F.R. §§ 75.334(b)(1); 75.334(c)(4); 75.364(a)(2)(iii) and (iv); 75.371(y), (z), and (bb); and 75.372(b)(9). Of these regulations, only § 75.334(b)(1), discussed above, deals with whether a ventilation plan is effective. The remainder of the regulations pertains to the technical requirements of what must be in a written ventilation plan and map prior to submission to MSHA for its consideration. Specifically, five of the remaining seven regulations—§§ 75.334(c)(4); 75.371(y), (z), and (bb); and 75.372(b)(9)—pertain to what the ventilation plan and map must “specify” and what “information” the ventilation plan and map must contain prior to submission for approval. It should be emphasized that these regulations only pertain to what technical details must be included in a submitted plan and map and *not* whether the submitted plan and map constitute a suitable ventilation plan. In other words, these regulations prescribe what information an operator must include in a ventilation plan and map when submitting them for MSHA’s initial consideration, but they do not speak to whether it is a suitable ventilation plan.

When MSHA approved the ventilation plan in 2010, MSHA found that the plan and map were in compliance with 30 C.F.R. § 75.370. G. Ex. 12 at 1. Under § 75.370, a “ventilation plan shall consist of two parts[:] the plan content as prescribed in § 75.371[,] and the ventilation map with information as prescribed in § 75.372.” As such, when a plan and map are found in compliance with § 75.370, they are likewise found in compliance with § 75.371 and § 75.372. Five of the cited regulations that MSHA alleged that Knight Hawk had violated— §§ 75.334(c)(4); 75.371(y), (z), and (bb); and 75.372(b)(9)—are components of § 75.371 and § 75.372. In 2010, MSHA found that the ventilation plan and map were in compliance with these five regulations concerning the required technical details.³⁹

When MSHA revoked the ventilation plan, nothing had changed in the written ventilation plan or map from the 2010-approved version. Tr. 240-41. Other than the PEUG ventilation survey, the Secretary offers no explanation as to why a plan found to include the necessary information in 2010 was suddenly lacking in 2018.⁴⁰ Furthermore, the Secretary offers no explanation why, even if the 2018 PEUG ventilation survey were accepted at face value, it rendered the technical details in the 2010 plan and maps improper for submission to MSHA for consideration. In essence, MSHA has declared, without explanation, that the previously approved ventilation plan and map are suddenly unacceptable even for an initial submission for consideration by MSHA.

As noted above, an agency must “examine the relevant data and articulate a satisfactory explanation for its action.” *FCC*, 556 U.S. at 513 (quoting *Motor Vehicle Mfrs.*, 463 U.S. at 43). Here, the Secretary offers *no* explanation, satisfactory or otherwise, why the technical details of the 2010 written ventilation plan did not satisfy the requirements of §§ 75.371 and 75.372 in 2018 when the same technical details did so in 2010. Consequently, MSHA acted arbitrarily and capriciously and contrary to law when it determined that Knight Hawk had violated these regulations.

The remaining two regulations—§§ 75.364(a)(2)(iii) and 75.364(a)(2)(iv)—require that the operator conduct weekly examinations of the ventilation system. Specifically, § 75.364(a)(2)(iii) requires that, at least every seven days, “[a]t least one entry of each set of bleeder entries used as part of the bleeder system . . . shall be traveled in its entirety.” Additionally, measurements shall be performed during the weekly examination to determine methane and oxygen levels as well as whether air is moving in the proper direction at EPs as

³⁹ Although 30 C.F.R. § 75.370 does not explicitly reference 30 C.F.R. § 334(c)(4), the requirements of § 334(c)(4)—that a ventilation plan specify “[t]he location of ventilating devices”—are the same as those in 30 C.F.R. § 75.371(bb), which does incorporate § 334(c)(4) by reference.

⁴⁰ It should be noted that MSHA cited Knight Hawk for operating without an approved ventilation plan, not for failing to follow an approved ventilation plan. As such, the findings of the ventilation survey should have no effect on whether the ventilation plan or map complied with § 75.371 or § 75.372.

prescribed in the ventilation plan.⁴¹ Section 75.364(a)(2)(iv) provides that an operator may offer, “in lieu of the requirements of [(a)(2)(iii)], an alternative method of evaluation” in a submitted ventilation plan.

MSHA’s determination that Knight Hawk violated § 75.364(a)(2)(iii) runs counter to the evidence. As noted above, this regulation requires weekly examinations where an examiner travels at least one bleeder entry of each set of entries, and for evaluations of air quality and movement at EPs as identified in the ventilation plan. Hasenstab identified the weekly route followed by an examiner to determine the effectiveness of the bleeder system at the EPs. P. Ex. 30 at 9; Tr. 320-22; *see also* Tr. 504 (Hartsog). Knight Hawk’s expert, Hartsog, credibly testified that “it would be an effective way of evaluating the system. It meets the requirements in that it goes to the extremities of the system. And it travels the entire perimeter of the bleeder area, of the bleeder system, bleeder entries.” Tr. 505.

The undersigned is persuaded by Hasenstab’s description of the weekly examinations. Tr. 320-22.⁴² Hasenstab testified that the weekly examination involved traveling along the bleeder entries from EP to EP and checking air quality and direction at each EP. Tr. 320-21; G. Ex. 13 at 9. Beiter’s report to Burns confirmed that “[t]he required examination of the bleeder system included travel of bleeder entries to evaluate its effectiveness” and that “[b]leeder entries were routinely traveled in each block in which an [EP] was located and across the front of the completed blocks.” G. Ex. 1 at 7. Consequently, the evidence clearly demonstrates that the weekly examinations occurred and included travel of “[a]t least one entry of each set of bleeder entries” to conduct the tests, meeting the requirements of § 75.362(a)(2)(iii). MSHA again offered no explanation as to why the weekly examinations themselves were inadequate under this regulation. As such, MSHA acted in an arbitrary and capricious manner when finding that Knight Hawk violated § 75.362(a)(2)(iii). *Motor Vehicle Mfrs.*, 463 U.S. at 43.

Additionally, although MSHA identified alleged deficiencies with the weekly examinations, none of these alleged deficiencies are grounded in the regulations. First, Burns, both in testimony and in his June 7 letter, identified the weekly examinations as deficient because the plan did not

define[] the proper air direction through individual “blocks”
Definition of the proper direction of airflow through bleeder entries and pillared areas, as well as the EP locations, also is necessary for the mine examiner to determine if air is moving in the proper direction when conducting tests during the weekly examination.

G. Ex. 9 at 2. Setting aside for the moment that MSHA, again without explanation, found fault with the written ventilation plan deemed acceptable in 2010, MSHA rejected Knight Hawk’s

⁴¹ Section 75.362(a)(2)(iii) uses the term “measurement point locations” rather than “evaluation points.”

⁴² The Secretary offered no evidence contrary to Hasenstab’s description.

offer to cure the alleged deficiency with written statements. *Id.* The only explanation for this rejection was that displaying the airflow with arrows on the map itself was required by the plain language of the regulation. Tr. 204. Because the Secretary relies on the plain language of the regulation, the Secretary’s interpretation of the regulation does not get deference. *Kisor v. Wilkie*, 139 S.Ct. 2400, 2415 (2019) (“[A] court should not afford *Auer* deference unless the regulation is genuinely ambiguous. If uncertainty does not exist, there is no plausible reason for deference.” (citations omitted)); *see also Christopher v. SmithKline Beecham Corp.*, 132 S. Ct. 2156, 2166-67 (2012) (holding that “[d]eference is . . . unwarranted when there is reason to suspect that the agency’s interpretation ‘does not reflect the agency’s fair and considered judgement on the matter in question.’”). Looking to the plain language of § 75.372, there is no requirement as to how, or in what format, the information must be provided on the ventilation map. Consequently, the Secretary does not provide any basis for this requirement, and this is yet another example of MSHA acting in an arbitrary and capricious manner to achieve the desired result. *Motor Vehicle Mfrs.*, 463 U.S. at 43.

Second, MSHA also alleged that the weekly examinations were deficient because

[t]he specified means of evaluation of the worked-out area does not provide sufficient information to determine the effectiveness of the bleeder system including (a) whether air was moving in the proper direction through all “blocks,” including the bleeder entries and pillared areas in each “block”; (b) the means to reasonably assure ventilation of the extended-depth portions of the pillared areas; or (c) the effectiveness of ventilation through the worked-out area.

G. Ex. 11 at 3. None of these requirements can be found in the cited regulation. The *only* requirement in § 75.364(a)(2)(iii) is that “[a]t least one entry of each set of bleeder entries used as part of the bleeder system . . . shall be traveled in its entirety” and that the weekly examination will include tests for air quality and movement. There is no requirement in § 75.364(a)(2)(iii) for additional tests outside of the EPs or the addition of more EPs than are required in the approved ventilation plan. Based on the language from the citation, MSHA created additional requirements that have no basis in the regulation. Again, it should be emphasized that this regulation pertains to whether Knight Hawk is conducting weekly examinations as prescribed by the ventilation plan and maps in the first instance, not whether those examinations revealed shortcomings in the ventilation plan.⁴³

⁴³ Although the Secretary never presents this argument, the best argument in support of the Secretary’s position is that, if Knight Hawk had been conducting proper weekly examinations, those examinations should have demonstrated that the ventilation plan was not suitable based on the results of the ventilation survey. Therefore, this argument continues, since the weekly examinations did not reveal the plan’s unsuitability, Knight Hawk must not have been performing proper weekly examinations. Even beyond the reasons stated above, this argument fails because the improperly conducted ventilation survey lies at the heart of this argument. Its reasoning fails once the keystone of the ventilation survey is found flawed.

On this point, Beiter testified that the evaluation was insufficient because “there were places in the bleeder system in which airflow was not being controlled in a manner that would allow that evaluation to take place.” Tr. 112-13. Even assuming that Beiter were completely correct that there were portions of the mine that did not have controlled airflow, this testimony goes to the results of the weekly examinations, not to whether Knight Hawk was conducting the weekly examinations in compliance with § 75.364(a)(2)(iii) in the first instance. Even uncontrolled airflow, except in extreme cases, would not prevent Knight Hawk from conducting adequate weekly examinations. To put it another way, where § 75.364(a)(2)(iii) asks whether Knight Hawk conducted weekly exams adequate to evaluate the bleeder system, Beiter faults Knight Hawk for the expected results of that test. This is akin to faulting Knight Hawk for not taking a test because, in MSHA’s view, Knight Hawk should fail that test. As this regulation goes to whether Knight Hawk is conducting the proper examinations—not what the result of that test may be—MSHA does not support this alleged violation.⁴⁴ In short, it is a non sequitur to allege that Knight Hawk failed to conduct weekly examinations because “there were places in the bleeder system in which airflow was not being controlled.” Tr. 112-13.

As noted above, the law requires MSHA to offer a reasoned explanation when departing from its standard course; “an agency changing its course must supply a reasoned analysis.” *Motor Vehicle Mfrs.*, 463 U.S. at 57 (quoting *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970)). Here, the Secretary offers no reasoned explanation why the additional deficiencies that it grafted onto regulatory language are necessary under § 75.364(a)(2)(iii), or how Knight Hawk’s execution of the weekly examinations runs afoul of that regulation.⁴⁵

Turning to § 75.364(a)(2)(iv), this regulation, by its plain language, only applies where an operator submits an alternative weekly examination plan “in lieu of the requirements of” § 75.364(a)(2)(iii) in a ventilation plan. The evidence is clear that Knight Hawk *did not* submit an alternative weekly examination plan in its ventilation plan. G. Ex. 12 at 9. Consequently, MSHA’s reliance on this regulation runs counter to the evidence. *Motor Vehicle Mfrs.*, 463 U.S. at 43.

As a final matter, insofar as the Secretary relies on PPL P13-V-12 as the impetus that changed the substantive requirements for the submitted ventilation plan and maps, such reliance is improper as PPL P13-V-12 did not go through proper notice-and-comment rulemaking. As noted in the Findings of Fact, on December 30, 2013, after the approval of the mine’s ventilation plan, MSHA, through Administrator Kevin Stricklin, issued the policy “to clarify and improve

⁴⁴ Burns testified that “[w]e did not feel the bleeder system was being ventilated. We did not feel it was being adequately examined.” Tr. 171. He did not, however, provide any concrete support as to why the weekly examinations themselves were inadequate, nor did the Secretary proffer any citations to support such conclusion. Rather, the Secretary only proffers results from an unreliable and suspect ventilation survey in areas where examiners would not travel.

⁴⁵ Like the unreliable smoke tests, this appears to be yet another example where MSHA created additional requirements for extended-cut perimeter mining that were not required for other forms of second mining.

the examination and evaluation of bleeder systems by mine operators.” R. Ex. 13 at 1. PPL P13-V-12 states that “[i]t is anticipated that District Managers would not suggest changes to the relevant portions of existing approved ventilation plans absent conditions affecting the safety or health of miners that arise following the issuance and effective date of” the policy. *Id.* PPL P13-V-12 defines a bleeder system to “include[] the area from which pillars are wholly or partially recovered, bleeder entries, bleeder connectors, and all associated ventilation control devices that control the air movement through the area.” *Id.* at 2.

Hartsog credibly testified that PPL P13-V-12 changed the definition of a bleeder system. Specifically, Hartsog testified that the policy includes as part of the newly defined bleeder system “any pillar that’s left untouched Commonly, we don’t refer to certain pillars next to the gob or around the gob as being part of the bleeder system. It’s part of the gob.” Tr. 513. Hartsog stated that perimeter cuts “are in the abandoned area. Once those are mined, I would not expect them to be re-examined once left.” Tr. 480. Hartsog also credibly testified that the policy redefined what constituted a bleeder entry. He stated that the policy “defines bleeder entries as being any entries that . . . are between or around blocks that have not been second mined. Before this [policy] document came out, that was not the case.” Tr. 523.

PPL P13-V-12 made substantive and definitional changes to § 75.300 dealing with bleeder systems that lack the force of law purportedly used to justify the revocation of Knight Hawk’s ventilation plan. It is the Secretary’s burden to appropriately promulgate new proposed changes in substantive legal requirements through proper notice-and-comment procedure. 30 U.S.C. § 811; *see Alaska Professional Hunters v. FAA*, 177 F.3d 1030, 1034 (D.C. Cir. 1999) (“When an agency has given its regulation a definitive interpretation, and later significantly revises that interpretation, the agency has in effect amended its rule, something it may not accomplish without notice and comment.”); *Drummond Company, Inc.*, 14 FMSHRC 695 (1992) (affirming the judge’s holding that the Secretary was required to promulgate a policy program letter through notice-and-comment rulemaking and concluding that the policy, as an invalidly issued substantive rule, can be accorded no legal weight or effect). Further, the Secretary failed to set forth any convincing reasons upon which policy changes may be exempt from notice-and-comment due to good cause. 5 U.S.C. § 553(b)(3)(B). Therefore, PPL P13-V-12 cannot justify changing the requirements of the submitted ventilation plan and maps.

The undersigned finds unpersuasive the Secretary’s argument that, even apart from the measurements taken within the perimeter cuts, the ventilation survey indicated that Knight Hawk had to revise its ventilation plan. Specifically, the Secretary contends that “[t]he direction of air movement in adjacent bleeder entries was not always consistent within a block[;] at several locations air moved in opposing directions across an individual bleeder entry, and in portions o[f] other bleeder entries there was no perceptible air movement at all.” Sec’y Post-Hearing Br. at 48-49. This argument relies on the definition of “bleeder entry” from PPL P13-V-12. When applying the pre-PPL P13-V-12 definition, the pillars that have not been second mined and are not adjacent to the perimeter cuts are not part of the bleeder system. Tr. 513. Consequently, applying the pre-PPL P13-V-12 definitions, there is a single bleeder entry and the ventilation survey found consistent air movement through the bleeder entry and through the area adjacent to the perimeter cuts. G. Ex. 18-1. The Secretary’s unpersuasive argument demonstrates exactly how PPL P13-V-12 changed the definition of a bleeder entry and the substantive consequences of that change.

In summary, MSHA acted in an arbitrary and capricious manner under *Motor Vehicles Mfrs.*, 463 U.S. at 43. First, MSHA relied on factors—the unreliable smoke tests within the perimeter cuts and a bias against perimeter mining—that were not intended to be considered. Second, MSHA entirely failed to consider important aspects of the revocation issue—the no-less-protection standard; using tracer gas; and the disagreements within the survey team and from Knight Hawk representatives concerning the varied and inconsistent results of the smoke tests. Finally MSHA either offered an explanation that ran counter to the evidence before it or failed to offer any explanation to support its decision that the previously approved plan no longer satisfies §§ 75.370, 75.371, and 75.372.

IV. CONCLUSION

For the foregoing reasons, the technical citation is vacated, and the previously approved ventilation plan is reinstated.

Thomas P. McCarthy

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Acting Chief Administrative Law Judge

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