

**FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION**

OFFICE OF ADMINISTRATIVE LAW JUDGES  
1331 Pennsylvania Avenue, NW, Suite 520N  
Washington, DC 20004

December 31, 2015

BHP NAVAJO COAL CO.,  
Contestant

v.

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

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

v.

BHP NAVAJO COAL CO.,  
Respondent

CONTEST PROCEEDING

Docket No. CENT 2013-335-R  
Citation No. 8480130; 02/20/2013

Mine: Navajo Mine  
Mine ID: 29-00097

CIVIL PENALTY PROCEEDING

Docket No. CENT 2013-555  
A.C. No. 29-00097-323596

Mine: Navajo Mine

**DECISION**

Appearances: Bryan Kaufman, Esq., U.S. Department of Labor, Office of the Solicitor, Denver, Colorado, on behalf of the Petitioner;

Charles W. Newcom, Esq., Sherman & Howard, LLC, Denver, Colorado,  
on behalf of the Respondent.

Before: Judge Bulluck

This matter is before me upon a Notice of Contest and a Petition for Assessment of Civil Penalty filed by the Secretary of Labor (“Secretary”), on behalf of the Mine Safety and Health Administration (“MSHA”), against BHP Navajo Coal Company (“BHP Navajo”), pursuant to section 105(d) of the Federal Mine Safety and Health Act of 1977 (“the Act” or “Mine Act”), 30 U.S.C. § 815(d).

A hearing was held in Durango, Colorado. The single violation at issue, section 104(d)(1) Citation No. 8480130, alleges a violation of section 77.516 of the Secretary's mandatory safety standards. Section 77.516 provides:

In addition to the requirements of §§ 77.503 and 77.506, all wiring and electrical equipment installed after June 30, 1971, shall meet the requirements of the National Electric Code in effect at the time of the installation.

30 C.F.R. § 77.516.

Citation No. 8480130 was designated by the Secretary as significant and substantial ("S&S"),<sup>1</sup> and "reasonably likely" to contribute to at least the "lost workday or restricted duty" injury of one miner. The Secretary also attributed the violation to a "high" degree of negligence and an unwarrantable failure to comply with the Secretary's mandatory safety standard.<sup>2</sup> The Secretary seeks a civil penalty in the amount of \$11,000.00.

As such, the following issues are before me: (1) whether BHP Navajo violated 30 C.F.R. § 77.516, as alleged in Citation No. 8480130; (2) whether the violation was S&S; and (3) whether the violation was attributable to a "high" degree of negligence and an unwarrantable failure to comply with section 77.516. The parties' post-hearing briefs are of record.<sup>3</sup>

For the reasons set forth below, Citation No. 8480130 is **AFFIRMED**, as modified from a section 104(d)(1) citation to a section 104(a) citation, the S&S designation is upheld, and a penalty is assessed against BHP Navajo.

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<sup>1</sup> Generally speaking, a violation is S&S if it is reasonably likely that a hazard contributed to by the violation will result in an accident causing serious injury. *Cement Div., Nat'l Gypsum Co.*, 3 FMSHRC 822, 825 (Apr. 1981).

<sup>2</sup> When Citation No. 8480130 was issued on February 20, 2013, the Secretary originally designated the violation as a section 104(a) citation attributable to a "moderate" degree of negligence. On March 1, 2013, the violation was modified to a section 104(d)(1) order attributable to a "high" degree of negligence and an unwarrantable failure. However, the predicate unwarrantable failure citation, which established the subject violation as a 104(d)(1) order rather than a citation, has since been modified to a 104(a) citation. Consequently, the subject violation is now a 104(d)(1) citation, rather than an order. Tr. 14; Stip. 10.

<sup>3</sup> The parties filed separate post-hearing briefs on the applicable version of the National Electric Code (abbreviated hereinafter as "Br. on NEC" and "Reply Br. on NEC"), and the merits of Citation No. 8480130 (abbreviated hereinafter as "Br." and "Reply Br.").

## I. Stipulations

The parties have stipulated as follows:

1. At the time of the inspection on February 19, 2013, [BHP Navajo] was engaged in mining and selling coal, and its mining operations affect commerce.
2. At the time of the inspection on February 19, 2013, [BHP Navajo] was the operator of the mine with the Mine Identification No. 29-00097.
3. At the time of the inspection on February 19, 2013, the mine was subject to the jurisdiction of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801, *et seq.*
4. The Administrative Law Judge has jurisdiction in this matter.
5. The subject citation was properly served by a duly authorized representative of [MSHA], upon an agent of [BHP Navajo] on the date and place stated therein. Accordingly, the citation may be admitted into evidence for the purpose of establishing its issuance and not for the truthfulness or relevancy of any statements asserted therein.
6. [BHP Navajo] timely contested the subject citation.
7. The payment of \$11,000.00 will not affect [BHP Navajo's] ability to remain in business.
8. Installation and testing of the fan in dispute in this matter was completed on June 7, 2012.
9. The room in which the fan was located became operational on August 31, 2012.
10. Citation No. 8480130 was written as an unwarrantable failure order. The underlying unwarrantable failure citation making it an order has subsequently been modified to a non-unwarrantable failure. Thus, Citation No. 8480130 is an unwarrantable failure citation, not an order.
11. At all times relevant to this matter, no manager with [BHP Navajo] ever conceded that they felt there was a violation of 30 C.F.R. § 77.516 and, in fact, took the position that they were in compliance in their discussions with any representatives of MSHA.

12. At no time did anyone in management with [BHP Navajo] ever concede that they thought what applied to this motor was the 1968 National Electric Code but, rather, that . . . BHP management's view was that the 2011 National Electric Code applied.

Tr. 11-14 (stipulations 1-10), 404 (stipulations 11-12).

## **II. Factual Background**

The Navajo Mine is an active surface bituminous coal mine in San Juan County, New Mexico. In February 2013, at the time that the subject citation was issued, the Navajo Mine was operated by BHP Navajo Coal Company. The Navajo Mine operation includes an on-site coal laboratory, called the SGS coal sample lab, which tests and analyzes the quality and chemical characteristics of the locally-extracted materials.<sup>4</sup> Tr. 320.

### **A. SGS Coal Sample Lab**

The SGS coal sample lab has two separate coal processing rooms: the “prep room” and the “x-ray room.”<sup>5</sup> As part of the routine coal testing procedure, coal samples are brought into the prep room, where they are crushed into a fine powder. The prep room is equipped with a dust collection and exhaust system that collects dust from the pulverizing process in a dust collection bag and exhausts any accumulations of gas. Tr. 354-55. The exhaust fan generates negative pressure in the prep room, which works to prevent suspended coal dust in the prep room from spreading to other parts of the lab. Tr. 181, 321-22.

Adjacent to the prep room, and connected by a door, is the x-ray room. Coal powder from the prep room is routinely transported to the x-ray room, burned down into an ash, and moltenized by a fluxer - - essentially a system of propane-fueled Bunsen burners.<sup>6</sup> Tr. 322. The molten coal ash is then cooled and evaluated using a robotic x-ray machine. Tr. 325-26. The x-ray machine utilizes, in part, potentially combustible methane gas. Tr. 356. To mitigate the

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<sup>4</sup> While BHP Navajo has long-operated a coal lab at the site of the current lab, in 2011, BHP Navajo and the Arizona Public Service Company consolidated their respective coal-testing facilities into the current laboratory, which is now staffed and operated by SGS, an outside contractor. Tr. 320, 339-40.

<sup>5</sup> The record in this matter alternatively refers to these rooms as the “pulverizing room” and the “burn room.”

<sup>6</sup> The fluxer is equipped with an automatic shut-off mechanism that shuts off the flow of propane should the system fail to ignite; however, the automatic shut-off mechanism does not shut off the valve on the propane container, itself. Tr. 201-02, 323, 345.

possibility of a combustible gas buildup, the x-ray room is equipped with a ventilation and gas-monitoring alarm system.<sup>7</sup> Tr. 323-25, 344-45.

The x-ray room is also equipped with a general exhaust system, which is the subject of Citation No. 8480130. The exhaust system in question draws air from the x-ray room through a large hood above the fluxer, exhausting the air through an external cone on the roof of the lab. See Tr. 74. The cone is a bowl-shaped metal structure that physically exhausts the air drawn from the x-ray room. Tr. 74-75; Ex. P-4 at 14. Within the exhaust cone is a smaller cylindrical metal structure. Tr. 74-75; Ex. P-4 at 14. Inside this smaller metal cylinder are the fan motor, motor housing, electrical junction box, and an associated wiring system. Ex. P-4 at 16. There are a number of small holes in the smaller metal cylinder that allow air passing through the exhaust cone to enter the location of the fan motor.

Directly west of the SGS coal sample lab is a large emergency stockpile of coal. West of the stockpile, about 1,500 feet from the coal lab, is the Navajo Mine North coal plant. Tr. 438. When the wind blows from the west, coal dust can be blown in the direction of the coal lab. Tr. 208; 434-36. Varying winds are also likely to blow sand, dirt, and ash in the direction of the coal lab. Tr. 435.

### **B. MSHA Inspection of the Exhaust Fan Motor**

On January 19, 2013, BHP Navajo electrician J.D. Arnold, upon observing an unfamiliar exhaust hood in the x-ray room, went onto the roof of the SGS coal sample lab to investigate the exhaust fan equipment. Tr. 86-87. Arnold removed the cap to the metal cylinder containing the fan motor, and observed an “open-faced motor” surrounded by a fine layer of dark-colored dusty material. Tr. 87-88. Concerned that the motor was non-compliant with the National Electric Code (“NEC”) and the Mine Act because it was not a closed-type motor, Arnold approached BHP Navajo electrical supervisor Kerry Steagall. Tr. 90-91. Steagall advised that the exhaust fan and motor and, in turn, the x-ray lab, should not be tagged-out at that time because he was uncertain of the NEC compliance requirements for the motor in question. Tr. 90-91.

Before conducting a monthly electrical inspection of the coal lab on February 14, Arnold, again, consulted with Steagall about the compliance of the exhaust motor. Tr. 90-91. Steagall and Arnold sought second, third, and fourth opinions regarding the compliance issue, none of which provided a conclusive answer. Tr. 92-93. Having not received a definitive opinion regarding the motor’s compliance, Steagall and BHP Navajo safety representative Tyler Martin instructed Arnold not to tag-out the exhaust fan during his monthly inspection. Tr. 93; Ex. P-3.

A few days later, Martin reported to Arnold that the exhaust fan motor in question was compliant with the NEC, without any modifications. Tr. 108. Arnold, unsatisfied with Martin’s

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<sup>7</sup> The triggering of the ventilation and gas-monitoring alarm system does not automatically shut off the fluxer propane gas feed. Tr. 125, 424.

opinion, filed a section 103(g) complaint with the mine's union representative.<sup>8</sup> Tr. 109-10. At that time, Steagall instructed Arnold to vacuum out the dust observed in the motor housing area, and take before-and-after photographs. Tr. 110-11.

On February 19, while conducting a regular inspection of the Navajo Mine, MSHA Inspector Ruth Williams received notice of Arnold's 103(g) complaint about the coal lab. Tr. 188. Williams proceeded to the roof of the coal lab, accompanied by Martin and BHP Navajo electrician Lawrence Beyale, to inspect the exhaust fan motor. Tr. 189-90. Williams removed the cap to the metal cylinder containing the fan motor, and observed evidence of the dust that had accumulated in the proximity of the fan motor and electrical components prior to Arnold's vacuuming. Tr. 192-93. Because the lab technician was absent, Williams was unable to operate the exhaust fan during the inspection. Tr. 193. While Williams observed no coal dust accumulation in the recently-cleaned x-ray room, she did observe coal dust accumulations in the prep room. Tr. 194. Unclear about the requirements of the Mine Act and the NEC, Williams did not issue a citation following the inspection. Tr. 198.

After consulting MSHA Regional Manager Don Gibson, Williams returned to the coal lab the following day, February 20, to further inspect the exhaust fan motor. Tr. 199. Arnold showed her the photographs that he had taken prior to having vacuumed the dust out of the exhaust fan motor housing, and she examined the operation of the automatic propane shut-off mechanism on the fluxer and the ventilation and gas monitoring alarm system. Tr. 204-06. After this follow-up inspection, and in consultation with Gibson, Williams issued Citation No. 8480130 for a violation of section 77.516. The "Condition or Practice" is described as follows:

North Plant at the SGS Coal Sample Lab. The 115 Volt motor that is installed for the exhaust fan system does not meet the 502 Group F of the National Electric Code in the area where it is installed. The coal lab is located in a real black fine coal dusty area. The motor is designed for commercial and restaurant exhaust system. The exhaust system for the coal lab needs a "dust-ignition-proof" shall mean [sic] enclosed in a manner that will exclude ignitable amounts of coal dusts or amounts that might affect performance or rating and that, where installed and protected in accordance with the NEC, will not permit arcs, sparks, or heat otherwise generated or liberated inside of the enclosure to cause ignition of exterior accumulations or atmospheric suspensions of a specified dust on or in the vicinity of the enclosure. The motor is located inside a metal compartment with a

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<sup>8</sup> Section 103(g)(1) provides:

Whenever a representative of the miners or a miner in the case of a coal or other mine where there is no such representative has reasonable grounds to believe that a violation of this Act or a mandatory health or safety standard exists, or an imminent danger exists, such miner or representative shall have a right to obtain an immediate inspection by giving notice to the Secretary or his authorized representative of such violation or danger.

cover. The cover is not a dust tight cover; coal dust accumulation was observed inside the compartment. The black fine coal dust will float into the open motor and accumulate inside, that would affect the rotation of the motor. The coal lab is exposed to coal dust 24/7. The potential of an electrical hazard exists, because of the floating dust going inside the enclosure. There are miners that work inside the lab, and the carpenter shop is adjacent to the building and there are miners inside that are exposed. The Mine failed to install the electric equipment to meet the requirement of the NEC in effect at the time of the installation.

Standard 77.516 was cited 3 times in two years at mine 2900097 (3 to the operator, 0 to a contractor).

Ex. P-1 at 7-8. On March 1, Williams modified Citation No. 8480130 from a 104(a) citation to a 104(d)(1) order. See Ex. P-1 at 10. BHP Navajo abated the cited condition on March 1 by installing a sealed exhaust fan motor and sealed wiring components. Ex. P-1 at 11, P- 4 at 26.

### **III. Findings of Fact and Conclusions of Law**

#### **A. Applicable Version of the National Electrical Code**

Section 77.516 requires that “all wiring and electrical equipment . . . meet the requirements of the National Electric Code *in effect at the time of the installation.*” 30 C.F.R. § 77.516 (emphasis added). As a preliminary matter, the parties disagree over which version of the NEC - - the 1968 or the 2011 edition - - applies to the exhaust fan motor in question. It is undisputed that the subject exhaust fan motor was installed on June 7, 2012. Stip. 8.

There is a primary substantive difference between the applicable sections of the 1968 and 2011 NEC, which necessitates resolution of this preliminary question. Unlike the 1968 NEC, the 2011 version has a specific definition of, and testing requirement for, “combustible dust,” the presence of which would require the exhaust fan motor to be sealed. See Ex. R-1 at 1, 6. The 2011 NEC defines combustible dust as:

Any finely divided solid material that is 420 microns (0.017 in.) or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in the air.

Ex. R-1 at 1 (NEC § 500.2). The 2011 NEC also specifies that combustible dust must be tested in accordance with the American Society for Testing and Materials standards to determine that it has more than eight percent total entrapped volatiles. Ex. R-1 at 6 (NEC § 500.6(B)(2)).

The 1968 NEC, however, has no specific testing requirement to determine the presence of “combustible dust.” Compare Exs. P-9 and R-1. It is undisputed that no tests were performed by MSHA to determine whether the dust identified in proximity to the fan motor in question was “combustible dust” under the 2011 NEC. Therefore, BHP Navajo asserts that “[t]he lack of any

testing/verification of whether ‘combustible dust’ was present precludes finding a violation for dust under the 2011 NEC,” should that version apply in the present case. Resp’t Br. at 8.

In asserting that the 1968 NEC applies to the exhaust fan motor in question, the Secretary interprets “in effect at the time of installation” to refer to the NEC version incorporated by reference into section 77.516. The Secretary argues that the 1968 NEC has been effectively incorporated by reference into the Mine Act and, as such, has the force of law. See Sec’y Br. on NEC at 3-10; Sec’y Reply Br. on NEC at 1-6. In contrast, BHP Navajo interprets “in effect at the time of installation” to refer to the most recent version of the NEC available on June 7, 2012, when the exhaust fan motor was installed - - the 2011 edition. BHP Navajo also argues that the 1968 NEC was never officially incorporated by reference because MSHA did not complete formal rulemaking applying the 1968 NEC to section 77.516. See Resp’t Br. on NEC at 2-9; Resp’t Reply Br. on NEC at 2-3.

This disagreement is, in essence, about the interpretation of the phrase “in effect at the time of installation” in section 77.516. In considering this question of statutory construction, the first inquiry is “whether Congress has directly spoken to the precise question at issue.” *Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984); *Thunder Basin Coal Co.*, 18 FMSHRC 582, 584 (Apr. 1996). If a statute is clear and unambiguous, effect must be given to its language. See *Chevron*, 467 U.S. at 842-43; accord *Local Union 1261, UMWA v. FMSHRC*, 917 F.2d 42, 44 (D.C. Cir. 1990). In ascertaining the meaning of a statute, courts utilize traditional tools of construction, including an examination of the “particular statutory language at issue, as well as the language and design of the statute as a whole,” to determine whether Congress had an intention on the specific question at issue. *Chevron*, 467 U.S. at 843 n.9; *Local Union*, 917 F.2d at 44; *Coal Employment Project v. Dole*, 889 F.2d 1127, 1131 (D.C. Cir. 1989). The examination to determine whether there is such a clear Congressional intent is commonly referred to as a “*Chevron I*” analysis. See *Coal Employment Project*, 889 F.2d at 1131; *Thunder Basin*, 18 FMSHRC at 584; *Keystone Coal Mining Corp.*, 16 FMSHRC 6, 13 (Jan. 1994).

In the context of section 77.516 and the enforcement of electrical safety regulations by application of the NEC, interpretation of the phrase “in effect” raises the question of whether the applicable NEC is made effective dynamically by the mere act of publication of an updated edition or, alternatively, by affirmative adoption by a regulatory body, such as MSHA. Where the meaning of a phrase is open to alternative interpretations, it should be treated as ambiguous under a *Chevron I* analysis. See *Berwind Nat. Res. Corp., et al.*, 21 FMSHRC 1284, 1308 (Dec. 1999) (citing *Nat’l R.R. Passenger Corp. v. Boston & Maine Corp.*, 503 U.S. 407, 418-19 (1992), and 2A Norman J. Singer, *Sutherland Statutory Construction* § 45.02, at 6 (5th ed. 1992) (“ambiguity exists when a statute is capable of being understood by reasonably well-informed persons in two or more different senses.”)). Accordingly, I conclude that the phrase “in effect at the time of installation” in section 77.516 is ambiguous.

As here, if a statute is deemed to be ambiguous, a second inquiry, commonly referred to as a “*Chevron II*” analysis, is required to determine whether an agency’s interpretation of it is a reasonable one. See *Chevron*, 467 U.S. at 843-44; *Thunder Basin*, 18 FMSHRC at 584 n.2;



*Keystone*, 16 FMSHRC at 13. Deference is accorded to “an agency’s interpretation of the statute it is charged with administering when that interpretation is reasonable.” *Energy West Mining Co. v. FMSHRC*, 40 F.3d 457, 460 (D.C. Cir. 1994) (citing *Chevron*, 467 U.S. at 844).

Based on the forthcoming analysis, it is clear that the 1968 NEC has been properly incorporated by reference into section 77.516, demonstrating MSHA’s consistent and long-standing agency practice of interpreting and enforcing the 1968 NEC as the edition “in effect at the time of the installation” in the regulation. Such consistency reflects that MSHA’s interpretation of section 77.516 has been a result of “considered judgment,” rather than a *post hoc* rationalization, and should be accorded deference. See *Akzo Nobel Salt, Inc. v. FMSHRC*, 212 F.3d 1301, 1304 (D.C. Cir. 2000); *Tilden Mining Co.*, 24 FMSHRC 53, 60-61 (Jan. 2002) (ALJ) (holding that consistent and long-standing agency interpretation of an ambiguous standard reflects “considered judgment” in support of deference).

The practice of incorporation by reference began in 1966 to reduce the volume of material published in the Federal Register. See 5 U.S.C. § 552(a). Incorporation by reference “allows Federal agencies to comply with the requirement to publish rules in the Federal Register and the Code of Federal Regulations (“CFR”) by referring to material already published elsewhere. The legal effect of incorporation by reference is that the material is treated as if it were published in the Federal Register and CFR.” *Electronic Code of Federal Regulations, Incorporation by Reference*, U.S. GOVERNMENT PRINTING OFFICE, <http://www.ecfr.gov/cgi-bin/text-idx?tpl=ibr.tpl> (last visited December 30, 2015).

In 1980 and, again, in 1981, the Director of the Federal Register (“Director”) approved the incorporation by reference of the 1968 NEC into section 77.516.<sup>9, 10</sup> Approvals of Incorporation by Reference, 45 Fed. Reg. 44090, 44098 (June 30, 1980); 46 Fed. Reg. 33980, 33991 (June 30, 1981). Thereafter, between 1982 and 2008, the printed edition of the CFR included the 1968 NEC, as incorporated by reference in section 77.516. Since 2009, while the printed editions of the CFR no longer contain a list of materials incorporated by reference, that list, including the 1968 NEC, remains published on the U.S. Government Printing Office’s e-CFR website. See *Electronic Code of Federal Regulations, Title 30—Mineral Resources, Material Approved for Incorporation by Reference*, U.S. GOVERNMENT PRINTING OFFICE, <http://www.ecfr.gov/cgi-bin/text-idx?SID=e793601b8c7ebf86d3eff77f0d5cce f4&mc=true&tpl=ibr/30V1.tpl> (last visited December 30, 2015).

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<sup>9</sup> In 1980 and 1981, an agency that desired to incorporate material by reference was required to annually submit that material to the Director for authorization. See 45 Fed. Reg. 44090 (June 30, 1980). In 1982, the Director revoked the annual submission requirement. 47 Fed. Reg. 34107 (Aug. 6, 1982).

<sup>10</sup> As identified by the Secretary, it is noteworthy that, in 1980, when the 1968 NEC was first incorporated by reference into section 77.516, three newer editions of the NEC had been published. Resp’t Br. on NEC at 4 (citing *National Electric Code*, NATIONAL FIRE PROTECTION ASSOCIATION, <http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=70&tab=editions> (last visited December 30, 2015)).

Nevertheless, BHP Navajo argues that while the 1968 NEC may have been “approved” for incorporation by reference by the Director, it has never been officially promulgated into section 77.516 by the formal procedure required for incorporation by reference in 1 C.F.R. Part 51. BHP Navajo’s argument is belied, however, by the clear intent of the Director.

The Director’s 1980 approval of the 1968 NEC for incorporation by reference expressed a clear intent to give legal effect to that material, rather than merely “approve” it for further promulgation:

[T]he materials [including the 1968 NEC] included on the table below *are* incorporated by reference in the CFR under 5 U.S.C. § 552(a) and 1 C.F.R. Part 51. These procedures provide that material approved for incorporation by reference by the [Director] *has the same legal status as if it were published in full in the Federal Register.*”

45 Fed. Reg. 44090 (June 30, 1980) (emphasis added). Similarly, the 1991 CFR provided that the Director had “approved under 5 U.S.C. § 552(a) and 1 C.F.R. Part 51 the incorporation by reference” of the 1968 NEC for section 77.516. Ex. P-9 at 46. Importantly, this language unambiguously states that the Director’s approval of the 1968 NEC for incorporation by reference was granted consistent with the requirements of 1 C.F.R. Part 51. It is clear that compliance with 1 C.F.R. Part 51 - - argued to be defective by BHP Navajo - - was a condition precedent to the Director’s approval. As such, the Director’s “approval” was not an inchoate blessing for further action by MSHA, but rather, was independently sufficient to finalize incorporation by reference.

Additionally, interpreting “in effect at the time of the installation” to mean the most recent version of the NEC available, as BHP Navajo asserts, suggests a dynamic incorporation that would automatically update the requirements of section 77.516 whenever a new edition of the NEC is published. Such dynamic incorporation is impermissible. The D.C. Circuit has held that dynamic incorporations violate the notice and comment requirements of the Administrative Procedure Act. *City of Idaho Falls v. FERC*, 629 F.3d 222, 227-28 (D.C. Cir 2011) (holding that FERC violated the APA by attempting to adopt, without additional notice and comment, updated Forest Service fee schedules, a previous version of which was incorporated by reference in its regulations). Rather, 1 C.F.R. § 51.11(a) provides unambiguous instructions to agencies regarding the formal procedure necessary to amend or update material incorporated by reference.<sup>11</sup>

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<sup>11</sup> 1 C.F.R § 51.11(a) provides:

An agency that seeks approval for a change to a publication that is approved for incorporation by reference must—

- (1) Publish notice of the change in the Federal Register and amend the Code of Federal Regulations;
- (2) Ensure that a copy of the amendment or revision is on file at the Office of the Federal Register; and

Accordingly, I conclude that the Secretary's interpretation that the 1968 NEC was "in effect at the time of the installation" of the subject exhaust fan motor in June of 2012 is reasonable and should be accorded deference.<sup>12</sup>

## B. Fact of the Violation

Having resolved the dispute as to the applicable version of the NEC, the question is whether the subject exhaust fan motor was compliant with the requirements of the 1968 NEC, as mandated by section 77.516.

Article 500 of the 1968 NEC states that "[t]he provisions of Articles 500-503 apply to locations . . . subject to the conditions indicated by the following classifications." Ex. P-9 at 31 (NEC § 500-1). The Secretary alleges that the subject exhaust fan motor and associated components violated alternative Article 500 classifications: Class II, Division 1; or Class II, Division 2.<sup>13</sup> Sec'y Br. at 10-13. These classifications apply to locations in which combustible dust may be present. More specifically, as relevant to the facts of this proceeding:

- Class II, Division 1 applies to locations "in which combustible dust *is or may be* in suspension in the air continuously, intermittently, or periodically *under normal operating conditions.*" Ex. P-9 at 32 (NEC § 500-5(a)) (emphasis added).
- Class II, Division 2 applies to locations "in which combustible dust [will] *not normally be in suspension in the air*, or will not be likely to be thrown into suspension by the normal operation of equipment," but where "deposits or accumulations of such dust may be sufficient to interfere with the safe dissipation of heat from electrical equipment," or "might be ignited by arcs, sparks or burning material from such equipment." The NEC specifies that the Class II, Division 2 classification may apply to "rooms or areas adjacent to [Class II, Division 1 locations], and into which explosive or ignitable concentrations of suspended dust *might be communicated only under abnormal operating conditions.*" Ex. P-9 at 32 (NEC § 500-5(b)) (emphasis added).

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(3) Notify the Director of the Federal Register in writing that the change is being made.

<sup>12</sup> It is noteworthy that Commission judges have, likewise, applied the 1968 NEC to violations of section 77.516 cited in 1992 and 1993. *See Peabody Coal Co.*, 16 FMSHRC 50 (Jan. 1994) (ALJ); *Peabody Coal Co.*, 16 FMSHRC 1505 (July 1994) (ALJ).

<sup>13</sup> Testimony at the hearing repeatedly addressed two additional Article 500 classifications: Class I, Division 1; and Class I, Division 2. Both of these Class I categories apply to locations "in which flammable *gases or vapors* are or may be present in quantities sufficient to produce explosive or ignitable mixtures." Ex. P-9 at 31 (NEC § 500-4) (emphasis added). However, the Secretary does not contend that these classifications applied to the subject condition. *See* Sec'y Br. at 10-13.

The NEC provides specifications for all fittings, junction boxes, wiring connections, and motors in Class II, Division 1 and Class II, Division 2 locations. Most notably, in Class II, Division 1 locations, junction boxes must be approved and “dust-ignition proof,” and are prohibited from having “openings (such as holes for attachment screws) . . . through which adjacent combustible materials might be ignited”; all flexible wiring connections must be “dust-tight,” and “flexible cords shall be provided with dust-tight seals at both ends”; and motors must be approved and “dust-ignition-proof or totally enclosed pipe ventilated.” Ex. P-9 at 39-40 (NEC §§ 502-4, 502-8). Similarly, in Class II, Division 2 locations, “[w]ireways, and fittings and boxes in which taps, joints or terminal connections are made, shall be designed to minimize the entrance of dust” through “telescoping or close fitting covers,” and are prohibited from having “openings (such as holes for attachment screws) through which dust might enter, or through which sparks or burning material might escape”; all flexible wiring connections must be “dust-tight,” and “flexible cords shall be provided with dust-tight seals at both ends”; and motors must be approved and “dust-ignition-proof or totally enclosed pipe ventilated.”<sup>14</sup> Ex. P-9 at 39-40 (NEC §§ 502-4, 502-8).

It is clear that the subject exhaust fan motor and associated components were not in compliance with the requirements of either Class II division when Citation No. 8480130 was issued on February 20. According to MSHA District Manager Gibson, BHP Navajo electricians Arnold and Beyale, and Arthur Bruno, an electrical engineer consultant who testified on behalf of BHP Navajo, the open-type motor, and unsealed wiring, flexible connections, and junction box were insufficient for either a Class II, Division 1 or Class II, Division 2 location. Tr. 100 (Arnold); Tr. 152, 154-56, 161 (Beyale); Tr. 278-84 (Gibson); Tr. 375 (Bruno). Thus, the threshold issue is whether the cited exhaust fan motor and associated components were required to comply with the Class II requirements at all. To resolve this issue, it must be determined whether the x-ray room, of which the exhaust fan is an integral component, is a Class II location. For the reasons that follow, I find that the x-ray room is a Class II, Division 2 location and, consequently, that the exhaust fan motor and associated components were required to comply with the applicable NEC Class II requirements.

BHP Navajo concedes that the prep room adjacent to the x-ray room was a Class II, Division 2 location, due to the dust generated by the coal crushing and pulverizing process.<sup>15</sup> Tr. 354; see Tr. 153. However, BHP Navajo argues that there is no evidence of sufficient coal dust in the x-ray room, itself, to classify it as a Class II location. Resp’t Br. at 10-14; Tr. 133, 366, 386; see Stip. 11.

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<sup>14</sup> BHP Navajo has not argued that the exception to these Class II, Division 2 motor requirements, regarding moderate non-conducting dust accumulations in easily-cleanable locations, applies. See P-9 at 40 (NEC § 502-8).

<sup>15</sup> Bruno asserts that the prep room was a Class II, Division 2 location, rather than a Class II, Division 1 location due to the mitigating operation of a dust collection and exhaust system. Tr. 354. While not dispositive of the outcome of this proceeding, testimony regarding the prevalence of suspended coal dust in the prep room suggests that the prep room may be, in fact, more properly classified as a Class II, Division I location. Tr. 194, 268.

On the contrary, the balance of the evidence establishes that coal dust was regularly present in the x-ray room, often transported from the adjacent prep room. Inspector Williams testified that she had regularly seen coal dust on surfaces in the x-ray room during prior inspections. Tr. 212-13. She also testified that there was no dust in the x-ray room during the February 19 inspection because she was told that the lab technician had cleaned the room prior to inspection. Tr. 194, 213. Poignantly, former coal lab manager Jamie Horton testified on cross-examination to the widespread presence of coal dust throughout both rooms of the lab:

Counsel: Had you ever seen coal dust anywhere in the lab outside of the pulverizing room at the time you worked there?

Horton: There's dust in the lab at all times.

Counsel: Coal dust?

Horton: I'm sure there was some level of coal dust. It's a dusty lab because we're in the middle of the desert. Like accumulations of coal dust, we kept it pretty well swept up, so it's inevitable. It's a coal lab.

Counsel: Okay. If you have coal dust that's mostly going to be in the air in the [prep] room, how does it wind up outside in the rest of the lab?

Horton: Through the air. It's a dusty area. People's clothes - - that would be the main thing. If you spill a little bit when you're weighing some out, that would just be less than a gram of coal here and there.

Counsel: Okay. I'm not sure I understand. Was there a door that separated the x-ray room from the rest of the lab?

Horton: There's a - - well, there was a doorway, but we never shut the door.

Counsel: Okay. Could the coal dust that was in the rest of the lab travel into the x-ray room?

Horton: I guess so. Like I said, it's kind of everywhere. You know, it's on the counter. It's dusty, it's dust, and so if you went into the lab with coal on you, it would get everywhere.

Tr. 328-29. The evidence further demonstrates that if there is accumulated or suspended coal dust in the x-ray room, it is likely to be drawn into the exhaust fan, thus requiring a Class II, Division 2-compliant exhaust fan motor. On this point, Bruno testified on cross-examination

regarding his failure to recommend installation of a closed-type motor for the exhaust fan:

Judge: If one of the lab technicians told you [the x-ray room] was normally a dusty area and that on an as-needed basis, the techs would wipe dust from countertops and that some would be on their clothes, and that the door [to the prep room] wasn't kept closed, may that have changed your opinion about the environment of that room where that - - or the site of where that installation was?

Bruno: If I thought there would have been accumulations of dust inside that room, yes, it would change my opinion of it.

Judge: Okay.

Counsel: How would it change your opinion?

Bruno: If there's truly combustible dust in the room that the exhaust fan could suck up through the motor, then I would be concerned about it.

Counsel: Okay. How so? What would that concern be about and what should be done about it?

Bruno: Well, the concern would be if there were, in fact, enough dust available to pull it up through the motor and result in an actual Class I or Class II, Division 2 situation, then the motor itself would have to be an enclosed motor. It makes all the difference.

Tr. 387-88.

BHP Navajo asserts that dust suppression and control measures that have been taken in the prep room mitigate the classification of the x-ray room as a Class II, Division 2 location. This argument, however, misses the heart of the issue: a location should be classified as Class II, Division 2 if "explosive or ignitable quantities of suspended dust *might be communicated only under abnormal operating conditions.*" Ex. P-9 at 32 (NEC § 500-5(b)) (emphasis added). It is clear that the NEC contemplates a Class II, Division 2 classification in circumstances where there are safety measures in place, the failure of which, although unlikely, would proliferate coal dust in combustible quantities; should the dust suppression and control measures in the adjacent prep room fail, Horton and Bruno's testimonies make clear the likelihood of potentially explosive quantities of suspended coal dust in the x-ray room.

BHP Navajo also argues that the coal dust first identified and photographed by Arnold in and around the fan motor was neither of sufficient quantity to be combustible nor, in fact, coal dust at all. Indeed, a number of witnesses testified to the likelihood that the dust observed in and around the subject motor may have been non-combustible dirt and sand that had blown into the

container from outside the lab.<sup>16</sup> However, a conclusion that the fan motor must comply with Class II, Division 2 requirements need not be predicated on an existing accumulation of combustible coal dust. Rather, the NEC clearly contemplates the likelihood of accumulations occurring over time, given the location and environment of the motor installation. Therefore, because the cited exhaust fan motor and associated components did not meet the standards of the 1968 NEC, as required for a Class II, Division 2 location, I find that the Secretary has established a violation of section 77.516.

### C. Significant and Substantial

Citation No. 8480130 alleges an S&S violation, as defined in section 104(d)(1) of the Mine Act. In *Mathies Coal Company*, the Commission set forth four criteria that the Secretary must establish in order to prove that a violation is S&S under *National Gypsum*, 3 FMSHRC 822 (Apr. 1981): 1) the underlying violation of a mandatory safety standard; 2) a discrete safety hazard - - that is, a measure of danger to safety - - contributed to by the violation; 3) a reasonable likelihood that the hazard contributed to will result in an injury; and 4) a reasonable likelihood that the injury in question will be of a reasonably serious nature. 6 FMSHRC 1, 3-4 (Jan. 1984); see also *Buck Creek Coal, Inc. v. FMSHRC*, 52 F.3d 133, 135 (7th Cir. 1995); *Austin Power, Inc. v. Sec’y of Labor*, 861 F.2d 99, 103-04 (5th Cir. 1988), *aff’d* 9 FMSHRC 2015, 2021 (Dec. 1987) (approving *Mathies* criteria). Evaluation of the third criterion, the reasonable likelihood of injury, should be made in the context of “continued normal mining operations.” *U.S. Steel Mining Co.*, 6 FMSHRC 1573, 1574 (July 1984). Moreover, resolution of whether a violation is S&S must be based “on the particular facts surrounding that violation.” *Texasgulf, Inc.*, 10 FMSHRC 498, 501 (Apr. 1988); *Youghiogheny & Ohio Coal Co.*, 9 FMSHRC 2007, 2011-12 (Dec. 1987) (citing *Nat’l Gypsum*, 3 FMSHRC at 825). The Secretary need not prove a reasonable likelihood that the violation, itself, will cause injury. *Musser Eng’g, Inc.*, 32 FMSHRC 1257, 1280-81 (Oct. 2010).

The fact of violation has been established. It is also readily apparent that there was a discrete safety hazard contributed to by the violation. On this point, Beyale testified that coal dust near the motor could ignite if there were a motor or wiring failure that caused a spark. Tr. 155-56. Moreover, because of the presence of the explosion pentagon - - oxygen, fuel, heat source, suspension, and confinement - - an explosion could result. Tr. 217-18, 274-75. As such, the focus of this S&S analysis is on the third and fourth *Mathies* criteria: whether the ignition of coal dust near the motor was reasonably likely to result in an injury, and whether the resulting injury would be serious.

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<sup>16</sup> As an additional factor in support of the issuance of Citation No. 8480130, the Secretary argues that coal dust could blow from the nearby coal stockpile and coal plant in the direction of the coal lab, potentially contributing to the accumulation of dust observed near the motor. Because an analysis of the dust observed near the motor was never performed, I find the Secretary’s argument on this point too speculative to consider as a basis for the violation. Rather, the Secretary’s demonstration of the potential for combustible dust to accumulate in the x-ray room is sufficient to support the fact of violation.

The Commission has emphasized that the test under the third *Mathies* criterion is whether the hazard contributed to by the violation is reasonably likely to cause injury, not whether the violation, itself, is reasonably likely to cause injury. *Cumberland Coal Res., LP*, 33 FMSHRC 2357, 2365 (Oct. 2011). Here, should an explosion occur, it is reasonably likely to result in serious injuries to technicians working in the lab, i.e., burns or smoke inhalation, and contusions, head trauma, or broken bones from falling roof material. Therefore, I find that the violation of section 77.516 was S&S.

#### **D. Negligence and Unwarrantable Failure**

Citation No. 8480130 was modified to allege a “high” degree of negligence and an unwarrantable failure to comply with section 77.516. In particular, the modification alleges the following:

After further review, it was determined that several company officials were aware of the existence of an open type motor being used on the exhaust fan system at the SGS Coal Sample Laboratory for an extended period of time and failed to take any form of corrective action to correct the condition. This violation is an unwarrantable failure to comply with a mandatory standard.

Ex. P-1 at 10.

Unwarrantable failure is aggravated conduct constituting more than ordinary negligence. *Emery Mining Corp.*, 9 FMSHRC 1997, 2001 (Dec. 1987). It is characterized by such conduct as “reckless disregard,” “intentional misconduct,” “indifference,” or a “serious lack of reasonable care.” *Id.* at 2001-04; *Rochester & Pittsburgh Coal Co.*, 13 FMSHRC 189, 194 (Feb. 1991). The Commission has recognized the relevance of several factors in determining whether conduct is “aggravated” in the context of unwarrantable failure, such as the extensiveness of the violation, the length of time that the violation has existed, the operator’s efforts in eliminating the violative condition, and whether the operator has been put on notice that greater efforts are necessary for compliance. *See Consolidation Coal Co.*, 22 FMSHRC 328, 331 (Mar. 2000) (citing *Mullins & Sons Coal Co.*, 16 FMSHRC 192, 195 (Feb. 1994)). The Commission has also considered whether the violative condition is obvious or poses a high degree of danger. *Windsor Coal Co.*, 21 FMSHRC 997, 1000 (Sept. 1999) (citing *BethEnergy Mines, Inc.*, 14 FMSHRC 1232, 1243-44 (Aug. 1992); *Warren Steen Constr., Inc.*, 14 FMSHRC 1125, 1129 (July 1992); *Quinland Coals, Inc.*, 10 FMSHRC 705, 709 (June 1988); *Kitt Energy Corp.*, 6 FMSHRC 1596, 1603 (July 1984)). Each case must be examined on its own facts to determine whether an actor’s conduct is aggravated, or whether mitigating circumstances exist. *Eagle Energy, Inc.*, 23 FMSHRC 829, 834 (Aug. 2001) (citing *Consolidation Coal Co.*, 22 FMSHRC at 353).

In support of the unwarrantable failure designation, the Secretary asserts that the condition existed from, at least, January 19, when the dust accumulations and open-type motor were first identified by Arnold, until issuance of Citation No. 8480130 one month later. During that period, the Secretary alleges that BHP Navajo made no efforts to abate the violative condition by replacing the potentially hazardous motor, or even tagging the exhaust fan and the



lab out-of-service until the condition could be further investigated. On this point, the Secretary alleges that prior to issuance of the citation, Arnold communicated his concerns about the condition to no less than five supervisors, while nothing was done to correct the obvious condition.

The Secretary's arguments, however, overstate the obviousness of the violation, and disregard BHP Navajo's previous good faith efforts to ensure compliance with the Mine Act and NEC. Regarding the obviousness of the violation, the Secretary asserts that the fan motor "was subjected to a significant and easily visible amount" of coal dust. Sec'y Br. at 17. As previously noted, however, a number of witnesses testified that the dust observed may have been non-combustible dirt and sand that had blown into the motor container from outside the lab. This testimony is credited, especially to the extent that it identifies legitimate ambiguity regarding the need for a fully sealed motor to protect against accumulations of combustible coal dust. In fact, that the violation was not obvious was made apparent by Inspector Williams's initial uncertainty. Following her 103(g) inspection, Williams left the mine without issuing a citation because she was unsure whether a violation existed. Williams issued a 104(a) citation the following day, only after consultation with two MSHA managers; nine days passed before she modified the 104(a) citation to a 104(d)(1) order, alleging an unwarrantable failure.

Regarding BHP Navajo's good faith efforts to ensure compliance with the Mine Act and NEC, when the SGS coal sample lab was renovated in 2012, lab management sought the electrical engineering expertise of consultant Arthur Bruno to ensure the lab's compliance with the NEC. Bruno made a litany of compliance and safety recommendations, which were all fully implemented by BHP Navajo. Bruno's recommendations, however, did not include an exhaust fan motor for the x-ray room that was compliant with Class II, Division 2 requirements. These previous efforts to ensure compliance with the NEC provide context for BHP Navajo's cautious response to Arnold's concerns. Indeed, an "unwarrantable failure does not result from a good faith, although mistaken, belief that an operator was complying with regulations." *Wyoming Fuels*, 16 FMSHRC 1618, 1627 (Aug. 1994).

Based on a thorough review of the evidence, I conclude that BHP Navajo was moderately negligent in violating the standard, and that it did not engage in aggravated conduct constituting unwarrantable failure.

#### **IV. Penalty**

While the Secretary has proposed a specially assessed civil penalty of \$11,000.00 for the violation, the judge must independently determine the appropriate assessment by proper consideration of the six penalty criteria set forth in section 110(i) of the Act, 20 U.S.C. § 820(j). See *Sellersburg Co.*, 5 FMSHRC 287, 291-92 (Mar. 1983), *aff'd* 763 F.2d 1147 (7th Cir. 1984).

Applying the penalty criteria, I find that BHP Navajo is a large operator with a negligible history of section 77.516 violations. As stipulated by the parties, BHP Navajo's payment of the proposed penalty will not affect its ability to continue in business, and BHP Navajo demonstrated good faith in abating the hazard.

The Secretary has established that the violation was S&S, but has not proven that BHP Navajo was highly negligent or that the violation resulted from an unwarrantable failure to comply with section 77.516. Rather, the facts establish that BHP Navajo was moderately negligent. Consequently, a reduced civil penalty of \$6,000.00 is appropriate.

**ORDER**

**ACCORDINGLY**, it is **ORDERED** that the Secretary **MODIFY** Citation No. 8480130 to a citation issued under section 104(a) of the Act, with the degree of negligence reduced to “moderate,” and that BHP Navajo Coal Company **PAY** a civil penalty of \$6,000.00 within 30 days of this Decision.<sup>17</sup>



Jacqueline R. Bulluck  
Administrative Law Judge

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<sup>17</sup> Payment should be sent to the Mine Safety and Health Administration, U.S. Department of Labor, Payment Office, P.O. Box 790390, St. Louis, MO 63179-0390. Please include the Docket No. and A.C. No. noted in the above caption on the check.