

**FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION**

OFFICE OF ADMINISTRATIVE LAW JUDGES  
601 New Jersey Avenue, N.W. Suite 9500  
Washington, DC 20001-2021

March 2, 2006

SECRETARY OF LABOR, : CIVIL PENALTY PROCEEDINGS  
MINE SAFETY AND HEALTH :  
ADMINISTRATION (MSHA), : Docket No. WEST 2003-196-M  
Petitioner : A.C. No. 24-01490-05668  
v. :  
 : Docket No. WEST 2003-197-M  
 : A.C. No. 24-01490-05669  
 :  
 : Docket No. WEST 2003-198-M  
 : A.C. No. 24-01490-05670  
 :  
 : Docket No. WEST 2003-295-M  
 : A.C. No. 24-01490-05671  
 :  
 : Docket No. WEST 2003-371-M  
 : A.C. No. 24-01490-05681  
 :  
 : Docket No. WEST 2004-140-M  
 : A.C. No. 24-01490-10041  
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 :  
STILLWATER MINING CO., :  
Respondent. : Mine: Stillwater Mine

**DECISION**

Appearances: Edward Falkowski, Esq., Office of the Solicitor, U.S. Department of Labor, for the Petitioner;  
Katherine Larkin, Esq., Jackson & Kelly, PLLC, Denver, Colorado for the Respondent,

Before: Judge Weisberger

**Statement of the Case**

These consolidated cases are before me based upon Petitions for Assessment of Civil Penalty filed by the Secretary of Labor alleging violations by Stillwater Mining Company “Stillwater” of various mandatory safety regulations set forth in Title 30 of the Code of Federal Regulations. After numerous pre-hearing conferences, and with the concurrence of the parties

regarding date and location, a hearing was held in Billings, Montana on May 10, 11 and 12, 2005. Subsequent to the hearing, and pursuant to numerous request for extensions, Stillwater filed its Post-Hearing Brief on November 7, 2005 and the Secretary filed her Brief and Proposed Findings of Fact on September 8, 2005. On November 7, 2005 the parties filed a Post-Hearing Stipulation (“Stipulation”). Pursuant to requests for extensions, the Respondent filed a Reply Brief on November 23, 2005 and the Secretary filed her Reply Brief and Objections to Stillwater’s Proposed Findings of Fact on November 23, 2005. On December 12, 2005, pursuant to a request by the undersigned, the parties filed Additional Post-Hearing Stipulations.

### **Introduction**

The Stillwater Mine is an underground platinum mine, located near Nye, Montana. In 2002, the mine commenced to use a remote control blasting system, (“PED”) to initiate all the end-of-shift blasts in the mine.<sup>1</sup>

The PED system includes a computer located on the surface that is connected to the mine’s “leaky feeder” radio communications system. To initiate a blast, the blaster inserts a disc into the computer, and enters an “arm” command followed by a “blast” command. The commands are transmitted via a radio signal that is received by those PED units that are turned on, and within reception of the signals.

Approximately 45 PED receiving units are located throughout the mine. Each PED unit is both a radio receiver and an electric firing device. When a PED receiving unit has been turned on by a manually-operated key switch located on the unit, and the unit receives the appropriate radio signal from the computer on the surface, the PED unit will discharge electricity into its adjacent distribution panel, and into the blast (trunk) lines that are attached to the left side of the distribution panel. Up to six lines may be connected to a distribution panel. Each of these lines extends over a thousand feet to an electric detonator located at a blast site (stope), and constitutes a blasting circuit.<sup>2</sup>

In July 2002, MSHA Inspector, Rodney Gust, and Explosive Specialist, Tom Lobb, inspected Stillwater’s PED blasting system for the first time, and issued a number of citations and orders relating to its operation and condition.

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<sup>1</sup>Occasionally on-shift blast are carried out at blast sites using hand-held blasting devices, rather than the PED system.

<sup>2</sup>The trunk (blast) lines are connected to smaller one-use lines, that are connected to electric detonators at the face.

**I. Order Nos. 6273734, 6278317, 6278261, 6278263 and Citation Nos. 6269338, 6269360<sup>3</sup> and 6278019<sup>4</sup>**

On July 22, 2005, the Secretary filed a motion to approve a settlement agreement regarding these matters. The Respondent agreed to pay the full penalty of **\$14,165.00**. I have considered the submitted representations and documentation, and I conclude that the proposed settlement is appropriate under the criteria set forth in Section 110(i) of the Act. Accordingly, the motion is **GRANTED**.

**II. Citation Nos. 6269353, 2629358, 6269362, 6269366 and 6269370**

According to Gust, he inspected five or six of the 46 PED receiving units. At each of the units that he inspected, he followed six blast lines from the distribution panels to the blast sites where the blast lines ended. These lines extended more than one thousand feet. Gust observed that there were not any open safety switches in any of the blast lines between the distribution panel, and the blast site.

Gust issued five separate citations for five separate locations, alleging that there were not any open safety switches or equivalent provided outside the blast area. The citations also allege that galvanometer testing was not being conducted on blast lines even though they contacted several sources of stray current. Each citation alleges a violation of 30 CFR § 57.6403(b).

**A. Section 57.6403(b) supra**

Section 57.6403(b), supra, provides as follows: “[a]t least one safety switch or equivalent method of protection shall be located outside the blast area and shall be in the open position until persons are withdrawn.” (Emphasis added.) Thus, the clear wording of Section 57.6403(b), supra, requires: 1) either a safety switch or equivalent method of protection; 2) that it be located outside the blast area; and 3) that it be in the open position until persons are withdrawn.

**1. Outside the blasting area**

It is the Secretary’s position that the regulatory language mandating safety switches “outside the blast area”, means that switches be located outside “... yet close to, the boundary of the blast area.” (Secretary’s brief, page 17) In this connection, Gust opined that Section 57.6403 (b) supra, requires the location of switches outside the blast area, but near enough to the boundary of a blast area, so that miners working in the blast area will have some awareness of

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<sup>3</sup> These four orders and two citations are located in Docket No. WEST 2003-196-M.

<sup>4</sup> This citation is located in Docket No. WEST 2003-371-M.

what is going on between the switch and the blast site.

In further support of its interpretation, the Secretary cites the testimony of Gust, that the trunk line extends over a thousand feet from the PED distribution panel to the blast area and touches various sources of stray electricity. Gust opined that the presence of an open safety switch outside, but near the blast area, would break the path of any stray electricity and prevent it from reaching the blast site and causing a premature blast.

The Secretary also argues that an open switch located outside, but close to the blast area, would break an electric circuit, and prevent an unintended explosion.

The regulations do not contain any definition of the word “outside” as used in the phrase “outside the blasting area”. As set forth by the Commission in *Island Creek Coal Co.*, 20 FMSHRC 14, 19 (Jan. 1998), “In the absence of an express definition or an indication that the drafters intended a technical usage, the Commission has relied on the ordinary meaning of the word to be construed. *Peabody Coal Co.*, 18 FMSHRC 686, 690 (May, 1996), aff’d 111 F 3d 963 (D.C. Cir. 1997 (table))”.

Random House Dictionary of the English Language Unabridged (2<sup>nd</sup> ed., 1966) defines the word “outside”, as pertinent, as follows: “... **18.** in or near an area that is removed from or beyond a given place or region: *The country’s inhabitants seldom travel outside.* - *prep.* ... **20.** beyond the confines or borders of; visitors from outside the country.”

In Webster’s Third New International Dictionary (1993) the word “outside” as used as a preposition is defined, as pertinent, as follows:

- 1: on the outer side of <the American flag ~ my building- ... 2: beyond the limits of <do little of their entertaining ~ their homes - ... < reach ~ the narrow intellectual boundaries imposed by a restricted income in a little village- ... < the law> 3: to the outside of <rañ the house> ...”.

The word “outside” used as an adjective is defined in Webster’s, supra, as pertinent, as follows: “...2a: situated, belonging, or performed outside a particular place, area, or enclosure... .”

I find that these unabridged dictionaries of the English language,<sup>5</sup> do not contain an explicit definition of outside as meaning close to, in proximity, or near a designated area. Thus the Secretary’s position that Section 57.6403(b), supra, is violated if a safety switch is not in

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<sup>5</sup>I take cognizance of the Secretary’s citation of the Compact Edition of the Oxford English Dictionary, (1971), as providing one definition of “outside” as “...[t]he position or locality **close to** the outer side or surface of anything.” (Secretary’s brief, page 12) However, I give more weight to the definitions found in unabridged dictionaries, as set forth above, as more authoritative, rather than one contained in a compact edition.

close proximity to the blasting area, is not clearly supported by the common meaning of the term “outside”. I find that if the Secretary’s interpretation is upheld, the result would be an amendment of Section 57.6403(b) by the addition of words requiring the location of a safety switch to be outside but near or close to the blasting area.

As additional support for her argument, the Secretary cites the preamble to the final rule promulgated effective March 1991, amending Parts 56 and 57 of Title 30, Code of Federal Regulations. This preamble states, under the heading “sections 56/57 *Branch Circuits*”, as follows:

[P]ermanent blasting circuits are often used by more than one miner, particularly in underground mines. The safety switch required in the standard is used to protect individuals from unintentional voltage when another miner may be energizing the circuit which could cause an unplanned ignition. This circuit is similar to an electrical lock-out when working on an electrical circuit (56 Fed. Reg. 2083 (Jan. 18, 1991)).

Thus, it is clear that the intent of Section 57.6403, supra, is to protect miners from unintended voltage when another miner may be energizing the circuit. There is nothing in the explicit language of the preamble regarding the location of such protection in relation to a blast area i.e., that it must be near to or in close proximity to the latter. Thus, the Secretary’s arguments are not clearly persuasive that her position is a reasonable interpretation of Section 57.6403(b), supra.

Moreover, even if the Secretary’s interpretation may be permissible, it is not determinative if Stillwater did not have notice of the Secretary’s interpretation. As stated by the Commission in *Island Creek Company*, 20 FMSHRC 14, 24 (January 1998):

Where an agency imposes a fine based on its interpretation, a separate inquiry may arise concerning whether the respondent has received “fair notice” of the interpretation it was fined for violating. *Energy West Mining Co.*, 17 FMSHRC 1313, 1317-18 (August 1995). “[D]ue process... prevents... deference... from validating the application of a regulation that fails to give fair warning of the conduct that it prohibits or requires...” *Gates & Fox Co. V. OSHRC*, 790 F. 2d 154, 156 (D.C. Cir. 1986). An agency’s interpretation may be “permissible” but nevertheless fail to provide the notice required under this principle of administrative law to support imposition of a civil sanction. *General Electric*, 53 F. 3d at 1333-34. The Commission has not required that the operator receive actual notice of the Secretary’s interpretation. Instead, the Commission uses an objective test, i.e., “whether a reasonably prudent person, familiar with the mining industry and the protective purpose of the standard would have recognized the specific prohibition or requirement of the standard.” *Ideal Cement Co.*, 12 FMSHRC 2409, 2416 (November 1990).”

The preamble, supra, sets forth that the purpose of Section 57.6403, supra, is to protect miners from unintended voltage when another miner may be energizing the circuit. As explained further, (II (A)(2)(3)), this purpose is achieved by a shunting method at the PED distribution panel located outside the blast area. Additionally, the Secretary's interpretation that Section 6403(b), supra, requires a safety switch to be placed outside, but close to, or near the blast area goes beyond the ordinary meaning of the word "outside".

Moreover, the Secretary's interpretation had not been set forth in any policy manual, nor asserted by any of its representatives prior to the issuance of the citations herein. Lastly, as noted above, there is not anything in the explicit wording of the preamble giving notice of the Secretary's interpretation. Therefore, for all of the above reasons, I reject the Secretary's interpretation, and find it is not entitled to deference.

## 2. Safety switch or equivalent method of protection

All the blast lines cited were connected to PED distribution panels located outside the blast area. In normal operations unless miners are checking the blast lines for continuity or are preparing to blast, the blast lines remain plugged into shunt receptacles on the right side of the distribution panel. While in a shunt receptacle, the ends of the blast line remain shunted which reduces the chance that unintended electric current can flow through the remaining circuit. It is Stillwater's standard operating procedure that blast lines are not removed from the shunt receptacles and inserted into the firing receptacles, on the left side of the PED unit, until all personnel are withdrawn, and the area is barricaded. When a blast line is placed into the firing receptacle, the ends of the blast lines are unshunted, which allows current to flow. Thus, in essence, plugging a trunk line into the left side of the PED unit incorporates that line into the blast circuit allowing power to flow to the trunk line, to a one-use line, and then to a detonator, which allows detonation to occur. On the other hand, when the trunk line is plugged into a plug of the right side of the distribution panel, that line is isolated from the PED receiving unit, and shunted. Accordingly, power will not flow down that line from the power source to a detonator.

The Secretary agrees that in the above operations the PED unit operates as a switch. However, the Secretary argues that the plug receptacles cannot be considered to be a safety switch providing the protection intended by Section 6403(b), supra.

...because their very design makes it likely that electric current will erroneously be sent into the wrong blast line and therefore to the wrong blast site. By having six separate trunk lines starting from within inches of each other at plug receptacles in the distribution panel, the panels make it more likely, not less likely, that a miner will mistakenly energize the wrong circuit and thereby "cause an unplanned ignition." 56 Fed. Reg. at 2083. (Secretary's brief, page 17).

## Discussion

The term “safety switch” is defined in 30 CFR § 57.6000 as follows: “[a] switch that provides shunt protection in blasting circuits between the blast site and the switch used to connect a power source to the blasting circuit.” The Secretary has conceded that the location where the trunk line is plugged into the left side of the distribution panel constitutes a switch (Secretary’s brief, page 16). The parties have agreed that shunting means “to connect the two conductors by a short circuit. Shunting is a safety-related practice, because when a shunt is in place, it reduces the chance that unintended electric current can flow through the remaining circuit.” (Stipulation, supra, page 7) The parties further stipulated that an example of a method to create a shunt is “... when a trunk line is plugged into the right side of the distribution panel, the trunk line at that location is shunted as a result of the design of the right plug receptacle. Similarly, the PED receiver’s output terminals are at times mechanically shunted (to each other) inside the PED receiver unit.” (id.)

Hence, based on the parties’ stipulations, it is clear that the operation of the PED distribution panel provides shunt protection in a blasting circuit. Further, the operation of the PED unit distribution panel is located between a computer controlled switch connecting the power source to the blasting circuit, and the blast site. (Stipulation, page 5, 8). Thus, I find that the method of plugging a trunk line into the right side of the distribution panel provides shunt protection in the blasting circuit between “... the blast site and the switch used to connect the power source to the blasting circuit...”<sup>6</sup> (Section 57.6000(a), supra). Accordingly, I find that the operation of the PED distribution panel shunting is, at a minimum, the equivalent of a safety switch as defined in Section 57.6000, supra.

### **3. In the open position until persons are withdrawn**

In the operation of the PED system, the blast lines remain plugged into the shunt receptacles on the right side of the distribution board until miners are preparing to blast, all personnel are withdrawn, and the area is barricaded. The ends of the blast lines remain shunted while they are in the receptacles on the right side of the panel, which reduces the chance that unintended electric current can flow through the remaining circuit. Accordingly, it would appear that this procedure produces the same result as a switch being in an open position.

Therefore, for all of the above reasons, I find that the record establishes that shunting i.e., plugging the trunk line onto the right side of the PED distribution panel, is the equivalent of a safety switch and that the shunting keeps the blasting circuits in the “open” position, not allowing current to flow, until mines are withdrawn and blasting is to commence. Also, when shunting is performed, the PED distribution panel is located outside the blast area. I thus find that

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<sup>6</sup>The parties stipulated that, as applied to the use of the receiving unit in the operation of the PED system of blasting, the switch in the receiving unit is the switch “... used to connect a power source to the blasting circuit... .” (Section 57.6000, supra).

Stillwater's PED system was in compliance with Section 6403(b), supra. It is thus concluded that it has not been established that Stillwater violated Section 6403(b), supra.

### **III. Citation No. 6269380**

\_\_\_\_\_ On October 6, 2002 the stope at 35 e 6700 was to be blasted during the shift with a hand-held blaster. The miner who was to blast at that site inadvertently unplugged the wrong trunk line from the PED distribution panel, and attached it to the blaster. When it was activated, it detonated a round at stope 35 e 6400 instead. According to Gust, if a safety switch had been located close to the blast site at stope 35 e 6400, it could have been used to disconnect the blast line from the power source, and the possibility of an accidental explosion would have been eliminated.

Gust issued a citation alleging that “ the branch circuits at the 35 e 6700 were not equipped with safety switches or equivalent methods to isolated the electric blasting circuits (sic).” It is alleged that this condition constitutes a violation of 30 CFR § 57.6403(a).

The Secretary argues that the miners who had worked at stope 35 e 6400 a short time prior to the detonation did not have the protection of a safety switch in their blast line. As support for her position, the Secretary refers to the preamble, supra, which states that: “the safety switch required in the standard is used to protect individuals from unintentional voltage when another miner may be energizing the circuit, which could cause and unplanned ignition.” 56 Fed. Reg. 2083, supra. In this connection, the Secretary argues that the incident on October 6, is the same type of incident intended to be prevented according to the preamble, supra. For the reasons that follows, I find the Secretary's position to be without merit.

#### **A. Discussion**

Section 57.6403(a), supra, provides that “ [i]f electric blasting includes the use of branch circuits, each branch shall be equipped with a safety switch or equivalent method to isolate the circuits to be used. Thus, to prove a violation the Secretary must establish: 1) that Stillwater's blasting included the use of branch circuits and 2) that each branch had either (a) a safety switch or (b) an equivalent method to isolate the circuits to be used.

##### **1. The PED blasting system includes the use of branch circuits**

Based on the Stipulation, supra, filed by the parties subsequent to the hearing, I find that in Stillwater's operation of the PED system, a blasting circuit is created when electricity flows from the power source in the PED receiving unit to the distribution panel, through branch (trunk) lines plugged into the left side of the distribution panel, through one-use lines to an electric detonator and then returns via the same route to the power source. When trunk lines from

additional blast lines are plugged into the left side of the distribution panel those branch circuits (also consisting of trunk lines, one-use lines, and electric detonators) are incorporated into the blasting circuit so that the resulting electrical circuit consists of one long continuous circuit. I conclude that each branch line running from the PED panel to a detonator at the blasting site constituted a branch circuit as it was incorporated into the larger PED blasting circuit.

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**2. Safety switch or equivalent method to isolate the circuits to be used**

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\_\_\_\_\_ Stillwater was in compliance with Section 6403(a), supra, if the record establishes that each branch circuit was equipped with either a safety switch or an equivalent method to isolate the circuits to be used. There does not appear to be any dispute that each branch circuit running from the PED panel to a detonator at the face constituted a separate circuit, and that each branch line was not connected to any other branch circuit. Further, there was not any connection between branch lines as each one was plugged into a different plug at the PED distribution panel. There is not any evidence in the record as to the distance between the plugs. Although a picture of the panel (exhibit P-3) indicates that the plugs are in close proximity to one another, the record does not indicate the scale of this picture, nor does the record indicate the dimensions of the panel. Further, unless and until the branch lines are to be connected to detonators at the face, they are kept on the shunt side of the panel which has the effect of isolating them from other branch circuits.

Within the above framework, I find that it has not been established by a preponderance of evidence that Stillwater did not have an equivalent method to isolate the branch circuits<sup>7</sup> i.e., to set each one apart from the others (See, Webster's, supra, definition of “isolate”). I therefore find that it has not been established that Stillwater violated Section 6403(a), supra.

**IV. Citation Nos. 6269361, 6269365, 6269369, 6269373 and 6269357**

Gust issued five citations for five<sup>8</sup> PED locations, each one alleging a violation of 30 CFR § 57.6405(c), which provides as follows: “[o]nly the blaster shall have the key or other control to an electrical firing device.”

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**A. Violation of 30 CFR § 57.6405(c)**

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<sup>7</sup>In on-shift blasting the blast line is connected to a hand-held firing device rather than the PED system. As such, the circuit from the hand-held firing device to a detonator at the face is not a “branch” circuit, because it is not connected to the PED system, and is not incorporated into the PED blast circuit. Thus, I find that this circuit it is not within the purview Section 6403(a), supra.

<sup>8</sup>Each citation, as amended at the hearing, alleges as follows: “The key and/or other control for the electrical firing device (PED)... was accessible to people other than the blaster.”

## 1. The “blaster” having control over the PED computer disc

Gust and Lobb, testified that on two occasions they observed the operation of the PED system from the room on the surface where its computer was located. A door separated this room from the room where persons visiting the mine sign-in. The top portion of the door was usually open and the bottom was usually closed. The disc that contained the various commands to be sent from the computer to the PED units underground was kept in a locked cabinet. However, the key to open the cabinet was located either on a hook on a nearby wall, or in an adjacent desk drawer. Gust concluded that the disc was accessible to persons other than the blaster.

Stillwater argues that since the computer disc sends commands to the PED units to “arm”, and “blast”, which result in the transmission of a signal to an electrical detonator to detonate, the disc constitutes the control for the system’s electrical firing device. In this connection, Stillwater relies on the testimony of Thomas T. Eaton,<sup>9</sup> that the Shift General Foreman who was Stillwater’s designated blaster, had sole possession of the only copy of the computer disc that controlled detonation of a blast. On the other hand, Gust and Lobb testified that they observed that although the disc was locked in a cabinet, the key to the cabinet was either on a wall or in a desk.

I do not place much weight on Eaton’s testimony inasmuch as the record does not establish that he had any personal knowledge of the PED operating procedures, and whether the blaster had possession of the disc. I take cognizance of the fact that Stillwater did not have anyone testify to contradict the testimony of Gust and Lobb as to what they observed, nor was their testimony impeached. Also, significantly, Stillwater did not proffer the testimony of any blaster who was responsible for inserting the disc into the computer. Nor did Stillwater impeach or contradict the testimony of the inspectors that on one occasion, in their presence, a person who was operating the computer asked a woman in the office to give him the disc to be inserted into the computer.

Section 6405(c),supra, provides that “[o]nly the blaster shall have the key or control to an electrical firing devices.” Webster’s Third New International Dictionary, supra, defines “have” as: **1a:** “to hold in possession as property... **b:** to hold, keep, or retain esp. in one’s use, **syn...** POSSESS...: HAVE is a very general term indicating any condition or action of control, retaining, keeping... .” Webster’s, supra, defines “control” as pertinent as “...4(a)(1) to exercise restraining or directing influence over...”

The computer disc containing the signals to the PED unit was kept in a locked cabinet in the office of the individual responsible for operating the computer. However, the weight of evidence establishes that persons other than the blaster could have obtained the key to open the locked cabinet containing the computer disc. Accordingly, the person responsible for sending the

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<sup>9</sup>At the date of the trial he was the General Mine Foreman. In October 2002, he was a Vision Mission and Value Supervisor.

computer generated blasting signals to the PED units did not have control over the use of the disc. Thus, he did not “have” the disc within the common meaning of that term.

## **2. The key to the PED receiving unit as a control to an electrical firing device**

According to Gust and Lobb, a key or a portion of a key had been left in the PED receiving unit at each of the five units that they examined. Gust concluded that the underground blaster did not have the key to an electrical firing device in violation of Section 6405(c),supra.

Stillwater argues that the PED receiving unit “key” is not a control device for the system because that function is performed by commands in the disc. Also, Stillwater makes reference to the testimony of Mike Foletti that the PED unit located underground needs to be turned on by inserting a key into a switch “... at which time two things occur, the PED unit checks that its battery... is charged and... checks to see that the unit is in reception of the signal provided by the radio communications system.” (Tr. 14).<sup>10</sup> It is thus argued by Stillwater that the key is not capable of initiating or performing any other function and thus cannot be the control for the PED device.

In subsequent testimony as part of Stillwater’s case, Folletti and Eaton elaborated on the function of the key for the switch in the PED receiving unit. According to their testimony, which was not impeached or contradicted, the PED receiving unit cannot receive the computer generated “arm” and “blast” signals unless the PED unit is turned on by the key. Once the key is turned on, and the PED unit receives a blast signal, power is then transmitted to all trunk lines plugged into the left side of the PED distribution panel, which in turn transmits power to an electric detonator causing detonation.

I find that inasmuch as the PED unit receives and transmits electrical signals, it is clearly an electrical device. Further, since its function is to receive “arm” and “blast” signals, and transmit them to detonators at various blasting areas, I find the unit is a firing device within the scope of Section 6405(c), supra. Moreover, because the unit cannot operate to receive and in effect transmit blast signals unless it has been turned on by its key, I find that the latter is a “key” to an electrical firing device. Accordingly, I find that the PED receiving unit keys are within the purview of Section 6405(c), supra.

The testimony of Lobb and Gust that a key or a portion of the a key was in place in each PED receiving unit at locations 32w 3900, 38w 7000, 40w 4100, 41w 6700 and 29w FWL, was not contracted or impeached. Accordingly, since these keys were in the PED unit, (an electrical firing device) I find that Stillwater was not in compliance with Section 6405(c), supra, which requires that only the blaster “shall have the key”. I thus find that Stillwater did violate Section 56.6405(c), supra.

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<sup>10</sup>The parties agreed to be bound by this testimony.

### 3. Penalty

As set forth above, IV(A), infra, persons other than the blaster could have access to the key to the cabinet containing the computer disc used to transmit “arm” and “blast” signals to the PED units. Accordingly, persons other than the blaster could have sent a signal to a PED unit that was turned on, thus initiating a blast.

I find that the level of gravity was moderate. Considering the remaining factors set forth in 110 (i) of the Act, I find that a penalty of \$55.00 is appropriate for each of these violations.

### V. Citation No. 6269379

At approximately 2:00 p.m. on October 6, 2002 a miner intended to blast stope at 35 e 6700. He went to the PED distribution panel, removed a blast line, and plugged it into a hand-held blasting device. According to MSHA Inspector, Gust, the device wasn’t secured, wasn’t locked, and “... was left in the open for anyone to use and anyone to blast on shift.” (Tr. 265). Gust issued a violation which alleged the following as a violation of Section 6405(c), supra: “persons other than the blaster had the control over the electrical firing device causing an unplanned explosion of explosives in the 35 e 6400 stope.”

There is not any indication in the record that Gust was present when this incident occurred. Also, the record does not establish that Gust had any personal knowledge to support his testimony that the blasting device wasn’t secured or locked, and was left in the open. Nor does the record indicate the foundation or basis for this testimony. As such, it cannot be found to be more than speculative, and clearly not of sufficient probative value to establish that someone other than the blaster had control over this device. I thus find that the Secretary has not established a violation of Section 6405(c), supra.

### VI. Citation Nos. 6269354 and 6269359

#### A. The Citations

According to Gust, when he inspected the area he described as 29w FWL, there were not any blaster’s galvanometers at either of the two blast headings. Also, there were not any galvanometers at the 32w 3900 blast headings. Gust indicated that miners told him that “[t]hey used the PED to test it after the circuit is altogether.” (sic.) (Tr. 244)

According to Lobb, if a galvanometric test is not performed, the result could be a misfire, causing injuries. Lobb indicated that a galvanometer checks for continuity and increased resistance “... that could indicate that they have more detonators wired in the circuit than they thought they did, or it could indicate that the circuit isn’t wired in a series the way they thought it was.” (Tr. 110)

Gust issued two separate citations, one for 29w FWL and another for 32w 3900 alleging violations of 30 CFR § 57.6407(b)(2) in that “[p]roper testing with a galvanometer of the “blasting lines” was not “conducted prior to the connection of the electric detonator... .”

30 CFR § 57.6407 provides as follows: “A blasting galvanometer or other instrument designed for testing blasting circuits in underground operations shall be used to test the following: “\*\*\* (b) In underground operations-... (2) Continuity of blasting lines prior to the connection of electric detonators.”

The Secretary did not adduce the testimony of any miners regarding actions taken by them, if any, to test for continuity of blasting lines prior to the connection of detonators. Instead, the Secretary relies on the testimony of Lobb and Gust. The only testimony of Lobb regarding his observations was that he found “...two blasters’ galvanometers in the whole mine, neither of which had been used recently.” (Tr. 104). Also, he indicated that he talked to two blasters who were “...wiring in rounds... hooking up and explosion. ... And neither one was using a galvanometer to do the required testing.” (Tr. 104-105). According to Gust, at the 29w FWL site, “... [t]hey were drilling their rounds and I came back later and they had just loaded the rounds.” (Tr. 244). Gust agreed, in response to a leading question, that this operation includes hook-up to the electric blasting system. Gust was asked what miners told him about the use of the galvanometer and he testified as follows: “They used the PED to test it after the circuit is altogether.”(sic) (Tr. 244). He was asked the basis for his knowledge as to what the miners did relating to galvanometer testing and he testified that a miner showed him the process of tying a round. His testimony is as follows:

... [F]irst, what he showed me was the trunk line. In this case -- in this case where he was at was shunted. He unshunted the trunk line – \*\*\*

So he would unshunt the trunk line, he would strip the one-use blast line, touch the wires together, which would be a spontaneous shunt, and then he ties each one leg wires to each one of the trunk leads, he spools out the one-use blast line to the loaded round area, the blast area, the loaded round area. At that time he would cut the one-use blast line, strip it, shunt that -- \*\*\*

Shunt the one-use blast line. He would unravel his one electric cap, because the wires are taped or spooled together, so he untapes them and just straightens the wire out on the cap. He takes -- there's a shunt on them. Take the shunt off, and he would touch them together -- this is a very experienced hand, good hand --- crosses the wires. Then he would, with the cap away from the loaded round, he would connect it to the trunk line, connect the cap -- excuse me-- to the one-use line. And with the point away from the face, in case there was any stray current, the cap would go off, which is still a hazard, but at least it's not tied to the full round of explosives. Okay. And then once it's -- now we have our circuit all the way back to the distribution panel. Then he's got this hand tying to the det cord, which ties in the whole round, and that's how he ties it in. No galvanometer was used at any point there. (Tr. 247-249)

I find that his testimony is unclear as to whether he was testifying as to what he observed the miner doing, or as to what the miner told him regarding as to what he would usually do.

Eaton testified regarding Stillwater's PED blasting procedures. According to his testimony, Stillwater's operational procedures require that the ends of the blast lines at the blasting area should be twisted together prior to loading the explosives that will be detonated. This procedure shunts the ends of the blast lines.<sup>11</sup> The next step in the procedure is for a miner to walk out by the drilled out face to the PED reception unit, and connect it to the PED distribution panel. Next, the blast line for the area to be blasted is moved from the shunt (right) side of the panel, and is plugged into the firing receptacle (left side of the panel). Once the blast line is plugged into the firing receptacle, the built-in ohmmeter on the PED unit displays a specific resistance reading that indicates whether the circuit is open or closed, i.e., whether there is a continuous circuit in the blast line. Eaton's testimony regarding Stillwater's procedures was not impeached, nor was it explicitly contradicted by Lobb or Gust.

It is the Secretary's interpretation that the requirement in Section 57.6407(b)(2), supra, of continuity testing "prior to the connection of electric detonators" requires such testing be performed immediately before the electric detonator is connected to the blast line. The Secretary argues that this interpretation must be deferred to as it "... is consistent with the regulatory text and it advances the Mine Act's goal of protecting the safety of mines." (Secretary's post-hearing brief, at 27). The Secretary also relies on testimony by Lobb, that it took him 15 to 20 minutes to walk from the loaded round at the blast site to the PED receiving unit, and another 15 to 20 minutes to return. He indicated that "A lot can happen in a mine" during the twenty minutes it takes to then return to the blast area after the miner test for continuity using the PED ohmmeter. (Tr. 196)

## **B. Discussion**

### **1. Continuity testing "prior to" the connection of detonators**

Section 6407(b)(2), supra, provides that testing for continuity of blasting lines be made "... prior to the connection of electric detonators." The word "prior" is defined in Webster, supra, as follows:

1A: earlier in time or order: preceding temporally, causally... ." The word "preceding" is defined in Webster's, supra, as pertinent as follows "1: that precedes: going before ... ." "Precede" is defined in Webster's, supra, as pertinent, as follows: "3: to... come before in arrangement or sequence. \*\*\* 4: to go before in order of time: ... occur before with relation to something.

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<sup>11</sup>The parties stipulated that when a shunt is in place, "... it reduces the chance that unintended electric current can flow through the remaining circuit", (Stipulation, page 7).

The above definitions establish that the common meaning of the word prior refers to a sequence or order of time. I thus find, based on the common meaning of the word “prior” as used in Section 6407(b)(2), supra, that the act of testing of continuity of blasting lines must be performed before the connection of electric detonators. There is not any requirement in Section 6407(b)(2), supra, that the act of testing be performed immediately before the connection of electric detonators. To add such a requirement would, in effect, amend the regulations, and go beyond the scope of the common meaning of the term “prior to”. Thus, because the standard at issue is unambiguous, the Secretary’s interpretation is rejected as not reasonable.

## **2. Blasting galvanometer or other instrument designed for testing blasting circuits**

Although a blasting galvanometer was not used by Stillwater to test for continuity of blasting lines, the record fails to establish that such testing was not done by the use of the PED receiving units’ built-in ohmmeter as required by Stillwater’s procedures.

A Dictionary of Mining, Mineral and Related Terms, (1968 edition (“DMMRT”)) defines an ohmmeter as “a type of galvanometer which directly indicates the number of ohms of the resistance being measured.” (Emphasis added). An ohmmeter-galvanometer is defined in the DMMRT as “a special instrument for measuring the resistance of an electric blasting circuit.”

The parties agreed to be bound by Foletti’s testimony, that the PED unit’s ohmmeter contains an LCD display, which indicates whether the blast circuit is open or closed. Hence, it services the function of testing whether there is a continuous circuit in the blast line which is part of that circuit. Thus, since the ohmmeter in the PED unit tests for continuity in the blast lines, I find it is within the purview of Section 6407(b)(2), supra, as it is either considered a “blasting galvanometer or other instrument designed for testing blasting circuits” and is “used to test ... continuity of blasting lines”. The Secretary has not adduced any evidence that, when cited Stillwater, was not following its procedures to use the ohmmeter on the PED unit to test for circuit continuity prior to the connection of electric detonators. Hence, I find that the Secretary has not established that there was not such testing for continuity of blasting lines, prior to the connection of electric detonators. Therefore, I find that the Secretary has failed to establish a violation of Section 6407, supra.

## **VII. Citations Nos. 6269381 and 6269382**

On October 6, 2002 the 35 e 6700 stope was to be blasted during the night shift, and the 35 e 6400 stope was to be blasted at the end of the shift at approximately 5:00 a.m. Both of the stopes had already been drilled, loaded and barricaded by 2:10 a.m. As part of the blasting sequence, a miner intended to remove a blast line from a PED distribution and attach it to a hand-held electric firing device . By mistake, he unplugged the blast line leading to stope 35 e 6400, rather than the one leading to stope 35 e 6700. As a result, when he attached this line to the hand-held detonator and activated it, stope 35 e 6400 detonated. According to Brent LaMoure,

Chief Engineer at Stillwater, the miner contacted his supervisor, and the latter began an investigation. This testimony was not impeached or contradicted.

On October 27, 2002, subsequent to an investigation, Gust issued two citations. Citation No. 6269381 alleges a violation of 30 CFR § 50.10 which, as pertinent states, as follows: “[i]f an accident occurs, an operator shall immediately contact the MSHA district office having jurisdiction over its mine .... .” (emphasis added) Section 50.10, supra, goes on to provide that if the operator cannot contact the district office, it shall “immediately” contact MSHA headquarters in Arlington, Virginia by telephone.

Citation No. 6269382 alleges a violation of 30 CFR § 50.20 (a) which, provides, in essence, that the principal officer in charge of health and safety or supervisor of the mine area at a mine in which “an accident” occurs shall mail an accident report, Form 7000-1, to MSHA within ten working days after the accident occurred.

According to Gust, when he issued these citations, the accident report had not been filed, and Stillwater had not immediately notified MSHA after the detonation at stope 35 e 6400 on October 6, 2002.

#### **A. The detonation at stope 35 e 6400 was an “accident”**

The recording requirements imposed by Sections 50.10 and 50.20 (a), supra, are required if “an accident” occurs. Section 50.2(h)(7) defines the word “accident” when used in part 50 of the Code of Federal Regulations, relating to notification and accident reports, as follows: “\*\*\* (7) an unplanned ignition or explosion of a blasting agent or an explosive [.]”

Thus, the initial inquiry herein is whether the explosion at stope 35 e 6400 was an accident, which in turn depends upon whether it was an “unplanned” explosion. The regulations do not define the word unplanned. Accordingly, reliance is placed on the common meaning of that word. Webster’s supra, as pertinent, defines the word “unplanned” as 1: not planned, ... 2: unexpected.” Planned is defined in Webster’s supra, as pertinent, as 1: INTENDED, PROJECTED... 2a: designed or carried out according to a plan: ORDERLY.” The word “unexpected”, is defined in Webster’s, supra, as not expected: UNLOOKED-FOR UNFORESEEN SURPRISING”.

Applying the above common meanings it is clear that an event is unplanned if its occurrence is not expected, or intended according to a plan. The record establishes that detonation at 35 e 6400 was planned for the end of the shift, at approximately 5:00 a.m. Hence, I find that its detonation by mistake at 2:10 a.m., was clearly unexpected and unintended, at that time. Thus, the detonation was an unplanned ignition as that term is commonly understood. Accordingly, the ignition by mistake at 35 e 6400 is within the scope of the term “accident”. Hence, the reporting requirements of Sections 50.10, supra, and 50.20(a), supra, are applicable.

## **1. Citation No. 6269381**

As set forth above, VII (A), infra, the detonation at 35 e 6400 at 2:10 a.m., on October 6, by mistake was an accident. The detonation was not immediately reported by Stillwater to MSHA as required by Section 50.10, supra. Accordingly, I find that Stillwater violated Section 50.10 supra.

The Secretary argues that the violation herein was the result of Stillwaters high negligence. In this connection, the Secretary alleges that the requirements of Part 50 were explained to Stillwater on many occasions, citing the testimony of Gust as follows:

Q. However, you did mark it as high negligence. Could you explain why.

A. Because this was a violation of Part 50, and the mine has had Part 50 audits in the past and been through the Part 50 audit process. If there was any doubt in the operator's mind of knowing Part 50, those questions are answered during these audits. And off of recollection there was a minimal of two Part 50 audits prior to this miscellaneous inspection, and this information of Part 50 has been explained to the company several times.

Q. Okay.

ADMINISTRATIVE LAW JUDGE: Were you involved in any of those explanations?

THE WITNESS: I was not in the Part 50 audits, no, but I have privy to that information in our files at the district office and at the field office.

ADMINISTRATIVE LAW JUDGE: You mentioned two things. The company had an audit two times, and you've indicated that you were not involved in that audit. Were you involved in any of the explanations to the company?

THE WITNESS: The explanations, no, just the review --

ADMINISTRATIVE LAW JUDGE: Okay. You answered the question. Sir. The explanation to the company, explanations prior to the time you issued the what at that time was an audit?

THE WITNESS: To -- what was that?

ADMINISTRATIVE LAW JUDGE: I asked you whether you were involved in any explanations to the company about their obligations under the reporting obligations, and you did not. I want to clarify, that my question went to the period prior to the time that you served the company with the petition, Exhibit P-14, 62.69381.

THE WITNESS: Okay. Prior to, what I explained is on the Part 50 audit.

ADMINISTRATIVE LAW JUDGE: That's on the same day.

THE WITNESS: What's that?

ADMINISTRATIVE LAW JUDGE: No, did you explain to the company any of their obligations --

THE WITNESS: On the reporting of this incident?

ADMINISTRATIVE LAW JUDGE: Prior to the time you issued the citation, did you --

THE WITNESS: Prior to. In all the -- and I don't know the number of regular inspections that I inspected Stillwater Mine. I do review their Part 50. It's not actually an audit, but I do review the Part 50 and I do explain everything that I'm reviewing when I go through that Part 50, and that would be regular inspections prior to this incident. But the Part 50 audits, no.

ADMINISTRATIVE LAW JUDGE: No, no, how many such inspections did you have prior to October 27, 2002, when you explained to the company Part 50?

THE WITNESS: I would have to take approximate guess on that because it's been a considerable amount of time now. Probably four regular inspections.

\*\*\*Q. (By Ms. Larkin:) Let me ask you based on your reviews at the end of each inspection, did you ever review 50.2(h)(7) with representatives of the Stillwater Mine?

A. (h)(7)? Not that I recall at this time. (Tr. 237-240, 328).

I find that Gust's testimony at best confusing and not consistent. I find therefore, that it does not establish that the specific reporting requirements of Section 50.10 and 50.20(a) were explained to Stillwater on many occasions.

The Secretary also alleges that Stillwater repeatedly received citations for the same reporting requirements at issue. In this connection, the assessed violation history report for the period from September 4, 1996 through December 31, 1999 indicates that Stillwater was cited for six violations of Section 50.20(a), supra, all relating to an incident that occurred on the same day.<sup>12</sup> Only one citation was issued for allegedly violating Section 57.10, supra.

On the other hand, Stillwater's management testified in essence, as to a good faith belief that the explosion herein at issue did not fall within the purview of Section 50.10, supra, as it was not an accident, i.e. an unplanned explosion, inasmuch as the company intended to detonate a round at that stope later on at the end of the shift.

Within the context of the above evidence, I find that Stillwater's negligence was moderate. Taking into account the history of violations as set forth on exhibit P-1, the good faith abatement of the citation at issue, as well as the lack of any evidence of other factors set forth in Section 110 (i) of the Act that would either cause a penalty to be mitigated or increased, I find that a penalty of \$55.00 is appropriate for this violation.

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<sup>12</sup> March 11, 2002.

## **2. Citation No. 6269382**

For the reasons set forth above, VII(A), infra, I find that the detonation at 35 e 6400 on October 6, was an accident. On October 27, 2003, when Stillwater was cited, it had not filed an accident report to MSHA as required by Section 50.20(a), supra. Accordingly, I find that Stillwater did violate Section 50.20(a), supra.

The analysis of the penalty factors for this violation is essentially the same as that set forth with regard to Citation No. 6269381 and VII(A)(1), infra, and is incorporated herein. For the reasons set forth above (id.) I find that a penalty of **\$55.00** is appropriate for this violation.

### **ORDER**

It is **ORDERED** that Respondent pay a total civil penalty of **\$14,550.00** within 30 days of this decision. It is further **ORDERED** that the following citations and orders are **DISMISSED: 6269353, 6269358, 6269362, 6269366, 6269370, 6269380, 6269379, 6269354 and 6269359.**

Avram Weisberger  
Administrative Law Judge  
202-434-9964

Distribution List: (Certified Mail)

Edward Falkowski, Esq., Office of the Solicitor, U.S. Department of Labor, P.O. Box 46550,  
Denver, CO 80201-6550

Katherine Lawkin, Esq., Jackson & Kelly, PLLC, 1099 18<sup>th</sup> Street, Suite 2150, Denver, CO  
80202

/lp