

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION  
COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Coal Mine

Fatal Powered-Haulage Accident  
November 30, 2012

Pocahontas Mine  
White Buck Coal Company  
Rupert, Greenbrier County, West Virginia  
I.D. No. 46-09154

Accident Investigators

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## OVERVIEW

On Friday, November 30, 2012, at approximately 1:20 a.m., a 27-year-old electrician, Steven A. O'Dell (victim), was fatally injured on the developing No. 2 Section when he was caught between a maintenance scoop and the continuous mining machine. O'Dell was positioned beside the cutting head of the continuous mining machine cleaning bolt holes in preparation for the replacement of the offside cutter drum when the maintenance scoop pinned him against the machine. When the accident occurred, the scoop was traveling battery end first, through the second connecting crosscut outby the face between the No. 6 and 7 entries.

The accident occurred because the sight range and distance of the scoop operator was limited due to the terrain of the mine floor, the type and condition of ventilation controls, and the extraneous material placed on top of the rear portion of the maintenance scoop. The mine operator was not using barriers to prevent mobile equipment from operating near miners conducting maintenance work. The mine operator was not requiring that all miners use personal protective equipment, such as wearable strobe light to increase their visibility.

## GENERAL INFORMATION

The Pocahontas Mine is an underground coal mine located near Rupert in Greenbrier County, West Virginia. The mine is operated by White Buck Coal Company, a subsidiary of Alpha Natural Resources, Inc. The mine employs 91 underground coal miners and 6 surface employees.

At the time of the accident, the mine had two active sections, each with two continuous mining machines (two separate MMUs), operating with separate splits of ventilating air. Coal is transported from the working faces by shuttle cars, and then transported to the surface via a conveyor belt system. The mine produces bituminous coal from the Pocahontas No. 6 seam using the room and pillar method of mining. The mine is accessed by 5 drift openings and the mining height is approximately 5 feet and 6 inches. The mine produces approximately 5,000 raw tons per day during two production shifts, day and evening, with a midnight shift for maintenance.

The principal officers for the mine at the time of the accident were:

Ray Hall .....	Superintendent
Bill Kell .....	Mine Foreman
Randy Taylor .....	Safety Director

Prior to the accident, the Mine Safety and Health Administration (MSHA) had completed the last regular safety and health inspection (E01) on September 27, 2012. The Non-Fatal Days (NFDL) injury incidence rate for the mine in 2011 was 9.77, compared to the National NFDL rate of 3.36.

## DESCRIPTION OF THE ACCIDENT

The pre-shift examination for the midnight maintenance shift of the No. 2 Section was conducted during the evening shift on Thursday, November 29, 2012. The examination was conducted by John Amick, Preshift Examiner, and the report was phoned outside to Michael Casey, Section Foreman for the midnight shift. The report indicates that the examination took place between 9:00 p.m. and 9:50 p.m.

Prior to going underground, a brief safety meeting was conducted with the midnight shift crew. Teddy Alderman, Evening Shift Mine Foreman, told the crew about an incident that occurred on the evening shift, while he was helping the section electrician troubleshoot the cable on the roof bolting machine. Alderman was standing in the No. 5 entry when a shuttle car approached and contacted his arm and leg. Alderman was located in the shuttle car operator's

blind spot when contacted, but was able to stop the shuttle car by yelling at the operator. Alderman was not injured, but he wanted to discuss with the crew the incident and dangers involved when working around mobile equipment.

At approximately 10:35 p.m., the crew entered the mine and traveled to the No. 2 Section. Michael Casey, Section Foreman, discussed portions of the mine's approved Roof Control Plan with the crew when they arrived on the section. Casey went to conduct an examination of the section face areas. Some miners from the previous shift (evening shift) crew remained on the section to install cutter drum bit inserts in the left side continuous mining machine and to grade bottom in the No. 7 entry. While Casey was completing his examination, the midnight shift maintenance crew went to work on the section.

Harold Fain, Maintenance Chief for No. 2 Section, and Shawn Hamrick, Electrician, went to the No. 1 shuttle car and began scheduled maintenance work on the machine. Fain and Hamrick remained at this location until they were notified of the accident. Bernard King, Utility Man, trammed a battery scoop outby the section in the No. 3 entry, to obtain roof bolting supplies. King brought the supplies to the No. 4 entry and Casey assisted him in loading the supplies onto the roof bolting machine. Chris May and Greg Baker, Utility Men, were located three crosscuts outby the section power center, loading a rock dusting machine onto the section scoop. May and Baker remained in this location until they were notified of the fatal accident. O'Dell and Aaron Childers, Apprentice Electrician, loaded their tools onto the maintenance scoop, and traveled outby the section to get oil. Childers operated the maintenance scoop as O'Dell traveled by foot. The oil was needed for routine maintenance work on the left side continuous mining machine.

O'Dell and Childers proceeded to the left side continuous mining machine in the No. 2 entry and began the maintenance work. They serviced the machine with hydraulic oil, heavy oil, and checked pressure on the water sprays. The majority of the work was completed and at approximately 12:10 a.m. O'Dell went to the right-side continuous mining machine to begin cleaning bolt holes in the left side of the cutter drum. The machine was located in the No. 7 entry. Childers remained at the left side continuous mining machine performing maintenance work.

At approximately 1:00 a.m., Frank McMillion, Midnight Shift Foreman, and Robbie Amick, Preshift Examiner, arrived on the No. 2 Section with a hydraulic jack for a shuttle car and some parts for Fain and Hamrick. They went to the face area and met Casey and King who were still loading supplies on the roof bolting machine in the No. 4 entry.

O'Dell began to clean the bolt holes on the continuous mining machine cutting drum, in preparation for the replacement of the offside cutter drum. In order to remove compacted material, O'Dell needed a drill bit and returned to the No. 2 entry where Childers was located at the maintenance scoop. Childers had completed his maintenance work and O'Dell instructed him to follow with the scoop to the right side continuous mining machine. The maintenance scoop was needed to service the continuous mining machine with hydraulic oil, heavy gear oil, and perform some welding.

At approximately 1:19 a.m., Childers was operating the maintenance scoop and following O'Dell, who was walking in the No.6 entry. Childers had trouble maneuvering the maintenance scoop through a low area in the No. 6 entry and saw O'Dell walking through the crosscut from the No. 6 to the No. 7 entry.

Childers made it through the low area and trammed in reverse, leading with the battery end of the machine, through the crosscut between the No. 6 to 7 entries. Childers operated the scoop through a set of ventilation curtains (fly pads) installed in the crosscut, toward the continuous mining machine in the No. 7 entry.

As he traveled through the crosscut, Childers noticed the illumination from the continuous mining machine's lights, but was unable to see the machine. Childers stated that he could not see O'Dell, so he trammed slowly, waiting for O'Dell to stop him. O'Dell did not instruct Childers to stop and the scoop then hit the continuous mining machine. Childers reversed the direction of the scoop, away from the continuous mining machine cutter head, approximately 3 feet. Childers exited the scoop, saw O'Dell in a kneeling position and realized that he had hit him. O'Dell told Childers to call for an ambulance. Childers ran to the section power center and notified Fain and Hamrick of the accident.

Fain immediately traveled to the No. 7 entry where O'Dell was located. Hamrick reported the accident by phone to Henry Utberg, Surface Dispatcher, at approximately 1:25 a.m. Fain arrived at the accident scene and found O'Dell lying on the mine floor. Fain spoke to O'Dell, but he did not reply back. Fain placed O'Dell's head in his lap and begin to yell for help. After completing the call to the surface, Hamrick used his radio to call McMillion and Amick, Emergency Medical Technicians (EMT), telling them to go to the accident site.

Casey, McMillion, King, and Amick arrived at the scene. Amick asked that the first aid boxes be brought and the maintenance scoop moved so that another scoop and first aid supplies could be brought to the accident scene. Casey traveled with McMillion to the section power center where he retrieved a backboard and blankets. McMillion notified Baker and May of the accident, and instructed May to prepare the mantrip for transportation. Baker and McMillion

then returned to the accident scene. Casey and Amick placed O'Dell on the backboard and prepared him for transport. The maintenance scoop was moved out of the way, and King brought the other scoop to transport O'Dell. Baker returned to the power center, met May and they carried first-aid boxes to the scene. O'Dell had been placed on the backboard and was being administered oxygen. O'Dell was then placed in the bucket of the scoop and transported to the end of the track, where he was loaded onto a battery-powered mantrip.

At approximately 1:53 a.m., McMillion called on the mine phone for track clearance and operated the mantrip to the mine portal. The mantrip arrived on the surface at 2:15 a.m., and O'Dell was transferred to Quinwood Emergency Ambulance Service. Cardio-pulmonary resuscitation (CPR) was initiated at this time. O'Dell was transported by ambulance to the Greenbrier Valley Medical Center in Ronceverte, West Virginia, where he was pronounced dead at 2:29 a.m.

### **INVESTIGATION OF THE ACCIDENT**

Dustin Griffith, Outby Electrician at the Pocahontas Mine, notified the Mine Safety and Health Administration (MSHA) Call Center of the accident on November 30, 2012, at 1:48 a.m. MSHA District 4 personnel were notified by the Call Center at 2:03 a.m. MSHA issued a non-contributing citation to the mine operator for a violation of 30 CFR § 50.10, because the accident was not reported at once, without delay, and within 15 minutes.

The issuance of a 103(j) order was delayed because MSHA was unable to reach the mine office via telephone. The mine operator failed to answer the telephone despite numerous repeated attempts to contact the mine. After 39 minutes of attempted calls, a verbal 103(j) order was finally issued by phone at 2:42 a.m. to Frank McMillion, Midnight Shift Foreman.

Coal Mine Safety and Health Inspector, Larry T. Metz, was dispatched to the mine. Upon arrival at the mine site, Metz met with Ray Hall, Mine Superintendent, reduced the verbal 103(j) order to writing, and modified the 103(j) order to a 103(k) order to ensure the safety of all persons during the accident investigation and to preserve all evidence at the accident scene.

The accident investigation was conducted in cooperation with the West Virginia Office of Miners' Health, Safety and Training (WVOMHS&T), the mine operator, and employees of the mine. Persons with knowledge of the accident and those that participated in the investigation are listed in Appendices A and B of this report.

Representatives of MSHA, the WVOMHST, and company officials traveled underground to the accident scene. Photographs, sketches, and relevant

measurements were taken at the accident site and a survey was conducted of the accident scene. Preliminary written statements from persons having knowledge of the facts and circumstances concerning the accident were obtained. Formal interviews with persons who had knowledge of the accident were conducted on December 4, 2012, at the Summersville Armory, and again on December 11, 2012, at the White Buck Coal Company office in Leivasy, West Virginia. Persons who were interviewed are listed in Appendix B of this report.

## DISCUSSION

### **Accident Scene and Operator Visibility**

The No. 2 Section (005-0 and 006-0 Mechanized Mining Units) used a split-air ventilation system with nine entries being mined on advance. Intake air was supplied to the section via the Nos. 6 and 7 entries. Entries 1, 8, and 9 were used for return airways. The section's conveyor belt was located in the No. 5 entry. The typical mining height averaged 5 feet 6 inches across the section.

The accident occurred in the No. 7 entry, at the second crosscut outby the face of the No. 7 entry, at survey station No. 3169. The mine floor in the No. 7 entry inby the location of the continuous mining machine had been graded by the evening shift crew, which caused a ledge, or drop-off, in the mine floor. Measurements taken by survey indicate that the elevation of the mine's floor in the No. 7 entry was approximately 9 inches lower than the floor elevation in the connecting crosscut between the No. 6 and 7 entries.

A set of translucent and transparent ventilation curtains (fly pads) were installed 23 feet into the crosscut from the inby rib corner of the No. 7 entry, extending across the crosscut, to 24 ½ feet from the outby corner of the No.7 entry, in the second crosscut outby the face area. The condition of the fly pads created visibility problems for the scoop operator, who could not see through the curtains clearly. The ventilation controls were installed in two overlapping layers comprised of white-colored translucent material and another layer comprised of transparent material. The fly pads were muddy, scratched from repeated use, and not maintained in a manner to allow for unobstructed visibility through the curtain.

The maintenance scoop involved in the accident had been moved from its position at the time of the accident. It was moved to provide room for the EMT's to work and in order to make the site accessible for another scoop that was used to transport O'Dell to the waiting mantrip. After O'Dell was en route to the surface, Casey instructed Baker to put the maintenance scoop back in its original position in the No. 6 to 7 crosscut, battery end first. Baker moved the maintenance scoop from the No. 6 entry into the crosscut. The movement of the scoop prior to the accident investigation made it difficult to determine the exact position of the machine at the time of the accident.



A reenactment of the accident was conducted on December 1, 2012, and on December 5, 2012, with representatives of MSHA, WVOMHST, and the mine operator, in order to determine the relative position of the machines and any contributing factors. The reenactment determined the geological conditions of the area also contributed to limiting the scoop operator's visibility. The mine floor in the No. 7 entry, which had been graded by the evening shift, was found to be approximately 9 inches lower than the connecting crosscut between the No. 6 and 7 entries. Additionally, the crosscut was inclined uphill toward the No. 7 entry, further limiting the scope of vision of the scoop operator.

Extraneous materials were also stacked on top of the rear portion of the maintenance scoop, further limiting the scoop operator's visibility. Metal boxes were also affixed on the rear portion of the machine. These boxes were 6 inches high and contained various spare parts, a welding machine, a bonder, and additional tools.

The terrain of the accident site, the extraneous material stacked on top of the scoop, the condition of the ventilation curtains, and location of the victim (near the mine floor) limited the scoop operator's visibility. Visibility was measured and the vertical range of sight from the operator's deck was between 20 ½ inches to 9 inches from the mine roof, depending on the location of the scoop in the crosscut. The victim was in a kneeling or crouching position and out of the sight line of the scoop operator. During the accident investigation, members of mine management were observed wearing battery-powered strobe lights approved for use in the mining environment. Mine management was questioned concerning the use of this type of personal protective equipment. Management stated that strobes were available for all miners, but mine management had not required that all miners use the strobes.

A drawing showing the relative location and position of the two machines involved in the accident, as determined from the reenactment, is included in Appendix D of this report.

### **Training and Experience**

O'Dell had approximately 3 years of total mining experience. A review of the training records revealed that he had received a West Virginia Underground Miner's Certificate on November 16, 2009. He was hired by the White Buck Coal Company, Pocahontas Mine on March 21, 2011. O'Dell received the following training at the Pocahontas Mine: experienced miner training on March 30, 2011; annual refresher training on April 20, 2012; and SCSR expectations training on May 18, 2012. This training was provided by Bill Kell, Mine Foreman.

Additionally, O'Dell received the following task training at the Pocahontas Mine: radio, tracking, and mine map training on March 21, 2011, from Jay Sigley; scoop,

forklift, mantrip, motor, utility knife, stoppings, moving cables, and shovel on March 22, 2011, from Brett Hamrick; task of setting timbers on March 28, 2011, from Brett Hamrick; operation of the pod (rock) duster and outside loader on April 5, 2011, from Brett Hamrick; operation of a Roof Ranger Roof Bolter, July 11, 2011; operation of mantrips November 14, 2011, from Frank McMillion; and operation of three (3) Brookville motors on November 16, 2011, from Willie Murphy.

O'Dell's underground and surface electrical certifications were maintained up-to-date. The review of O'Dell's training records did not indicate any instance where required training was not provided. However, nine 104(a) citations that did not contribute to the accident were issued for identified deficiencies, most of which were related to the way the training forms were filled out. One citation was issued for failing to provide experienced miner training prior to beginning work duties. One citation was issued for failing to provide annual refresher training within twelve months and one citation was issued for using a certified instructor who provided annual refresher training although he was not listed in the mine training plan. Six citations were issued for missing dates, signatures or other information.

A review was also conducted of the training records for Childers. The records show that Childers received experienced miner training on June 8, 2011, and June 9, 2011. He received his annual refresher training on April 20, 2012. Childers, an apprentice electrician, received task training for the maintenance scoop he was operating at the time of the fatal accident. Childers' training records showed no instances where the required training was not provided. However, nine 104(a) citations that did not contribute to the accident were issued for deficiencies identified. The majority of the issues were related to the manner the training forms were completed. One citation was issued for using a certified instructor who provided annual refresher training although he was not listed in the mine training plan. Eight citations were issued for missing dates, signatures or other key information.

### **Equipment**

The maintenance scoop involved in the accident was a Fairchild International Incorporated, Model 35C, Serial Number T339-492-1025. The maintenance scoop was altered significantly when used previously at the Jerry Fork Eagle Mine (Massey Energy Company) and had the following modifications/additions: 1 - Heavy Duty 4 ton Jib Crane, 1 - air compressor with a 60 gallon air tank, 1 - removable 100 gallon hydraulic oil tank, 1 - removable 50 gallon gear oil tank, 1 - grease container, 1 - oxygen/acetylene tank mounts, 1 - storage area which consisted of six assorted lockable tool boxes, a bonder storage area, and 2 - 10 pound portable fire extinguishers.

The continuous mining machine was originally manufactured by Joy Manufacturing; Model 14CM15, Serial Number JM6179. The continuous mining machine was not in use at the time of the accident and appears to have had no bearing on the cause of the accident. Both of the machines involved in the accident were inspected and no mechanical deficiencies were identified during the investigation that would have affected the safe operation of these machines.

**Immediate Notification**

Dustin Griffith, Outby Electrician, notified MSHA the day of the accident at 1:48 a.m., via a telephone to the MSHA notification hotline. Quinwood Ambulance Service received a call from the mine at 1:46 a.m., two minutes prior to MSHA's notification. The ambulance arrived at the mine at 2:09 a.m., and transported O'Dell at 2:15 a.m. Considering the nature of the injuries and loss of consciousness by the victim, it should have been apparent to mine management that the injuries were potentially life threatening and that the accident was required to be reported to MSHA at once, without delay, and within 15 minutes. Therefore, a non-contributing citation was issued for a violation of § 50.10.

## ROOT CAUSE ANALYSIS

An analysis was conducted to identify the most basic causes of the accident that were correctable through reasonable management controls. During the analysis, root causes were identified that, if eliminated, would have either prevented the accident or mitigated its consequences.

Listed below are root causes identified during the analysis and their corresponding corrective actions implemented to prevent a recurrence of the accident.

*Root Cause:* Management stated that strobe lights were available for all miners, but mine management had not required their use.

*Corrective Actions:* MSHA issued a 314(b) Safeguard Notice on December 11, 2012, requiring strobe lights to be worn by all miners while traveling inby the section loading point. The strobe light must be worn in such a manner to ensure the strobe can be observed while the miner is faced from the rear. This excludes the face equipment operators who will not be required to wear the strobes during operation of equipment; with exception to the continuous mining machine operators. Strobes must be maintained with adequate batteries to ensure proper illumination to the surrounding area. The operator submitted a revision to its training plan to train miners on the provisions of the Safeguard.

*Root Cause:* A safety hazard involving visibility existed on the No. 2 Section. The ventilation curtains (fly pads) in use were not constructed completely of transparent material and were not maintained such that scratches, dirt, mud, and other debris did not obstruct the visibility of the machine operator. The geologic conditions of the mine also caused limited visibility in some areas for machine operators due to undulations in the mine floor and the natural dipping of the coal seam, which made it difficult to see miners and other machinery in active areas where mobile equipment was being operated.

*Corrective Actions:* MSHA issued 314(b) Safeguard Notices on December 11, 2012, requiring transparent ventilation curtains be installed throughout the section, and be maintained as such, which will allow the equipment operator to see beyond the ventilation controls. Strobe lights are required to be worn by all miners traveling on foot and the use of a conspicuous physical barrier or warning device to be installed where maintenance is performed on equipment. The operator submitted a revision to its training plan to train miners on the provisions of the Safeguards.

*Root Cause:* A modification to the maintenance scoop, which included installation of storage boxes, welder (bonder), etc., on the frame of the maintenance scoop, limited the sight distance of the scoop operator.

*Corrective Actions:* MSHA issued a 314(b) Safeguard Notice on December 11, 2012, requiring all mobile face equipment be maintained so that mechanical or electrical components, supplies or other extraneous material be located in such a manner that they cannot obstruct or limit the machine operator's visibility while the machine is in operation. The operator submitted a revision to its training plan to train miners on the provisions of the Safeguard.

## CONCLUSION

The accident occurred when the victim was caught between the batteries of the maintenance scoop and the continuous mining machine. The visibility of the scoop operator was very limited by the rolling nature of the mine floor, the type and condition of the ventilation curtains (fly pads), and the extraneous material that had been placed on top of the rear portion of the maintenance scoop. A system was not in place to utilize physical barricades, or other visible warnings, to prevent machine operators from entering areas where miners were performing maintenance work. The majority of mine management felt it was important to wear strobe lights to increase visibility of miners, but did not require that all miners wear the strobes.

Approved By:

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David S. Mandeville  
District Manager  
Coal Mine Safety and Health, District 4

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Date

## ENFORCEMENT ACTIONS

1. A 103(j) Order No. 8152536, was issued to White Buck Coal Company to ensure the safety of all persons at the mine until an investigation of the accident could be completed, and to prevent the destruction of any evidence which would assist in investigating the cause or causes of the accident. It was subsequently modified to a 103(k) Order.

2. A 314(b) Safeguard, No. 8145383, was issued to White Buck Coal Company, under 30 CFR § 75.1403, on December 11, 2012. On November 30, 2012, a fatal accident occurred on the No. 2 Section (Mechanized Mining Unit 005 & 006) when an electrician received crushing injuries from being caught between a battery powered scoop (S/N T339-492-1025) and the right side continuous mining machine (S/N JM6179). The scoop was traveling in the 6 right crosscut, located between survey station No. 3167 in No. 6 entry and survey station No. 3169 in No. 7 entry, when it struck the continuous mining machine which was parked in the next to last open intersection in the number 7 entry.

For the safe operation of this scoop and other mobile equipment, it is vital that equipment be maintained as designed by the original equipment manufacturer and mechanical or electrical components such as welding machines (aka bonders) and supplies or other material not be placed on the machine in a manner or location that obstructs or limits the operator's visibility.

Due to the rolling nature of the coal seam, this mine experiences grades which limit the visibility of mobile equipment operators, increasing the risk of miners being struck by mobile equipment. This mine has experienced two fatal accidents involving miners being struck by mobile face equipment. The specific conditions at this mine necessitate greater safety precautions to increase the visibility of mobile equipment operators and to prevent miners from being struck by mobile equipment.

This is a notice to provide safeguard(s) that this scoop (S/N T339-492-1025) and all other mobile face equipment operating at this mine be maintained so that mechanical or electrical components, supplies or other extraneous material be positioned or located on the machine in such a manner that it does not obstruct or limit the machine operator's visibility from the operator's compartment while operating the machine.

3. A 314(b) Safeguard, No. 8145384, was issued to White Buck Coal Company, under 30 CFR § 75.1403, on December 11, 2012. On November 30, 2012, a fatal accident occurred on the No. 2 Section (Mechanized Mining Unit 005 & 006) when an electrician received crushing injuries from being caught between a battery powered scoop (S/N T339-492-1025) and the right side continuous

mining machine (S/N JM6179). The scoop was traveling in the 6 right crosscut, located between survey station No. 3167 in No. 6 entry and survey station No. 3169 in No. 7 entry, when it struck the continuous mining machine which was parked in the next to last open intersection in the number 7 entry.

The 6 right crosscut contained a ventilation curtain that was installed in two layers. The first layer was transparent and the second layer was comprised of white colored translucent material and transparent material that was not maintained so as to allow visibility through the curtain material due to age, foreign matter and scratches related to use.

Due to the rolling nature of the coal seam, this mine experiences grades which limit the visibility of mobile equipment operators, increasing the risk of miners being struck by mobile equipment. This mine has experienced two fatal accidents involving miners being struck by mobile face equipment. The specific conditions at this mine necessitate greater safety precautions to increase the visibility of mobile equipment operators and to prevent miners from being struck by mobile equipment.

For the safe operation of mobile equipment, ventilation curtains or flypads are to be installed and maintained transparent so as to increase the sight distance and visibility of mobile face equipment operators.

This is a notice to provide safeguard(s) that ventilation curtains or flypads that are used in by the section loading point of this section and all other sections at this mine, where mobile face equipment is in use and the equipment is required to travel through the curtains or flypads, be installed and maintained as transparent to prevent accidents and injuries to persons on the working section.

4. A 314(b) Safeguard, No. 8145385, was issued to White Buck Coal Company, under 30 CFR § 75.1403, on December 11, 2012. On November 30, 2012, a fatal accident occurred on the No. 2 Section (Mechanized Mining Unit 005 & 006) when an electrician received crushing injuries from being caught between a battery powered scoop (S/N T339-492-1025) and the right side continuous mining machine (S/N JM6179). The scoop was traveling in the 6 right crosscut, located between survey station No. 3167 in No. 6 entry and survey station No. 3169 in No. 7 entry, when it struck the continuous mining machine which was parked in the next to last open intersection in the number 7 entry. The electrician was in a kneeling type position and was not visible to the scoop operator due to limited visibility from ventilation controls, a slight grade, and extraneous material located on the scoop.

Due to the rolling nature of the coal seam, this mine experiences grades which limit the visibility of mobile equipment operators, increasing the risk of miners being struck by mobile equipment. This mine has experienced two fatal



accidents involving miners being struck by mobile face equipment. The specific conditions at this mine necessitate greater safety precautions to increase the visibility of mobile equipment operators and to prevent miners from being struck by mobile equipment.

To ensure safety of persons working or traveling on the working section and to ensure their visibility to mobile face equipment operators, intrinsically safe or permissible electric strobes are necessary to reveal the location of persons.

This is a notice to provide safeguard(s) that a strobe light is required to worn by all miners while traveling inby the section loading point. The strobe light must be worn in such a manner to ensure the strobe can be observed while the miner is faced from the rear. This safeguard excludes the face equipment operators who will not be required to wear the strobe lights during the operation of equipment; with the exception of the continuous miner operators. Strobes must be maintained with adequate batteries to ensure proper illumination to the surrounding area.

5. A 314(b) Safeguard, No. 8145386, was issued to White Buck Coal Company, under 30 CFR § 75.1403, on December 11, 2012. On November 30, 2012, a fatal accident occurred on the No. 2 Section (Mechanized Mining Unit 005 & 006) when an electrician received crushing injuries from being caught between a battery powered scoop (S/N T339-492-1025) and the right side continuous mining machine (S/N JM6179). The scoop was traveling in the 6 right crosscut, located between survey station No. 3167 in No. 6 entry and survey station No. 3169 in No. 7 entry, when it struck the continuous mining machine which was parked in the next to last open intersection in the number 7 entry. The electrician was in a kneeling or crouched position and was not visible to the scoop operator because of limited visibility from ventilation curtains, a slight grade, and extraneous material located on the scoop. The electrician was performing maintenance on the continuous mining machine when the accident occurred.

To ensure safety of persons performing maintenance on parked equipment and to ensure mobile equipment operators are aware of parked stationary equipment, it is necessary to install physical barriers to signify that maintenance is being performed on stationary equipment to prevent powered haulage collisions with parked equipment and/or maintenance personnel.

Due to the rolling nature of the coal seam, this mine experiences grades which limit the visibility of mobile face equipment operators, increasing the risk of miners being struck by mobile face equipment. This mine has experienced two fatal accidents involving miners being struck by mobile face equipment. The specific conditions at this mine necessitate increased safety precautions to

increase the visibility of mobile equipment operators and to prevent miners from being struck by mobile face equipment.

This is a notice to provide safeguard(s) that a conspicuous physical barrier or warning device be installed at all approaches to areas where maintenance is being performed on equipment. The warning device shall prevent access by physical means or flashing light to any maintenance work area. The warning device shall be readily observable from beyond any ventilation control that is being approached (visible before the ventilation control is crossed). This safeguard is not required inby the last open crosscut while changing bits or water sprays on the continuous mining machine. Areas located outby the last open crosscut or in areas where other equipment may be used, such as an intersection, require the use of a conspicuous physical barrier or warning device to be installed.

## APPENDIX A

### Persons Participating in the Investigation

#### Alpha Natural Resources

Ken Perdue.....Director of Safety, Alpha Natural Resources  
Gary Frampton.....Safety, Alpha Natural Resources  
Craig Boggs.....President, Brooks Run North Business Unit  
Robert Gordon.....Vice President, Brooks Run North Business Unit  
Wayne Persinger.....Safety Director, Brooks Run North Business Unit  
Jon Brown.....Vice President, Surface Mining, Brooks Run North Business Unit  
Kris Burke.....Director of UG Maintenance, Brooks Run North Business Unit  
Jeremy McClung....Running Right Coordinator, Brooks Run North Business Unit  
Justin McMillion....Running Right Coordinator, Brooks Run North Business Unit  
Leon Williams.....Assistant General Manager, Green Valley Coal Company  
Randy Taylor.....Safety Manager, Green Valley Coal Company  
Glen Wiant.....Maintenance, Alex Energy  
Scott Lancainese.....Safety, Alex Energy  
Ray Hall.....Superintendent, White Buck Coal Company  
Bill Kell.....Mine Foreman, White Buck Coal Company  
Jay Sigley.....Block Foreman, White Bick Coal Company  
Ryan Hayhurst.....Block Foreman, White Buck Coal Company  
Brett Hamrick.....Section Foreman, White Buck Coal Company  
Collis Bickford.....Section Foreman, White Buck Coal Company  
Rob Bowen.....Chief Electrician, White Buck Coal Company  
Barry Elliott.....Chief Electrician, White Buck Coal Company

#### West Virginia Office of Miners' Health, Safety and Training

Eugene White.....Deputy Director  
McKennis Browning.....Inspector-at-Large  
Steve Lafferty.....Assistant Inspector-at-Large  
John Cruse.....Engineer  
Don McKenzie.....District Inspector  
Sam Bell.....District Inspector  
Preston Toney.....District Inspector, Roof Control

#### Mine Safety and Health Administration

Joseph C. Mackowiak, PE.....Assistant District Manager, Technical Division  
Keith Stone.....Coal Mine Safety and Health Inspector  
Daris Lee Barker, PE.....Coal Mine Safety and Health Inspector  
Larry Metz.....Coal Mine Safety and Health Inspector  
Perry Brown.....Coal Mine Safety and Health Inspector

Rick Thomas ..... Coal Mine Safety and Health Inspector  
Larry Hedrick ..... Coal Mine Safety and Health Inspector  
Mike Browning..... CMS&H Inspector, Training EFS

## APPENDIX B

### List of White Buck Coal Company Employees Interviewed

RayHall .....	Superintendent
Bill Kell .....	Mine Foreman
Teddy Alderman .....	Evening Shift Mine Foreman
Frank McMillion .....	Midnight Shift Foreman
Mike Casey .....	Section Foreman
Robbie Amick .....	Fireboss
Aaron Childers .....	Apprentice Electrician
Harold Fain .....	Midnight Maintenance Foreman
Bernard King .....	Utility Man
Greg Baker .....	Utility Man
Randy Taylor .....	Safety Manager
Shawn Hamrick .....	Electrician
Chris May .....	Utility Man
Dustin Griffith .....	Outby Electrician (Midnight)
Chad Dean .....	Outby Electrician (Evening)
Henry Utnberg .....	Dispatcher (Midnight)
Barry Elliott .....	Chief Electrician

# APPENDIX C

## Victim Information

Accident Investigation Data - Victim Information

**U.S. Department of Labor**  
Mine Safety and Health Administration



Event Number: 6 2 9 1 6 3 1

<b>Victim Information: 1</b>												
1. Name of Injured/Ill Employee: <i>Steven A. O'Dell</i>			2. Sex <i>M</i>	3. Victim's Age <i>27</i>		4. Last Four Digits of SSN: <i>8172</i>			5. Degree of Injury: <i>01 Fatal</i>			
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 11/30/2012 b. Time: 2:29</i>						7. Date and Time Started: <i>a. Date: 11/29/2012 b. Time: 22:30</i>						
8. Regular Job Title: <i>002 Electrician</i>				9. Work Activity when Injured: <i>039 Working on offside cutting drum</i>				10. Was this work activity part of regular job? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
11. Experience a. This Work Activity: <i>1 4 1</i>			b. Regular Job Title: <i>1 4 1</i>			c. This Mine: <i>1 35 0</i>			d. Total Mining: <i>3 2 0</i>			
12. What Directly Inflicted Injury or Illness? <i>077 Scoop and Continuous Mining Machine</i>						13. Nature of Injury or Illness: <i>170 Chest Area</i>						
14. Training Deficiencies: Hazard: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Annual: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Task: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>												
15. Company of Employment:(If different from production operator) <i>Operator</i>						Independent Contractor ID: (if applicable)						
16. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> First-Aid: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> CPR: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> EMT: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Medical Professional: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> None: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>												
17. Part 50 Document Control Number: (form 7000-1) <i>220133450028</i>						18. Union Affiliation of Victim: <i>9999 None (No Union Affiliation)</i>						

<b>Victim Information:</b>												
1. Name of Injured/Ill Employee:			2. Sex	3. Victim's Age		4. Last Four Digits of SSN:			5. Degree of Injury:			
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death:						7. Date and Time Started:						
8. Regular Job Title:				9. Work Activity when Injured:				10. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>				
11. Experience: a. This Work Activity:			b. Regular Job Title:			c. This Mine:			d. Total Mining:			
12. What Directly Inflicted Injury or Illness?						13. Nature of Injury or Illness:						
14. Training Deficiencies: Hazard: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Annual: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Task: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>												
15. Company of Employment: (If different from production operator)						Independent Contractor ID: (if applicable)						
16. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> First-Aid: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> CPR: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> EMT: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Medical Professional: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> None: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>												
17. Part 50 Document Control Number: (form 7000-1)						18. Union Affiliation of Victim:						

<b>Victim Information:</b>												
1. Name of Injured/Ill Employee:			2. Sex	3. Victim's Age		4. Last Four Digits of SSN:			5. Degree of Injury:			
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death:						7. Date and Time Started:						
8. Regular Job Title:				9. Work Activity when Injured:				10. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>				
11. Experience: a. This Work Activity:			b. Regular Job Title:			c. This Mine:			d. Total Mining:			
12. What Directly Inflicted Injury or Illness?						13. Nature of Injury or Illness:						
14. Training Deficiencies: Hazard: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Annual: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Task: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>												
15. Company of Employment:(If different from production operator)						Independent Contractor ID: (if applicable)						
16. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> First-Aid: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> CPR: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> EMT: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Medical Professional: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> None: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>												
17. Part 50 Document Control Number: (form 7000-1)						18. Union Affiliation of Victim:						

APPENDIX D  
Sketch of Accident Scene  
Not to Scale

