REPORT OF FATALITY

OCTOBER 4, 2013

McELROY COAL CO.

McELROY MINE

PERMIT NO. U-00003383

REGION ONE

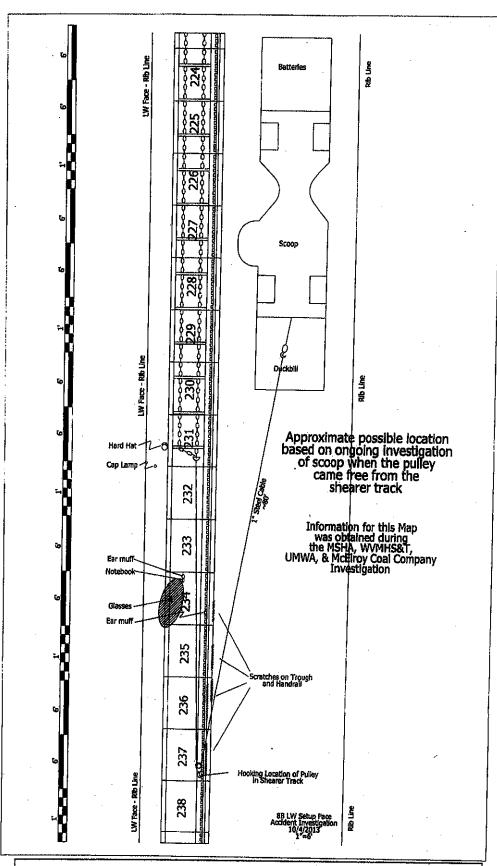
14 COMMERCE DRIVE, SUITE ONE

WESTOVER, WEST VIRGINIA 26501

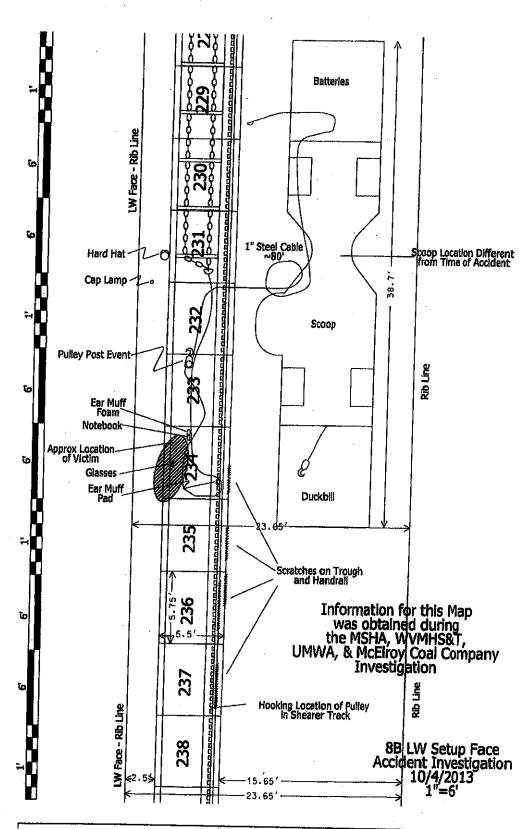
EDWARD PEDDICORD, INSPECTOR-AT-LARGE

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GENERAL INFORMATION

The McElroy Coal Co., McElroy Mine, Permit No. U-00003383 is located near Moundsville, Marshall County, West Virginia. The underground mine employs approximately 1,016 miners. The Pittsburgh No. 8 seam is accessed by Blake Ridge, Cameron, Fish Creek, and Grapevine portals as well as slopes at the coal preparation plant and the Fish Creek portal. The mine produces approximately 10 million tons of coal annually from six (6) continuous miner units and two (2) longwall units. Coal is transported from the working sections in the mine via conveyor belt to the slope at the coal preparation plant. Battery, trolley and diesel powered vehicles are used to transport supplies and mine personnel.

DESCRIPTION

On October 4, 2013, at approximately 12:49 p.m., Roger R. King, 62 years of age, was fatally injured while supervising the installation of a section of face conveyor chain into the longwall armored faced conveyor/panline. The accident occurred on the 8B Longwall Section face setup. Mr. King had a total of forty-two (42) years of mining experience with seventeen (17) years experience at the McElroy Mine.

On October 4, 2013, at 1:19 p.m., Edward Peddicord, Inspector-at-Large at the Region One Office of the West Virginia Office of Miners' Health, Safety and Training was notified by the Mine and Industrial Accident Rapid Response System that an accident had occurred at the McElroy Mine. West Virginia Mine Inspectors; Colin Simmons, William Coen and Silas Stavischeck were contacted by Mr. Peddicord and were instructed to go directly to the McElroy Mine. A joint investigation with the Mine Safety and Health Administration, McElroy Coal Co., Consol Energy, Inc. and the United Mine Workers of America began immediately.

On October 4, 2013, at approximately 8:00 a.m., a crew of men traveled from Cameron Portal to the 8B Longwall Face setup to begin their regular job duties of installing various components

of the longwall. The face setup crew consisted of McElroy Coal Co. employees; Oliver Parker, Josh Hoyt, Mike Decrease, Austin Lesnock, Chris Drummond, Jarred Jackson, Kelly Fluharty, Kyle Fluharty and Zachary Morris under the supervision of Paul Clements, Assistant Underground Mine Foreman, and Roger King, Chief Longwall Maintenance Coordinator.

Mr. Clements conducted a safety meeting with this crew at the beginning of the shift upon arrival to the section. Mr. King requested that Kelly Fluharty, Kyle Fluharty, Mr. Morris and Mr. Jackson go with him to begin work near the tail of the longwall. They proceeded to install the longwall tail drive unit without incident. The remaining miners on the setup crew who had stayed at the headgate side of the longwall brought a section of face conveyor chain down the face through the panline and were instructed by Mr. King to unhook the chain from their scoop and leave the chain in the panline near the # 6 crosscut. Mr. King's crew then began the process of completing the installation of the bottom face conveyor chain by installing a wire rope/steel cable through a snatch block/sheave wheel with a hook that was placed in the rack bar at pan #237. The wire rope was used to pull the chain through the top sections of the panline. The hook on the sheave wheel was placed in a downward position in one of the openings of the rack bar. The winch rope of the Bucyrus-Versatrac battery powered scoop, serial number 650-1055 was then attached to a 1 inch by 80 foot wire rope that had been installed through a sheave wheel and connected to a link of the gob side strand of the face conveyor chain by a 2 inch metal shackle/clevis. A link of the face side strand was tied off with a nylon rope to the gob side strand to prevent the links of the face side strand from wedging during the pulling process.

The scoop was tramming battery end first toward the headgate while attached to the pulling mechanism due to the close proximity of the tailgate entry. This section of the conveyor chain had been pulled approximately 25 to 30 feet when the chain lodged in the process of pulling the chain through the panline. At this point the scoop operator, Kelly Fluharty, stopped the scoop and slack was given to the wire rope that was pulling the conveyor chain. A flight had come out of the panline and was reinstalled in the pan guides. Once the flight was reinserted the workers removed themselves from the confines of the panline to a safe location near the

tailgate. The scoop operator proceeded to retighten the wire rope attached to the chain through the sheave wheel by tramming the scoop towards the headgate.

During this attempt to pull the face conveyor chain, the scoop operator noticed the wire rope tension and then heard Mr. King say stop. Kelly Fluharty, scoop operator, asked Mr. King if he wanted slack on the wire rope. According to Kelly Fluharty, Mr. King said, "hold on". Mr. King entered the confines of the panline (between the longwall face and the spill boards) and walked from the tailgate drive side of the longwall, positioning himself between the sheave wheel anchor point and the end of the wire rope attached to the face conveyor chain. Mr. King placed himself in this location to determine what was preventing the chain from moving. While in this location, Mr. King instructed the scoop operator to give slack on the wire rope. The scoop operator, upon hearing this request, started the scoop and released the parking brake. When the scoop brakes were released the wire rope attached to the scoop (which was under tension). moved the scoop a few inches towards the tail of the longwall. When this happened, witnesses stated that they heard a loud noise and saw Mr. King falling face first into the panline. The hook of the sheave wheel that was placed in the rack bar at pan #237 that served as an anchor point for the pulling mechanism failed. The result of this failure caused a part or parts of the pulling mechanism to strike the victim. The sheave wheel, hook and wire rope were found lying in the panline between pan #234 and pan #231.

Workers immediately went to Mr. King's location to render medical assistance. Mr. King was unresponsive during attempts to assist him. Calls were made to the headgate and the surface to secure transportation and to alert others of the accident. Mr. King was secured for transport and workers continued treatment while traveling to the surface. Once on the surface, Mr. King was transferred to the care of Tri State Ambulance Service and transported by ambulance to the helicopter pad where the decision was made by Medcom to stop CPR. The time of death was 1:39 p.m. Mr. King was then transported to Reynolds Memorial Hospital in Glen Dale, West Virginia.

FINDINGS OF FACT

- 1. Roger King received annual refresher training on February 22, 2013.
- 2. Mr. King was a Certified Mine Foreman and completed continuing education requirements on April 16, 2013.
- Documentation was not provided showing that Mr. King or others had been trained as required in a letter dated February 19, 2008, submitted as a modification to McElroy Coal Co.'s Comprehensive Mine Safety Program.
- 4. The 420 BB, 6 inch snatch block/sheave wheel and hook being used is manufactured by McKissick.
- 5. The snatch block/sheave wheel and hook weighs 40 pounds.
- 6. After the accident, the hook of the snatch block/sheave wheel originally placed in the rack bar at pan #237 was found to be damaged in that the hook was deformed and twisted. The opening of the hook was elongated/stretched approximately 2 ⁷/₁₆ inches. The safety latch was also damaged. The hook and the snatch block/sheave wheel which had previously been placed at pan # 237 were discovered in the panline between pan #233 and pan #232 after the accident. The snatch block/sheave wheel and hook traveled approximately 28 feet from their original anchor point.
- 7. The safety latch of the snatch block/sheave wheel hook could not be engaged due to the size configuration of the hook and the rack bar openings.

- 8. The wire rope being used at the time of the accident was 1 inch in diameter and 80 feet in length, thimble to eye rope with a rated capacity of 9.8 tons.
- 9. The manufacturer of the 420 BB, 6 inch snatch block recommends that a 3/4 to 7/8 inch diameter wire rope be used with this particular snatch block/sheave wheel hook combination. The 1 inch diameter wire rope being used at the time of the accident with the 420 BB snatch block was larger than the manufacturers' recommended diameter.
- 10. The Ultrex winch rope installed on the Bucyrus-Versatrac battery powered scoop, serial number 650-1055, being used at the time of the accident was a 7/8 inch by 50 foot rope with a maximum workload of 19,600 pounds. This scoop has a 50 ton carrying capacity.
- 11. An onsite inspection of the scoop involved in the accident was performed on October 7, 2013. No violations were found.
- 12. The armored face conveyor/panline is manufactured by Longwall-Associates Inc.
- 13. The rack bar is manufactured by Longwall-Associates Inc. to be compatible with the Joy shearer.
- 14. The safety latch of the snatch block/sheave wheel hook could not be engaged due to the size configuration of the hook and the rack bar openings.
- 15. The 2 inch shackle/clevis attached to the end of the face conveyor chain was still intact after the accident.
- 16. The face conveyor chain is manufactured by Thiele. The chain links are 48mm. This section of face conveyor chain was delivered in a 164 foot section. The chain weighs 32

pounds per foot per strand. Total weight of this section of face conveyor chain is 10,496 pounds.

- 17. The conveyor chain flights and straps are 1 meter in width and are manufactured by Caterpillar. There are 55 flights in this 164 feet of chain. Each flight bar weighs 123.64 pounds. The strap bar connector weighs 28.16 pounds. The total weight of a flight and strap bar is 151.8 pounds. The total weight of the flight bars and straps per section of chain is 8,349 pounds.
- 18. The combined weight of this section of chain, flights and straps is 18,845 pounds.
- 19. The mining height at the accident scene is approximately 7 feet. The mine floor was basically level and dry at the time of the accident.
- 20. The panel length is approximately 12,193 feet.
- 21. The total width of the 8B Longwall set up face is approximately 1,400 feet.
- 22. The procedures and equipment being used the day of the accident to pull these last few sections of face conveyor chain once they near the tailgate of the longwall were similar to those used on previous longwall face setups.
- 23. The following safety precautions were submitted in a letter dated February 19, 2008 by McElroy Coal Co. A modification to McElroy Coal Co.'s Comprehensive Mine Safety Program received at the Region One office of the West Virginia Miners' Health, Safety and Training on February 21, 2008, states as follows: "Additional training will be given to all personnel working to move equipment or parts with chains or cables. Prior to loading a wire rope used to pull equipment, a safety zone (with a radius equal to 1 ½ times the length of the rope) shall be established and all persons shall be prohibited

from entering this safety zone unless substantial barriers, guards or other devices are present that provide adequate protection to persons. Where practical, wire ropes used to pull equipment shall be covered with a canvas covering prior to loading to dissipate energy in the event of breakage."

24. Mr. King was inside the safety zone at the time of the accident without substantial barriers, guards or other devices that provide adequate protection. This action was a violation of McElroy Coal Co.'s Comprehensive Mine Safety Program.

CONCLUSION

Mr. King was fatally injured when he entered the confines of the panline on the 8B Longwall face setup on October 4, 2013, at approximately 12:49 p.m. The victim positioned himself near pan #234, between the snatch block/sheave wheel anchor point and the end of the wire rope that was attached to the face conveyor chain that was being installed in the panline. The wire rope inserted through the sheave wheel was under tension while attached to the winch of the scoop and the face conveyor chain. The anchor of the pulling mechanism failed and an unknown part or parts of the pulling mechanism struck the victim.

The victim's position was within the safety zone as referenced by the February 19, 2008 letter modifying McElroy Coal Co.'s Comprehensive Mine Safety Program prohibiting any person from being present in the safety zone without substantial barriers, guards or other devices present which would provide adequate protection.

ENFORCEMENT ACTION

A non-assessed order was issued in accordance with West Virginia Code Chapter 22A, Article 2-Section 68 to preserve evidence until an investigation by the Office of Miners' Health, Safety and Training is completed.

Chapter 22A, Article 1, Section 36(b)

The Comprehensive Mine Safety Program was not being complied with on October 4, 2013 during the 8B Longwall face setup. The modification to the safety program dated February 19, 2008 established safety precautions and a safety zone when doing this type of work. This component was not adhered to when the victim entered the safety zone without substantial barriers, guards or other devices present to provide adequate protections for the victim.

RECOMMENDATIONS

- 1. McElroy Coal Co. submitted a letter dated October 10, 2013, modifying an order issued as a result of a fatality at the McElroy mine. Additionally, Consol Energy, Inc. issued a safety document dated January 1, 2011, that was obtained at the mine for the purpose of identifying and establishing minimum standards for use of wire ropes (wire and/or synthetic) and sheaving components with checklists to assure safety of all individuals working with or around wire and synthetic rope and sheaving components. The aforementioned letter and the safety document shall be submitted as a modification and implemented into the McElroy Coal Co.'s Comprehensive Mine Safety Program as warranted by the findings of this investigation.
- These additional safety precautions shall be reviewed with all workers annually and
 prior to their involvement in relevant type activities. The safety contact shall be
 recorded and a record kept for no less than one year from the time of the initial safety
 review.

ACKNOWLEDGEMENT

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the management and employees of McElroy Coal Co., McElroy Mine, Consol Energy, Inc., the Mine Safety and Health Administration, and the United Mine Workers of America during this investigation.

MINE INFORMATION

COMPANY McElroy Coal Co.
MINE COMPANY McElroy Mine
WV PERMIT <u>U-00003383</u> MSHA PERMIT NO. <u>46-01437</u>
ADDRESS 57 Goshorn Woods Rd. Cameron, WV 26033
COUNTY Marshall PHONE NO. 304-686-4300
DATE PERMIT ISSUED October 20, 1969
WORKING STATUS Active
LOCATION <u>Cameron Portal</u>
UNION X NON-UNION
DAILY PRODUCTION 40,000 tons ANNUAL PRODUCTION TO DATE 7 million tons
TOTAL EMPLOYEES
NUMBER OF SHIFTS 3
COAL SEAM NAME AND THICKNESS Pittsburgh 8 60 inches
ACCIDENT INCIDENT RATE 1.90 LOST TIME ACCIDENTS 15 YTD
TYPE OF HAULAGE Belts
WVOMHST INSPECTORS Colin Simmons and William Coen
DATE OF LAST INSPECTION Regular completed September 30, 2013
NOTIFIED BY Mine and Industrial Accident Emergency Operations Center
NOTIFICATION TIME October 4, 2013 at approximately, 1:19 p.m.
CMSP-ANNIVERSARY DATE <u>February 12, 2014</u>
CMSP-CONTACT PERSON <u>Ken Harvey</u>