FAI-F008355-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Underground
(Coal)

Fatal Powered Haulage Accident
January 10, 2025

Acosta Deep Mine
Wilson Creek Energy LLC
Friedens, Somerset County, Pennsylvania
ID No. 36-09893

Accident Investigators

Joseph Wagner
Mine Safety and Health Specialist

William Kibler
Mine Safety and Health Inspector

Peter Urbassik
Mine Safety and Health Specialist

Originating Office
Mine Safety and Health Administration
Mt. Pleasant District
Paladin Professional Center
631 Excel Drive, Suite 100
Mt. Pleasant, PA 15666
Michael Kelley, District Manager

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OVERVIEW

On January 10, 2025, at 12:43 p.m., Joshua Mock, a 34-year-old mobile bridge carrier operator with one year and nine months of mining experience, was fatally injured when he was pinned between the mobile bridge carrier and the coal rib.

The accident occurred because the mine operator did not: 1) properly maintain the electrical components of the continuous haulage system in safe operating condition; and 2) have procedures for ensuring the continuous haulage system operators communicated their position and intended movements.

GENERAL INFORMATION

Wilson Creek Energy LLC owned and operated the Acosta Deep Mine, an underground bituminous coal mine located in Somerset County, Pennsylvania. Acosta Deep Mine employed 90 miners and operated two, nine-hour production shifts and one maintenance shift per day, five days per week. Acosta Deep Mine operated two mechanized mining units in the Middle Kittanning coal seam with an average mining height of 42 inches. A continuous mining machine (CMM) extracted coal. Attached mobile bridge carriers (MBCs) and bridge conveyors transported coal to the belt conveyor where it was taken to the surface.

Rosebud Mining Company purchased the Acosta Deep Mine from Wilson Creek Energy LLC during bankruptcy liquidation and took ownership and control on April 7, 2025.

The principal management officials at the Acosta Deep Mine at the time of the accident were:

Robert Bodenschatz	Director of Safety
James Moss	Mine Superintendent
Michael Kimmel	Mine Foreman

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on December 19, 2024. A regular safety and health inspection was ongoing at the time of the accident. The 2024 non-fatal days lost incident rate for the Acosta Deep Mine was 4.92, compared to the national average of 3.03 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On January 10, 2025, at approximately 6:00 a.m., Mock entered the mine and traveled to the 7-Left section with the day shift crew (see Appendix A). According to interviews, Thomas Lehman, Section Foreman; and Nathaniel Miller, CMM Operator, met Mark Mehall, Section Mechanic, who was conducting pre-operational inspections on the CMM for the shift. Mock and the dayshift crew arrived in the 7-Left section at approximately 6:50 a.m. and began normal production.

At 12:40 p.m., after mining the crosscut from the No. 3 to the No. 4 entry, Miller, Mock, and Austin Heitzer, MBC Operator, were tramming the continuous haulage system outby in the No. 3 belt entry when the left track of the No. 1 MBC broke. Mock continued to tram the No. 1 MBC outby approximately ten feet and stopped. Heitzer trammed the No. 2 MBC outby until the bridge conveyor slide reached the maximum extent of overlap with the No. 1 MBC. Miller trammed the CMM outby until the bridge conveyor slide reached the maximum extent of overlap between the CMM and the No. 2 MBC. The CMM was tramming outby with enough force that when the bridge conveyor's slide stopped, the rear of the CMM went to the left and into the belt structure. The CMM tram became disabled due to a proximity detection system trip. Once the tram was enabled at 12:43 p.m., Miller trammed the CMM to move the rear off the belt structure.

The movement of the CMM caused No. 1 MBC to move toward the right coal rib. At this time, Mock was partially out of the operator's compartment of the No. 1 MBC and was crushed between the operator's compartment and the right coal rib. Austin Hribar, Laborer, James Moss, Mine Superintendent, and Jason Goughenour, Section Mechanic, who were working on the 7-Left section, heard Mock yell. Hribar saw Mock, unresponsive and pinned between the No. 1 MBC and the coal rib. Hribar yelled for help and said not to move any equipment. When Heitzer heard Hribar, Heitzer stated he pushed the No. 2 MBC emergency stop switch and went to Mock.

Moss instructed Goughenour to modify the system's safety circuit wiring to allow the No. 1 MBC to operate independently of the system. While Goughenour worked on the wiring, Moss directed Terry Hull, Scoop Operator, to use the scoop to knock out the stopping in the crosscut

between the No. 3 and No. 4 entries and push the bridge conveyor outby to move the No. 1 MBC away from the right coal rib. The scoop did not move the No. 1 MBC enough to free Mock. Goughenour was not able to modify the wiring as needed to move the No. 1 MBC. Miller then successfully modified the wiring and trammed the No. 1 MBC away from the coal rib and freed Mock.

Moss used his radio to call Jerry Donaldson, Mine Clerk. Donaldson called 911 at 12:48 p.m. Moss called Ronald Zufall, Maintenance Foreman/Emergency Medical Technician (EMT), and Kyle Drenner, Chief Electrician/EMT, to the section to provide first aid to Mock. At 1:25 p.m., Heitzer, Hull, Drenner, and Zufall provided first aid and transported Mock to the surface. At approximately 2:00 p.m., Somerset Area Ambulance Service took over first aid. Alexis Lichty, Somerset County Chief Deputy Coroner, arrived at the mine and pronounced Mock dead at 3:19 p.m.

INVESTIGATION OF THE ACCIDENT

On January 10, 2025, at 1:05 p.m., Robert Bodenschatz, Director of Safety, called the Department of Labor National Contact Center (DOLNCC) to report a serious accident. The DOLNCC notified Timothy Horton, Administrative Specialist. Horton informed Michael Kelley, District Manager. Kelley assigned Joseph Wagner, Mine Safety and Health Specialist, as the lead investigator.

At 1:05 p.m., William Kibler, Mine Safety and Health Inspector, who was at the mine conducting a regular safety and health inspection, issued an order under the provisions of Section 103(k) of the Mine Act to ensure the safety of the miners and preservation of evidence. Kibler notified Dennis Zeanchock, Supervisory Mine Safety and Health Inspector, who directed Peter Urbassik, Mine Safety and Health Specialist, to assist in the investigation. Kelley and Urbassik traveled to the mine to investigate. Urbassik arrived at the mine at approximately 1:50 p.m., followed by Kelley at approximately 3:20 p.m.

The MSHA accident investigation team, Pennsylvania State Police, and the Pennsylvania Bureau of Mine Safety conducted an examination of the accident scene, interviewed miners and mine management, and reviewed conditions and work procedures relevant to the accident. Investigators from MSHA Technical Support later went to the mine on February 3, 2025, to assist in the investigation. See Appendix B for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred in the 7-Left section, in the No. 3 belt entry, approximately 290 feet outby the working face (see Appendix A). The No. 3 belt entry was approximately 18 feet wide and four feet high.

Equipment Involved

The continuous haulage system involved in the accident consisted of three bridge conveyors, two MBCs, and the CMM. The MSHA Approval Plate on the No. 1 MBC listed the manufacturer as

DBT America Inc., the model number as MBC-30CL, and the MSHA Approval No. as 2G-4139A-0. The No. 2 MBC did not have an MSHA Approval Plate and only had a nameplate listing the serial number. At the time of the accident, Simmons Equipment Company (SEC) owned the MSHA approvals for the No. 1 and No. 2 MBCs. SEC helped investigators identify the model number as FH330 and the MSHA Approval No. as 2G-4139A-0. The CMM was a Joy model 14CM10AA. The CMM was equipped with a Joy Network Architecture (JNA) Face Boss System, which records logs of CMM functions and alarms which were downloaded from the CMM. The MBCs and CMM were electrically connected and mechanically connected by the bridge conveyors that transport the coal to the belt.

Investigators examined the electrical system and CMM JNA records and determined a diode was connected in a junction panel on the CMM during the mining cycle. MSHA did not approve this diode as part of the electrical system in MSHA Approval No. 2G-4139A-0, which was issued to the manufacturer. The diode had been previously installed with a plug/receptacle connector so that it could be easily connected or disconnected from the electrical circuit. Investigators determined that connecting and disconnecting this diode was a common practice. When connected, the diode disabled the emergency stop switches on the MBCs and prevented the CMM from shutting down. Based on a review of the CMM JNA alarm log, investigators determined the diode was connected from 11:33 a.m. to 1:04 p.m. There were over 50 emergency stop alarms recorded from 6:50 a.m. to 11:33 a.m. The CMM JNA alarm log showed no emergency stop alarms from 11:33 a.m. to 1:04 p.m.; however, Heitzer activated the emergency stop switch in the No. 2 MBC when the accident occurred at 12:43 p.m. The mine operator did not properly maintain the electrical components of the continuous haulage system in safe operating condition. Investigators determined this contributed to the accident.

MSHA Technical Support conducted an onsite investigation to determine compliance of the MBCs and CMM with MSHA approval documentation and to examine the startup, shutdown, and emergency stop circuits for the two different models of MBCs. MSHA Technical Support determined that the MBCs in the 7-Left section were not in compliance with MSHA Approval No. 2G-4139A-0. The approval does not allow for the combination of the electrical systems of the two MBCs involved in the accident because the manufacturer did not design the electrical systems to function together. The mine operator combined two incompatible electrical systems of the MBCs, which contributed to the accident.

Investigators determined that mine management instructed the mine maintenance department to attach the different models of MBCs, knowing that they were electrically incompatible. Investigators also determined that mine management allowed unauthorized modifications of the electrical components in the continuous haulage system. Based on interviews and an examination of the electrical system, the mine operator displayed a pattern of improper maintenance. Investigators also identified the following hazardous conditions on the continuous haulage system that did not contribute to the accident:

1. A bar in the No. 2 MBC operator's compartment that miners said was used to keep the man-in-position foot pedal, an emergency stop switch, engaged.
2. Additional diodes and resistors in the junction boxes that had been added and could be used to defeat the safety circuit.
3. A tape switch, an emergency stop switch, would not latch the safety circuit on the No. 1 MBC as designed, which allowed the CMM to be immediately restarted and moved.
4. Splices in intrinsically safe electrical cables.

Continuous Haulage System Procedures

Investigators could not determine the reason Mock partially exited the No. 1 MBC operator's compartment, or whether Mock activated an emergency stop switch. The mine operator did not have procedures for ensuring the continuous haulage system operators communicated their position and intended movements. Investigators determined this contributed to the accident.

Examinations

Mehall conducted the last weekly electrical examination of the No. 1 MBC and CMM on January 6, 2025, and the No. 2 MBC on January 8, 2025. Mehall did not record any defects. Investigators determined that the conditions discovered during the investigation would likely not be identified during the weekly electrical examination, therefore the examination did not contribute to the accident.

Dennis Blucas, Section Foreman, conducted the preshift examination of the 7-Left section and did not record any hazards. Lehman conducted the on-shift examination on the 7-Left section and did not record any hazards that would have contributed to the accident. Investigators determined these examinations were adequate and did not contribute to the accident.

Training and Experience

Mock had one year and nine months of mining experience, all at the Acosta Deep Mine. Mock received annual refresher training on March 9, 2024, and task training as an MBC operator on April 10, 2023. Investigators determined Mock received all training in accordance with MSHA Part 48 training regulations.

Miller received annual refresher training on March 9, 2024, and task training on a Joy 14 CMM on June 18, 2021. Heitzer received experienced miner training on August 3, 2024, and task training as an MBC operator on August 8, 2024. Investigators determined Miller and Heitzer received all training in accordance with MSHA Part 48 training regulations.

ROOT CAUSE ANALYSIS

The accident investigation team conducted an analysis to identify the underlying causes of the accident. The accident investigation team identified the following root causes, and the mine operator implemented the corresponding corrective actions to prevent a reoccurrence.

1. Root Cause: The mine operator did not properly maintain the electrical components in the continuous haulage system in safe operating condition.

   Corrective Action: The mine operator removed one of the different models of MBCs from the continuous haulage system. The mine operator rewired one MBC and reconnected the CMM and MBC with the correct cable according to the manufacturer's MSHA approved electrical drawings. The mine operator demonstrated proper operation of the continuous haulage system.

   The new mine operator removed the MBCs involved in the accident from service and will be using MBCs from a different manufacturer that are electrically compatible and approved by MSHA for combined use.

2. Root Cause: The mine operator did not have procedures for ensuring the continuous haulage system operators communicated their position and intended movement.

   Corrective Action: A safeguard was issued to address this condition. The mine operator developed and implemented a written procedure for continuous haulage system operator communication requiring:

   1. The tram and boom/tail functions of the continuous haulage system CMM and MBCs, be de-energized by use of an emergency stop circuit in each MBC before the MBC operator exits the operator's compartment. These functions will remain de-energized while the MBC operator is outside of the operator's compartment.

   2. Prior to any MBC operator exiting their operator's compartment or the continuous haulage system restarting, the MBC and CMM operators shall verbally communicate their intentions and receive acknowledgment from the other system operators and the tail gunner (laborer who manages the continuous haulage system trailing cable), if one is being utilized. This shall be done either by radio or via voice communications.

   3. The CMM will have a dedicated maintenance mode which will not allow the CMM to tram, the CMM boom/tail to function, or MBCs to start or tram.

   The mine operator trained all miners on this procedure.

   Rosebud Mining Company, the new mine operator, will follow and train miners on the procedure.

CONCLUSION

On January 10, 2025, at 12:43 p.m., Joshua Mock, a 34-year-old mobile bridge carrier operator with one year and nine months of mining experience, was fatally injured when he was pinned between the mobile bridge carrier and the coal rib.

The accident occurred because the mine operator did not: 1) properly maintain the electrical components of the continuous haulage system in safe operating condition, and 2) have procedures for ensuring the continuous haulage system operators communicated their position and intended movements.

Approved By:

_____ _____

Michael Kelley Date
District Manager

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Wilson Creek Energy LLC.

   A fatal accident occurred on January 10, 2025, at approximately 12:43 p.m. This order is being issued under the authority of the Federal Mine Safety and Health Act of 1977, under Section 103(k) to insure the safety of all persons at the mine, and requires the operator to obtain the approval of an authorized representative of MSHA of any plan to recover any person in the mine or to recover the mine or affected area. This order prohibits any activity in the affected area. The operator is reminded of the obligation to preserve all evidence that would aid in investigating the cause or causes of the accident in accordance with 30 CFR 50.12.

2. A 104(d)(1) citation was issued to Wilson Creek Energy LLC for a violation of 30 CFR 75.512.

   On January 10, 2025, a mobile bridge carrier operator was fatally injured when he was pinned between the mobile bridge carrier and the coal rib. The mine operator did not maintain the electrical components of the continuous haulage system in safe operating condition. Mine management instructed the mine maintenance department to attach the different models of bridge conveyors and engaged in a practice of unauthorized modifications of the electrical components of the continuous haulage system. The mine operator engaged in aggravated conduct constituting more than ordinary negligence. This is an unwarrantable failure to comply with a mandatory standard.

3. A 314(b) safeguard was issued to Wilson Creek Energy LLC under the provisions of 30 CFR 75.1403-10.

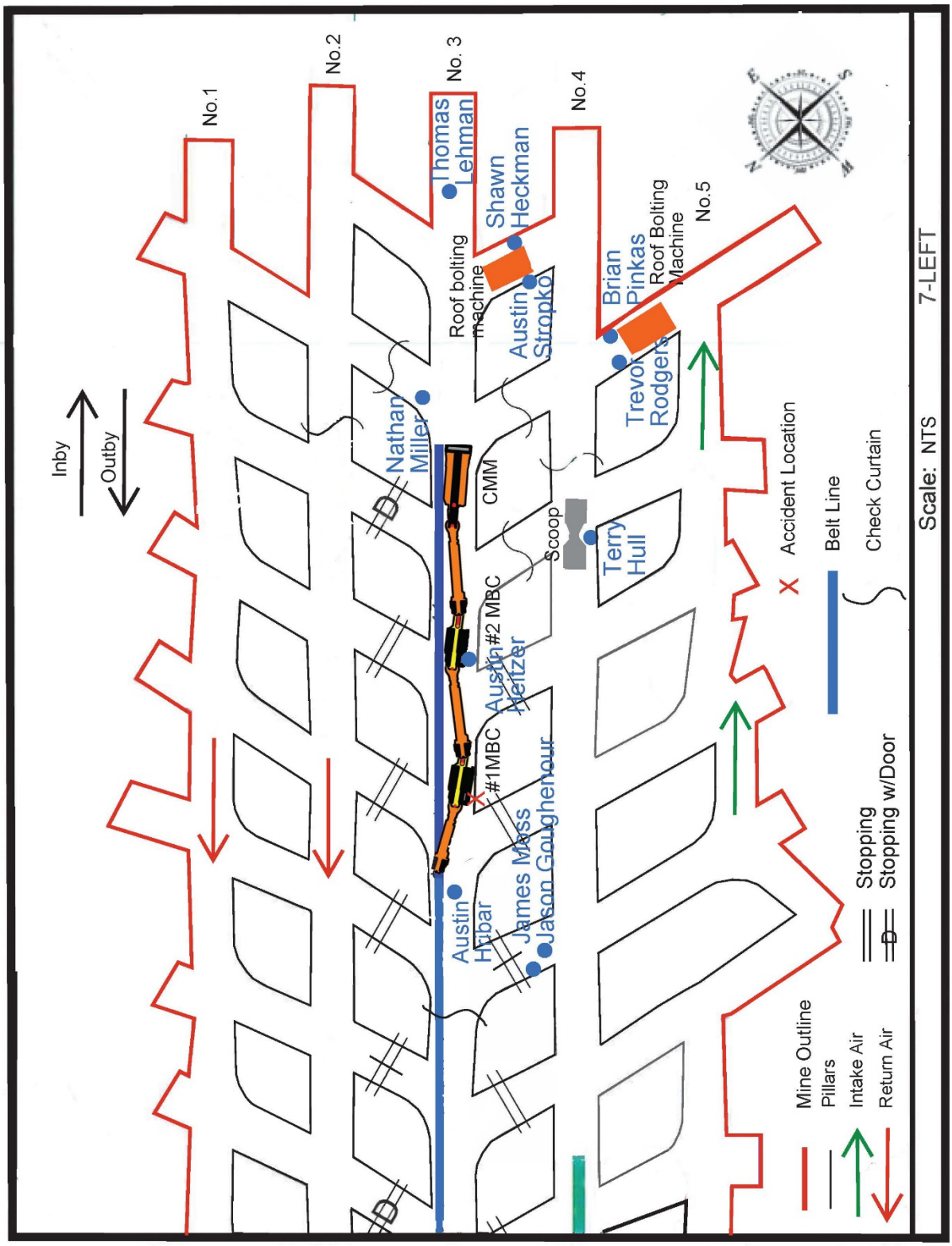
   On January 10, 2025, a mobile bridge carrier operator was fatally injured when he was pinned between the mobile bridge carrier and the coal rib. The mine operator did not have procedures for ensuring the continuous haulage system operators de-energized their equipment with an emergency stop switch before exiting the operator’s compartment and communicated their position and intended movement. This is a notice to provide safeguard requiring:

   1. The tram and boom/tail functions of the continuous haulage system, continuous mining machine (CMM) and mobile bridge carriers (MBC), be de-energized by use of the emergency stop circuit in each MBC before the MBC operator exits the operator's compartment. The emergency stop circuit in the MBC will remain activated while the MBC operator is outside of the operator's compartment.

   2. Prior to any MBC operator exiting their operator’s compartment or the continuous haulage system restarting, the MBC and CMM operators shall verbally communicate their intentions and receive acknowledgment from the other system operators and the tail gunner, if one is being utilized. This shall be done either by radio or via voice communications.

3. The CMM will have a dedicated maintenance mode which will not allow the CMM to tram, the CMM boom/tail to function, or MBCs to start or tram.

APPENDIX A – Map of 7-Left Section at the Time of the Accident



APPENDIX B – Persons Participating in the Investigation

Wilson Creek Energy LLC

Kim Shick	Vice President of Operations
Robert Bodenschatz	Director of Safety
Shawn Petree	General Superintendent
James Moss	Mine Superintendent
Michael Kimmel	Mine Foreman
Kyle Drenner	Chief Electrician/EMT
Ronald Zufall	Maintenance Forman/EMT
Daniel Fabo	Safety Representative
Dennis Blucas	Section Foreman
Thomas Lehman	Section Foreman
Jason Goughenour	Section Mechanic
Mark Mehall	Section Mechanic
Nathaniel Miller	CMM Operator
Austin Heitzer	MBC Operator
Austin Hribar	Laborer
Terry Hull	Scoop Operator
Shawn Heckman	Roof Bolter
Brian Pinkus	Roof Bolter
Trevor Rodgers	Roof Bolter
Austin Stropko	Roof Bolter
Jerry Donaldson	Mine Clerk

Pennsylvania Bureau of Mine Safety

Bradley Russian	Bituminous Mine Safety Program Manager
Chas Washlack	Bituminous Mine Safety Electrical Program Manager
Mark Gindlesperger	Bituminous Underground Inspector Supervisor
Nicholas Dady	Bituminous Underground Mine Electrical Inspector Supervisor
Jason Kostan	Bituminous Underground Mine Electrical Inspector
Michael Castner	Mining Engineer
Gregory Barclay	Mining Engineer Consultant

Mine Safety and Health Administration

Michael Kelley	District Manager
Todd Anderson	Assistant District Manager
Richard Gindlesperger	Supervisory Mine Safety and Health Specialist
Dennis Zeanchock	Supervisory Mine Safety and Health Inspector
Peter Urbassik	Mine Safety and Health Specialist
Joseph Wagner	Mine Safety and Health Specialist

William Kibler	Mine Safety and Health Inspector
Brett Chiccarello	Mine Safety and Health Training Specialist
David Cavins	Electrical Engineer, Technical Support
Steven Kotvas	Electrical Engineer, Technical Support
Roger McDiffitt	Electrical Engineer, Technical Support
Dustin Hinchman	Mining Equipment Compliance Specialist, Technical Support
Alexis Argirakis	Mechanical Engineer, Technical Support