FAI-7034569-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Coal)

Fatal Machinery Accident
May 16, 2024

Cornerstone Labor Services, Inc. (B4839)
Ashland, Hanover County, Virginia

at

Coal Mountain No 1 Surface
CM Energy Operations LP
Coal Mountain, Wyoming County, West Virginia
ID No. 46-09062

Accident Investigators

Michael Keene
Mine Safety and Health Inspector

Yancy Rode
Mine Safety and Health Specialist

Originating Office
Mine Safety and Health Administration
Pineville District
4499 Appalachian Highway
Pineville, West Virginia
Craig Plumley, District Manager

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OVERVIEW

On May 16, 2024, at approximately 2:15 a.m., Virgil Paynter, a 59 year-old contract excavator operator with ten weeks of mining experience, died after the excavator he was operating traveled over a highwall and fell 235 feet before coming to rest on top of spoil material in the pit below. Paynter was ejected from the operator's cab during the fall.

The accident occurred because the mine operator did not establish and follow a Ground Control Plan that insured safe working conditions.

GENERAL INFORMATION

CM Energy Operations LP (CM Energy) owns and operates the Coal Mountain No 1 Surface mine (Coal Mountain). The mine is a surface coal mine located in Coal Mountain, Wyoming County, West Virginia. Coal Mountain employs 15 mine employees and 119 contract labor employees. The mine operates two ten-hour production shifts, five to six days per week. The mine extracts coal using methods of mountaintop removal, hilltop removal, contour mining, and by using a highwall mining machine. The mine operator contracted Cornerstone Labor Services, Inc. (Cornerstone) to provide laborers.

The principal management officials for CM Energy at Coal Mountain at the time of the accident were:

Mark Weaver	President
Todd Bradford	Mine Manager
Lewis White	Safety Manager

The principal management officials for Cornerstone at Coal Mountain at the time of the accident were:

Dwayne Vance	Superintendent
James Reed	Day Shift Mine Foreman
James Tackett	Evening Shift Mine Foreman
Gerald Bailey	Coal Foreman

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on March 27, 2024. The 2023 non-fatal days lost injury incidence rate for the Coal Mountain No.1 Surface mine was zero, compared to the national average of 0.76 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On May 15, 2024, Paynter began his shift at 5:00 p.m. and traveled to his work area with the evening shift crew. According to interviews, between 6:30 p.m. and 7:00 p.m., James Tackett, Evening Shift Mine Foreman, drove his pickup truck to the DC7B Williamson bench and then walked up to the DC8A Williamson bench and spoke with Paynter (see Appendix A). Tackett instructed Paynter to pull material (rocks and dirt) with the excavator from the outside (hillside) and move it to the center of the bench. Tackett left to continue his duties throughout the mine site. Paynter was operating the excavator on the DC8A Williamson bench with James Harris, Bulldozer Operator. Paynter used the excavator to pull material from the hillside and place the material on the bench. This process allowed Harris to position his bulldozer behind the material and push it over the highwall on the opposite side of the bench, down to the 328 Alma pit. Early in the shift, during daylight hours, Paynter began this task where the width of the bench measured approximately 165 feet. As Paynter progressed toward the opposite end of the bench, it became dark and foggy, and the width of the bench narrowed to approximately 54 feet.

On May 16, 2024, at approximately 1:45 a.m. while working on the DC8A Williamson bench, Paynter encountered a 17-foot by 14-foot by eight-foot rock on the hillside. According to interviews, the size of the rock prevented Paynter from pulling it up onto the bench with his excavator. Paynter used his radio to request Harris' help. Positioning their machines on opposite sides of the rock, Paynter and Harris worked together to move the rock onto the bench. From the bench, Harris could position his bulldozer behind the rock to push it over the highwall. At approximately 1:55 a.m. Harris radioed Paynter and said, "I can get it from here." Harris then turned his bulldozer around and began pushing material away from the access road leading to the bench. Based on the investigation, at this time Paynter's excavator was positioned between the rock and the edge of the highwall in an area approximately 15 feet wide. The excavator's boom would have been extended over the rock with the bucket curled to grasp the rock. Investigators

observed impressions of the excavator's tracks leading over the highwall in this area. At some point while the bulldozer cleared material from the access road, Paynter traveled over the highwall and was ejected from the operator's cab during the fall. Harris returned to the bench area near the rock, noticed Paynter's excavator was gone, and called over the radio for Paynter with no response.

At approximately 2:00 a.m., Tackett was in his pickup truck traveling toward the impoundment, beginning his pre-shift examination for the next crew. Tackett stated he saw the shadow of the lights of all the equipment on the DC8A Williamson bench above him as he drove by. At approximately 2:15 a.m., while watching rock trucks operating on the haul road from the MD93 Powellton pit, Tackett stated he heard metal banging against rocks. Tackett looked to his left and saw the excavator crashing down into the 328 Alma pit. Tackett immediately drove toward the 328 Alma pit and began radioing for Gerald Bailey, Coal Foreman; David Houck, Maintenance Foreman; Shane Christian, Coal Loader Operator/EMT (Emergency Medical Technician); and Michael Adams, Rock Loader Operator, to inform them of the accident and instruct them to travel to the 328 Alma pit. Tackett instructed Houck to call 911. At 2:20 a.m., Houck called 911 to request emergency medical services (EMS).

As soon as Tackett arrived at the 328 Alma pit, he observed the excavator at the bottom of the highwall, grabbed his hard hat and light, and ran to the excavator. Tackett began hollering Paynter's name before finding him lying approximately 20 feet from the excavator. Tackett checked for Paynter's pulse and breathing and found none. Bailey picked up Christian in his pickup truck and traveled to the 328 Alma pit. Christian climbed up to the accident scene to Paynter. At 2:34 a.m., Christian assessed Paynter and could not detect a pulse.

EMS arrived at the accident scene at 3:03 a.m. and checked Paynter's vitals. Paramedics could not detect a pulse and reported Paynter as dead. The paramedics called Regional Command located in Raleigh General Hospital, Beckley, WV. Joshua Enyart, D.O., pronounced Paynter dead at 4:21 a.m.

INVESTIGATION OF THE ACCIDENT

On May 16, 2024, at 2:38 a.m., Lewis White, Safety Manager, called the Department of Labor National Contact Center (DOLNCC) to report a fatal accident. The DOLNCC notified Kenneth Butcher, Supervisory Mine Safety and Health Inspector. Butcher notified Mark Muncy, Assistant District Manager. Muncy notified Herman Morgan, Supervisory Mine Safety and Health Specialist, and sent him to the mine. Muncy also notified Craig Plumley, District Manager, and Nicholas Christian, Supervisory Mine Safety and Health Inspector. Plumley assigned Michael Keene, Mine Safety and Health Inspector, as the lead investigator.

At 3:55 a.m., Morgan arrived at the mine, met with Tackett, and traveled to the accident site. At 4:10 a.m., Morgan met with White and 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. Aaron Cline, Mine Safety and Health Inspector, arrived at the mine at 4:15 a.m.; Keene arrived at the mine at approximately 7:00 a.m.; and Yancy Rode, Mine Safety and Health Inspector, arrived at the mine at 8:03 a.m.

MSHA's accident investigation team, along with the West Virginia Office of Miners' Health, Safety, and Training, conducted an examination of the accident scene; interviewed contractors, miners, and mine management; and reviewed conditions and work practices relevant to the accident. See Appendix B for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

Paynter was operating the excavator on the DC8A Williamson bench that has a steep highwall on one side and steep hillside on the other. The width of the bench where Paynter operated the excavator started at 165 feet and narrowed to 54 feet. After the fall, the excavator and Paynter were located at the 328 Alma pit approximately 235 feet below (see Appendix C).

Investigators observed the right track impression of the excavator between the rock and the edge of the highwall. Investigators measured the rock to be 15 feet from the edge of the highwall. The track of the excavator measured 19 feet in length, and therefore at least four feet of the track would have extended over the highwall edge. There was also a five-foot indention in the face of the highwall which created a depression in the bench. Previous mining had filled the depression with loose unconsolidated material that was pushed over the highwall by a bulldozer. The right track of the excavator was positioned in the center of the depression. This indicated solid rock was only supporting one-half of the excavator's right track.

Due to marks from the excavator's bucket observed on the rock and a four-foot by four-foot by one-foot piece of the rock found next to it (see Appendix D), investigators determined that as Paynter attempted to move the rock closer to the edge of the highwall, the smaller piece of the rock broke off, releasing the stored energy of the excavator's hydraulic system. This would have caused the balance of the excavator to shift and travel over the highwall.

Weather

This surface mine is located adjacent to and above R.D. Bailey Lake which is known to generate foggy conditions. Also, local weather reports indicate foggy conditions with zero miles of visibility as early as 10:54 p.m. on May 15, 2024, until 7:54 a.m. on May 16, 2024. On the day of the accident, miners stated that fog was present in the 328 Alma pit and DC8A Williamson bench. Upon arriving on the mine property, each investigator reported a lack of visibility due to the heavy fog. Investigators drove at a crawling speed in their vehicles and followed the berms on the shoulder of the haul roads to arrive at the accident site. Investigators determined the foggy conditions contributed to the accident. During interviews, investigators learned that almost two weeks prior to the accident on the DC8A Williamson bench, another bulldozer operator working with Paynter stated he notified Tackett by radio that he was stopping work due to the foggy conditions and a lack of visibility.

Equipment Involved

The excavator involved in the accident was a Caterpillar Model 374F, owned by CM Energy. Due to the damage incurred during the accident, investigators could not conduct any performance or functionality tests on the excavator. Caterpillar's fleet monitoring diagnostic reports did not indicate that there were any mechanical issues with the excavator at the time of the accident.

Investigators were able to access the seatbelt and determined it to be functioning properly and did not appear to be used at the time of the accident. Investigators have determined that due to the condition of the operator's cab, not wearing the seatbelt did not contribute to the accident.

The manufacturer equipped the excavator with a rear-view camera and a monitor in the cab, but no video recording capability. Investigators determined the foggy conditions would have limited the effectiveness of the camera.

Ground Control Plan

The mine operator's Ground Control Plan (GCP) was submitted to MSHA in March 2017 and was acknowledged by MSHA in June 2017. The GCP did not address the hazard of limited visibility due to foggy conditions. The mine operator is required to establish and follow a GCP that will insure safe working conditions. Investigators determined that limited visibility due to fog was a known and common occurrence at this mine. The mine operator did not establish and follow a GCP that addressed this hazard, which contributed to the accident.

Illumination

According to interviews, the illumination provided by the equipment's operating lights is sufficient for the work being performed. When questioned about the potential for adding light plants to increase illumination, equipment operators stated light plants are a blinding hazard that diminishes visibility rather than enhances it.

Examinations

Investigators recovered the pre-operational examination records of the excavator, conducted by Paynter, at the accident scene. Investigators found no hazardous conditions noted in these examinations that contributed to the accident. James Reed, Day Shift Mine Foreman, conducted an examination of the DC8A area at the beginning of the shift from 3:25 p.m. to 5:00 p.m. Tackett conducted an on-shift examination from 8:45 p.m. to 12:32 a.m. and started conducting a pre-shift examination for the next shift at 2:00 a.m. Investigators determined that Tackett conducted the examinations properly. Tackett did not report any hazards in this area as far back as May 9, 2024.

Training and Experience

Paynter received experienced miner training on March 21, 2024, and task training on April 10, 2024, for the Caterpillar 374F excavator. According to interviews, Tackett discussed the fog, working on the bench, and the unwritten stop work policy with Paynter during the experienced miner training. Investigators determined Paynter received training in accordance with MSHA Part 48 training regulations. Also, Paynter has more than 25 years of experience operating excavators.

ROOT CAUSE ANALYSIS

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

Root Cause: The mine operator did not establish and follow a Ground Control Plan that insured safe working conditions.

Corrective Action: The mine operator revised its Ground Control Plan to include procedures to prevent a reoccurrence. The procedures include:

1) A foreman will conduct an additional on-shift examination of the mine during the night. In addition, the foreman will conduct a pre-shift examination during the night as required by the state of West Virginia.

2) When equipment operators report hazards, particularly visibility concerns, the mine operator has given equipment operators the ability to stop work and report the hazards to a foreman. Before operations can resume in the area, a foreman will evaluate and determine when it is safe to resume operations. Visibility concerns include excavator operators not being able to see the edge so they can know their distance from the edge, and bulldozer operators not being able to see to know when the load closest to the edge falls.

3) When the elevated bench in the mountaintop/area mining areas is less than 90 feet in width, excavators will not work on the bench during nighttime hours. This provision will also apply to contour mining benches less than 70 feet wide in that excavators will not work on such benches in nighttime hours.

4) An excavator may be used to preliminarily move the rock to the approximate middle of the bench or no closer than 30 feet from the edge of the outside wall to make room for a bulldozer to get behind the rock and push it over the inside edge.

The mine operator has retrained all miners on this revised Ground Control Plan.

CONCLUSION

On May 16, 2024, at approximately 2:15 a.m., Virgil Paynter, a 59 year-old contract excavator operator with ten weeks of mining experience, died after the excavator he was operating traveled over a highwall and fell 235 feet before coming to rest on top of spoil material in the pit below. Paynter was ejected from the operator's cab during the fall.

The accident occurred because the mine operator did not establish and follow a Ground Control Plan that insured safe working conditions.

Approved By:

_____ _____

Craig Plumley Date
District Manager

ENFORCEMENT ACTIONS

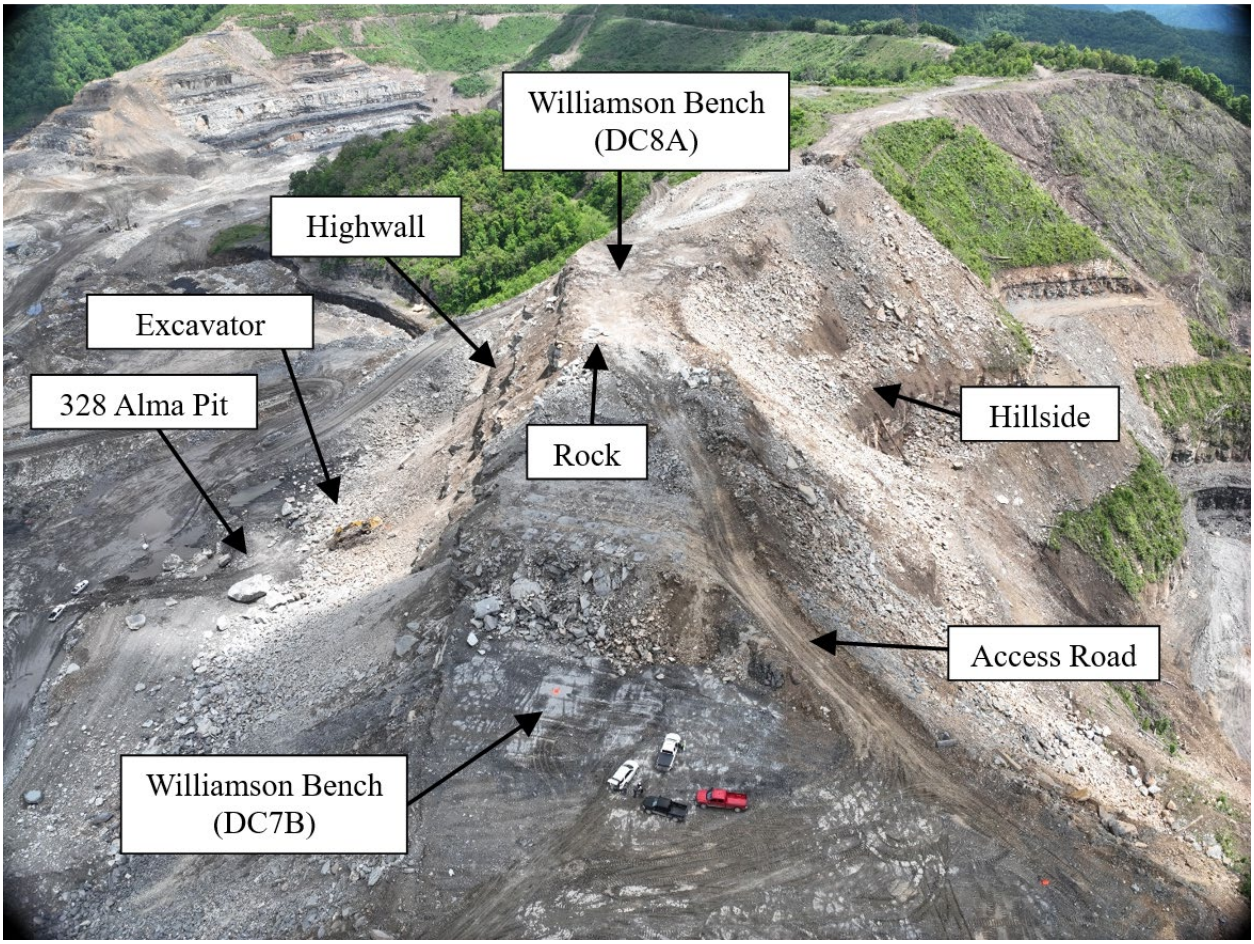
1. A 103(k) order was issued to CM Energy Operations, LP.

   A fatal accident occurred on May 16, 2024, at approximately 2:15 a.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(a) citation was issued to CM Energy Operations LP for a violation of 30 CFR 77.1000.

   A fatal accident occurred on May 16, 2024, when a contract excavator operator traveled over a highwall from the DC8A Williamson bench and was ejected from the excavator. The excavator and contract excavator operator fell 235 feet and came to rest on spoil material in the 328 Alma pit. The mine operator did not establish and follow a Ground Control Plan that insured safe working conditions.

APPENDIX A – Aerial View of Accident



APPENDIX B – Persons Participating in the Investigation

CM Energy Operations LP

Mark Weaver	President
Todd Bradford	Mine Manager
Lewis White	Safety Manager

Cornerstone Labor Services, Inc.

Dwayne Vance	Superintendent
James Reed	Day Shift Mine Foreman
James Tackett	Evening Shift Mine Foreman
Gerald Bailey	Coal Foreman
James Harris	Bulldozer Operator
Anthony Hall	Drill Operator
Michael Adams	Rock Loader Operator
Shane Christian	Coal Loader Operator/EMT

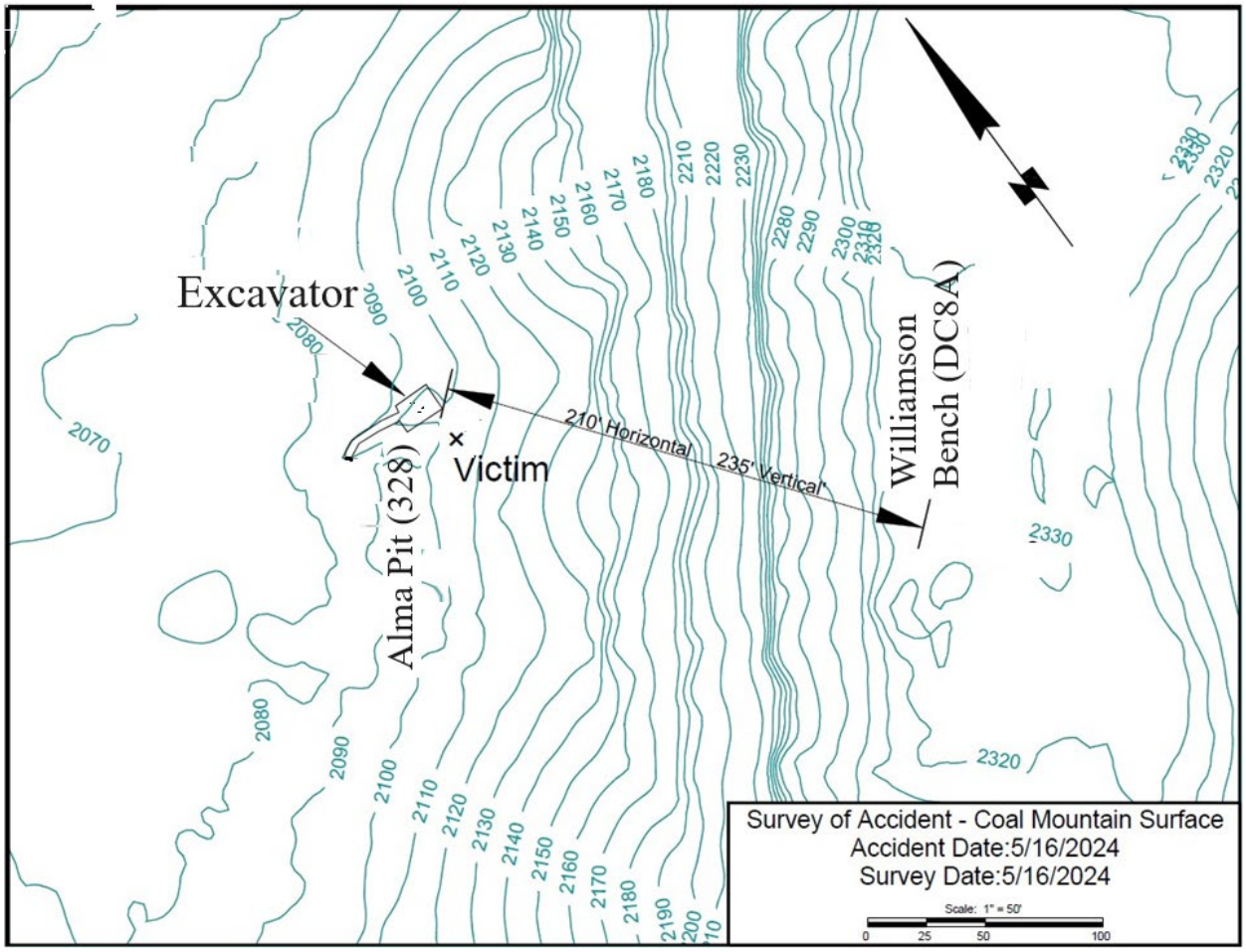
West Virginia Office of Miners Health Safety and Training

Mike Pack	Inspector-at-Large
Benjamin Hamilton	Surface Inspector
Kelly Blair	Surface Inspector
Ricky Browning	Surface Inspector
Shawn Coleman	Surface Inspector

Mine Safety and Health Administration

Craig Plumley	District Manager
Mark Muncy	Assistant District Manager
Herman Morgan	Supervisory Mine Safety and Health Specialist
Nicholas Christian	Supervisory Mine Safety and Health Inspector
Yancy Rode	Mine Safety and Health Specialist
Aaron Cline	Mine Safety and Health Inspector
Michael Keene	Mine Safety and Health Inspector

APPENDIX C – Map of Accident Area



APPENDIX D – Rock with Smaller Piece Broken Off