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UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Surface Coal Mine/Facility

Fatal Slip or Fall of Person Accident
February 27, 2017

Bishop Impoundment Area
Chestnut Land Holdings, LLC
Squire, McDowell County, West Virginia
ID No. 46-02380

Accident Investigator

Aaron D. Cline
Coal Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
District 12
4499 Appalachian Highway
Pineville, WV 24874
Brian Dotson, District Manager

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PHOTO OF ACCIDENT SCENE

OVERVIEW

On February 27, 2017, at approximately 10:00 p.m., Jason Kenneth Matthews, a 43-year-old plant attendant with 13 years of mining experience, received fatal injuries when he fell through an opening in a plate press. The victim was preparing to make repairs to the plate press when he fell onto a moving conveyor belt, which moved the victim to a transfer chute 55 feet from where he fell.

The accident occurred because fall protection was not used during work in an area where a risk of falling existed. Also, a safe means of access to this area was not provided.

GENERAL INFORMATION

The Bishop Impoundment Area is a surface mine, preparation plant, and impoundment that have the same MSHA ID number. This coal mine/facility is operated by Chestnut Land Holdings, LLC, which is a subsidiary of Southern Coal Corporation. The coal mine/facility is located in Squire, McDowell County, West Virginia. The mine/facility is in operation 7 days a week and employs 47 miners who work 2 shifts each day. Approximately 1,000 tons of coal are processed daily.

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

James C. Justice II………………… Controller
Patrick Graham……………………Senior Vice President
Kenny Lambert Jr………………… Director of Mining
Jack Jude…………………………... Superintendent
Danny Orick……………………….Surface Mine Foreman
Rocky Henry……………………… Surface Mine Foreman
Bruce Lambert……………………. Plant Foreman
Jeff Music…………………………..Control Room Operator and Plant Foreman

A regular (E01) safety and health inspection was started on January 20, 2017, and had not been completed when the accident occurred. However, there was no inspection activity on the day of the accident. The previous regular inspection was completed on June 2, 2016. The Non-Fatal Days Lost (NFDL) injury incidence rate for the mine/facility in 2016 was 0.00, compared to the national NFDL incident rate of 0.73 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On February 27, 2017, at 7:00 p.m., Matthews began his shift. At approximately 9:00 p.m., Matthews contacted Jeff Music, Control Room Operator and Plant Foreman, on a two way radio. Matthews informed Music of a problem with the plate press and requested assistance with the repairs. Music notified Danny Orick, Surface Mine Foreman, and requested assistance for Matthews. Orick instructed Ralph Sparks, Mechanic, to assist Matthews at the preparation plant.

At approximately 9:45 p.m., Sparks arrived on the second floor of the preparation plant and was informed by Matthews that one of the plates had broken and needed to be repaired. Matthews was using the jog feature on the plate press's control panel to create enough space between the plates to make the repairs. The jog feature is designed to move the plates only when holding constant pressure on a button; once released the plates stop moving. The plates became obstructed and would no longer move by using the jog control. Matthews told Sparks it would take a couple of hours to move the plates manually, and he would notify Sparks when he needed him again.

At approximately 10:00 p.m., as Sparks was leaving the plate press area, he observed Matthews climbing a ladder to the top of the plate press with a shovel in his hand, but he was not wearing a safety body harness (safety harness). When Sparks reached the top of the stairway, he heard a couple of objects fall and then he heard Matthews calling out for help. Sparks went to the plate press control cabinet and he de-energized the plate press with the emergency stop button. Sparks realized that the filter cake collecting (FCC) conveyor belt was still operating underneath the plate press, so he

went to the belt drive to depress the stop button. Next, Sparks searched, but was unable to locate Matthews. Sparks ran to the control room and instructed Music to shut down the preparation plant. Sparks informed Music of what occurred and asked for his assistance in locating Matthews.

At approximately 10:05 p.m., Sparks and Music located the victim inside the transfer chute between the FCC conveyor belt and the refuse collecting (RC) conveyor belt. Matthews was sitting upright with refuse material piled up around him to his chest and was unresponsive. At 10:06 p.m., Music returned to the control room to call Orick and request emergency medical technicians (EMTs) and to call 911.

At approximately 10:10 p.m., Orick and Richard Compton, Bulldozer Operator/ EMT, arrived at the preparation plant. When Compton went into the control room to ensure 911 was called, Music was on the phone with the 911 operator. Orick and Compton then went to the transfer chute. Orick told Compton not to enter the transfer chute until it was safe and everything was de-energized. Compton tried to communicate with Matthews while Orick confirmed everything was de-energized. Matthews did not respond to Compton.

Anthony Cordle and Thurman Slone, Loader Operators, heard of the accident on the CB radio. Cordle and Slone met Compton at the transfer chute with fall protection equipment (2-inch nylon strap and safety harness). Compton was too large to fit through the opening in the transfer chute, so Slone entered the transfer chute. When he reached Matthews, Compton instructed him to clear the material from around Matthews' chest and check for breathing and a pulse. Slone did not detect a pulse or breathing. After making several attempts, Slone exited the transfer chute.

At approximately 10:25 p.m., the Berwind Volunteer Fire Department arrived at the preparation plant followed by the War Volunteer Fire Department at 10:41 p.m. Fire department personnel secured the scene. At 10:52 p.m., McDowell County Emergency Ambulance Authority (MCEAA) arrived and evaluated the victim's condition. Matthews had no pulse. Emergency personnel contacted Dr. Talman, Emergency Room Physician, and at 11:20 p.m., Dr. Talman directed emergency personnel to not resuscitate. Both fire departments' personnel worked together to remove Matthews from the transfer chute.

INVESTIGATION OF THE ACCIDENT

On February 27, 2017, at 10:31 p.m., Orick called the Department of Labor National Call Center to report a trapped miner inside the preparation plant. A second call was made to the call center at 10:39 p.m. by Patrick Graham, Senior Vice President. He stated that an employee fell into a belt press conveyor, emergency services were called, and were currently on site. Graham also stated the employee was being extracted from the

conveyor and Compton said he may have life threatening and/or fatal injuries. A noncontributory citation was issued for a violation of 30 CFR § 50.10 because the mine operator did not contact MSHA immediately, at once, without delay, and within 15 minutes once they were aware of an entrapment of an individual which had a reasonable potential to cause death. The accident occurred at approximately 10:00 p.m., and the operator called the MSHA hotline at 10:31 p.m., a 30 minute delay.

The call center operator notified Jeff Presley, MSHA District 12 Ventilation Supervisor, of the accident at 10:43 p.m. and 11:05 p.m. Presley called Clark Blackburn, Assistant District Manager (Enforcement), to inform him of the accident. Blackburn called Rodney Lusk, Field Office Supervisor; Michael Keene, Coal Mine Safety and Health Inspector; and Aaron Cline, Coal Mine Safety and Health Inspector/Accident Investigator. On February 28, 2017, at 1:30 a.m., Lusk and Keene arrived at the preparation plant. Upon arrival, Keene issued a 103(k) order to preserve the accident scene and to prevent the destruction of any evidence that would assist in the investigation. Lusk and Keene secured and photographed the accident scene.

Cline arrived at the preparation plant at 1:45 a.m., and met with Lusk and Keene at the plate press. Cline obtained written statements from Music and Sparks and reviewed training records. Officials with the West Virginia Office of Miners Health Safety and Training (WVOMHST) and company officials participated in the investigation (see Appendix A).

On February 28, 2017, Educational Field and Small Mine Services dispatched Mike Browning, Training Specialist, to the mine/facility to review training records and the company's training plan.

On March 1, 2017, formal interviews were conducted by MSHA and WVOMHST at the WVOMHST office located in Welch, WV (see Appendix A).

On March 2, 2017, Rex Hampton, Coal Mine Safety and Health Electrical Specialist, Blackburn and Cline travelled to the mine/facility to conduct an electrical investigation of the plate press. No electrical hazards were identified.

On March 3, 2017, Brickstreet Insurance conducted training in fall protection and lock out/tag out procedures to be followed inside the preparation plant. Nicholas Christian, Field Office Supervisor, and Greg Ward, Coal Mine Safety and Health Inspector, observed the training.

On March 6, 2017, Cline conducted informal interviews at the mine/facility with Compton, Cordle, and Slone (see Appendix A).

DISCUSSION

Raw coal is processed through a preparation plant where coal is separated from the refuse. The refuse material consists of coarse (larger rock) and fines (a smaller, finer, wet material). The coarse refuse travels out of the preparation plant on the RC conveyor belt, while the fine refuse travels to the plate press.

Equipment Involved

The McLanahan plate press (serial number 2011263) consists of a series of 154 processing plates. Each plate measures 8 feet by 8 feet by 2 ¾ inches thick. The refuse material is pumped between the plates. The plate press uses hydraulic cylinders to squeeze the material between the plates, a process which forces water out of the refuse material. The plates have small holes similar to screens, that allow water to pass through but not the fines. The water is piped from the plates and carried away from the plate press. The pressure is then released from the plates allowing the fines to fall onto the FCC conveyor belt located underneath the plate press. The fines are then conveyed to a transfer chute where they are transferred onto the RC conveyor belt and carried out of the plant.

Caster type rollers are attached to the top of the plates allowing them to move along an "I" beam track. Each plate locks into a chain, which is located on top of the plate press, and extends from end to end (see Appendix B). In order to slide the plates manually, the locking mechanism on the chain must be released. This work can only be performed from the top of the plate press, which is 7 feet 7 inches above the floor of the preparation plant and 18 feet 7 inches above the FCC conveyor belt.

The width of an I-beam is 16 ½ inches. The accident investigation could not verify whether the victim was on the top of an I-beam or on top of the plates when he fell. Investigators saw boot prints in both areas.

The FCC conveyor belt is driven by a single 480 VAC, 50 hp motor. The belt is 72 inches wide and 155 feet long. It moves at approximately 3.8 feet per second. The material that travels on this belt is the refuse that falls from the plate press.

Safe Access and Fall Protection

Safety harnesses were provided by the mine operator and available for miners to use for fall protection. During interviews, Slone and Cordle stated the safety harness they used to recover the victim was lying on the plant floor near the ladder climbed by the victim. Emergency responders used this safety harness to recover the victim. However, the victim was not wearing or using any type of fall protection at the time of the accident. There was no safe means of access on the top of the plate press, and no means of tying off while on top of the plate press was provided.

Experience and training

Matthews had 13 years of total mining experience and started working at this facility on October 28, 2016. He received experienced miner training on October 28, 2016, and was task trained as a plant attendant on February 1, 2017. No training deficiencies were found during the investigation.

B. Lambert stated that fall protection was discussed during experienced miner training. About one week before the accident, MSHA inspector Michael Keene observed the victim wearing a safety harness the entire day.

ROOT CAUSE ANALYSIS

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

Listed below are the root causes identified during the analysis and the corresponding corrective actions that were implemented to prevent reoccurrence.

1. Root Cause: The mine operator failed to ensure safety belts and lines were used when there is a danger of falling, as required by 30 CFR § 77.1710(g).

   Corrective Action: The operator developed a written action plan outlining specific training conducted for all employees. This training covers fall protection, locking/tagging out of equipment, and blocking against motion. The operator also revised the training plan to include provisions for these three subjects. All miners have been trained.

2. Root Cause: The mine operator failed to provide a safe means of access to all areas where miners are required to work and travel, as required by 30 CFR § 77.205(a). An effective means was not provided for miners to tie off when working on top of the plate press.

   Corrective Action: The operator installed 8 tag lines, 2 on each side of both plate presses; the lower of the tag lines is utilized while travelling up a ladder or walking on top of the plates and the upper tag line is utilized when working on top of the plate press. The operator has provided a dual lanyard system (100% tie-off) in which miners are always tied off overhead to prevent falling. Also, the operator revised the ground control plan to address examinations, maintenance, and required use of the tag lines.

CONCLUSION

The miner, Jason Kenneth Matthews, received fatal injuries when he fell from the top of the McLanahan plate press onto an operating conveyor belt below, where he traveled 55 feet before coming to rest in a conveyor transfer chute. No fall protection was used when working from areas where a risk of falling existed. Also, the operator did not provide a safe means of access to all areas where miners are required to work or travel.

Signed by:

____ ________________

Brian M. Dotson Date
District Manager

ENFORCEMENT ACTIONS

1. Section 103(k) Order No. 9064248 issued on February 27, 2017, to Chestnut Land Holdings, LLC, Bishop Impoundment Area.

   An accident occurred at this operation on 2/27/2017 at 22:00. This order is issued under section 103(k) of the Federal Mine Safety and Health Act of 1977, to assure the safety of all persons at this operation and to prevent the destruction of any evidence which would assist in the investigation of the cause or causes of this accident. It prohibits all activity in the Preparation Plant until MSHA has determined that it is safe to resume normal mining operations in the area. The operator shall obtain prior approval from an Authorized Representative for all actions to recover and/or restore operations to the affected area.

2. Section 104(a) citation issued for violation of 30 CFR § 77.1710(g).

   A fatal accident occurred at this operation on February 27, 2017, when a Plant Attendant fell 18 feet 7 inches from the top of a plate press and landed on the operating Filter Cake Collecting conveyor belt. The victim was not using any fall protection equipment at the time of the accident.

3. Section 104(a) citation issued for violation of 30 CFR § 77.205(a).

   A fatal accident occurred at this operation on February 27, 2017, when a Plant Attendant fell 18 feet 7 inches from the top of a plate press and landed on the operating Filter Cake Collecting conveyor belt. The operator failed to provide safe means of access to all areas where miners are required to work and travel. There was no safe means for miners to tie off when required to work on top of a plate press.

APPENDIX A

Persons Participating in the Investigation

(Persons interviewed are indicated by a * next to their name)

Chestnut Land Holdings, LLC

Kenny Lambert Jr .... Director of Mining
Patrick Graham.......... Senior Vice President
Jack Jude .... Superintendent
Danny Orick.......... Foreman
*Bruce Lambert.......... Foreman
*James David Mitchell .... Electrician
*Jeff Music .... Control Room Operator/Foreman
*Ralph Joshua Sparks .... Mechanic
*Richard Compton .... Dozer Operator/Emergency Medical Technician
*Anthony Cordle .... Loader Operator
*Thurman Slone.......... Loader Operator
*Stanley Bolden .... Rock Truck Operator

West Virginia Office of Miners Health Safety and Training

Greg Norman.......... Director
John O'Brien.......... Inspector at Large
Doug Depta .... Assistant Inspector at Large
Kendall Smith .... Electrical Inspector
Billy Justus.......... Electrical Inspector
Ben Hamilton.......... Inspector
Donald Maynor .... Inspector

Mine Safety and Health Administration

Clark Blackburn.......... Assistant District Manager (Enforcement)
Rodney Lusk .... Field Office Supervisor
Nicholas Christian .... Field Office Supervisor
Charles Justice .... Acting Electrical Supervisor
Aaron D. Cline .... Coal Mine Safety and Health Inspector/Accident Investigator
Rex Hampton.......... Coal Mine Safety and Health Electrical Inspector
Greggory Ward.......... Coal Mine Safety and Health Inspector
Michael S. Keene .... Coal Mine Safety and Health Inspector
Joshua Bennett .... Coal Mine Safety and Health Inspector

APPENDIX B

Photos of Accident Scene

Overhead View of Plate Press

Photos of Accident Scene Cont'd.

Opening between plates where victim fell

Photos of Accident Scene Cont'd.

Transfer Chute where victim was located

APPENDIX C

Victim Information

Accident Investigation Data - Victim Information

Event Number: 7 0 0 3 3 1 2

U.S. Department of Labor

Mine Safety and Health Administration

Victim Information: 1

1. Name of Injured/Ill Employee:	2. Sex	3. Victim's Age	4. Degree of Injury:
Jason K. Matthews	M	43	01 Fatal

5. Date(MM/DD/YY) and Time(24 Hr.) Of Death: a. Date: 02/27/2017 b. Time: 22:15

6. Date and Time Started: a. Date: 02/27/2017 b. Time: 19:00

7. Regular Job Title: 116 Plant Attendant

8. Work Activity when Injured: 039 working on plate press

9. Was this work activity part of regular job? Yes X No

10. Experience	Years	Weeks	Days
a. This Work Activity:	0	16	0
b. Regular Job Title:	0	16	0
c. This Mine:	0	16	0
d. Total Mining:	13	0	0

11. What Directly Inflicted Injury or Illness? 002 fall from height

12. Nature of Injury or Illness: 220 fracture to neck at base of skull

13. Training Deficiencies: Hazard: New/Newly-Employed Experienced Miner: Annual: Task:

14. Company of Employment: (If different from production operator) Operator

Independent Contractor ID: (if applicable)

15. On-site Emergency Medical Treatment: Not Applicable: First-Aid: CPR: EMT: X Medical Professional: X None:

16. Part 50 Document Control Number: (form 7000-1)

17. Union Affiliation of Victim: 9999 None (No Union Affiliation)