FATAL RIB FALL ACCIDENT

CONSOLIDATION COAL COMPANY
LOVERIDGE MINE
PERMIT NO. D-403

REGION ONE – WESTOVER
14 COMMERCE DRIVE, SUITE ONE
WESTOVER, WV 26501
ALAN LANDER, INSPECTOR-AT-LARGE
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GENERAL INFORMATION

On July 29, 2010, at approximately 11:45 a.m., Mr. Jesse Adkins, 39 years of age, was fatally injured by a rib roll. At the time of the accident, he was working as a miner bolter on the left side of the Voest-Alpine continuous miner, operating on the left side of the 9 South Mains section. Mr. Adkins had a total of seven (7) years mining experience; with over three (3) years at the Loveridge Mine. Training records revealed approximately three (3) years four (4) months experience bolting off the Voest-Alpine continuous miner. The crew was mining above the coal seam in the upper portion of the belt overcast for the future 18-D section.

At noon, Mr. Alan Lander, Inspector-at-Large for Region One of the Office of Miners’ Health, Safety and Training (OMHS&T), was notified by the Mine and Industrial Accident Emergency Operations Center that they had received a call from Marion County Emergency Medical Services and were responding to a “partial mine collapse” accident at the Loveridge Mine. At approximately 12:10 p.m. Mr. Brian Stock, Corporate Safety Manager for Consol Energy Company, called the Region One Office to report a serious accident at the mine. Approximately 12:15 p.m., Mr. Tadd Rankin, District Mine Inspector for OMHS&T, was contacted by Mr. Lander and instructed to go directly to the Loveridge Mine. A joint investigation with the Mine Safety and Health Administration was immediately started.

DESCRIPTION

The Consolidation Coal Company, Loveridge Mine, Permit No. D-403 is located near Metz, in Marion County, West Virginia. The underground mine employs 640 persons of which 583 are underground miners. The Pittsburgh No. 8 seam is accessed by one (1) slope and eight (8) shafts. The mine produces approximately six (6) million tons of coal annually from its four (4) continuous miner units and one (1) longwall unit. Coal is transported from the working sections in the mine via conveyor belts to the surface. Battery and trolley powered rail mounted vehicles are used to transport supplies and mine personnel.

Development of the seven (7) entries for the 9 South Mains section is achieved by one (1) Voest-Alpine continuous miner with integral roof bolters, and one (1) Joy 14ED continuous miner with integral bolters. Two (2) Joy Loading machines and two (2) Joy/Stamler ram cars are utilized to remove the coal from each side of the section.
On July 29, 2010, the 9 South Mains crews entered the mine at approximately 8:00 a.m. under the supervision of Mr. Larry Mayle, left side section foreman, and Mr. Larry Broadwater, right side section foreman. The left side crew consisted of Mr. Richard Barnhart, miner operator; Mr. Donald Banko, right side miner bolter; Mr. Jesse Adkins (victim), left side miner bolter; Mr. Frank Polce, loading machine operator; Mr. James Wilkins, ram car operator; and Mr. Ronald Buckley, mechanic. Upon arrival on the section at approximately 8:40 a.m., Mr. Mayle read sections of the mine roof control plan to the crew. He then proceeded to examine the working faces. This was not the regular section or crew for Mr. Mayle. He was filling in for the regular section foreman. The midnight shift’s left side crew had mined approximately nineteen (19) feet of rock in the 18-D belt trench. Toward the end of the shift they backed the continuous miner out of the face for a distance of approximately fifty (50) to sixty (60) feet. Their plan was to clean up rock after the face had fallen. After loading one (1) ram car, the section conveyor belt stopped, preventing the ram car from being unloaded and the continuation of the clean-up. With the day shift crew on the section, the midnight crew proceeded to leave the face area.

Mr. Barnhart, miner operator, walked the miner cable up to the continuous miner and checked the cutter bits and water sprays. He asked the section mechanic, Mr. Buckley, to help replace a couple of broken cutter bits on the head of the continuous miner. Mr. Barnhart positioned the continuous miner against the left rib to facilitate a walkway along the right side of the machine. The continuous miner was then approximately twenty (20) feet from the face. While the broken bits were being removed, Mr. Joseph Morgan, Foreman Mentor, came upon the crew to see how they were progressing. He and Mr. Barnhart walked along the left rib to the face to examine the rib. Then they measured from the mine roof to the bottom and had approximately eight (8) feet. A total height of fourteen (14) feet is needed for the belt trench. They examined the right rib as they walked back to the continuous miner. During the interim, the roof support supplies were loaded onto the continuous miner. Two (2) test roof bolts were installed, and then Mr. Barnhart trammed the continuous miner to the face while Mr. Morgan walked to the Joy loading machine to help the operator align the laser sights.
The ATRS jacks were set against the mine roof, and the face was undercut. The ATRS jacks were then lowered, and the continuous miner backed up to start to cut the roof. The ATRS jacks were reset, and Mr. Barnhart started to cut the roof. He had mined approximately three (3) to four (4) feet of the roof and was about to signal the roof bolters to lower their ATRS jacks. Mr. Barnhart saw a flash from where Mr. Adkins had been standing. Mr. Barnhart immediately hit the panic button on the remote box to remove the power from the continuous miner. He and the right roof bolter, Mr. Banko, went around the boom of the miner and found the victim pinned against the left side of the machine near the rear bumper.

Mr. Morgan was helping Mr. Polce, loading machine operator, adjust the laser when he heard the call for help. After seeing the size of the rock pinning Mr. Adkins, Mr. Morgan went to the right side section to summon help. He instructed Mr. James Wilkins, the ram car operator, to get jacks, cribs and first aid equipment and to deliver them to the accident site. Mr. Morgan then went to the section telephone to relay the information to the dispatcher.

Mr. Adkins was extracted by the crews using lifting jacks and crib blocks. Emergency Medical Technicians, Mr. Melvin Delaney (working on the East Mains Haulage) and Mr. Dana Burdette (working in 17-D), were notified to go immediately to the accident site. When they arrived on the section, the crews were preparing Mr. Adkins to be removed from the mine. No vital signs were detected, and CPR was started. Mr. Adkins was placed in the bucket of the ram car, and CPR was administered while transporting him to the end of the section supply track. He was moved from the ram car to a rail mounted man trip. CPR was continued throughout the trip to the surface. Marion County Emergency Service was waiting at the elevator and continued the attempt to revive Mr. Adkins. Mr. Matt Smith, Marion County Medical Examiner, pronounced Mr. Adkins dead at the mine at approximately 1:18 p.m.

**FINDINGS OF FACT**

1) The 18-D belt trench was being mined eight and one half (8½) feet high and seventeen (17) feet wide.

2) The belt trench consisted of a top portion of four (4) feet of gray claystone and a bottom portion of four and one half (4½) feet of unconsolidated black shale, gray claystone and wild coal.
3) MSHA Technical Support Roof Control Specialist defined the rib failure as “a system of curvilinear, meandering, slickensides that ran nearly parallel with the trench rib and dipped steeply (roughly fifty-five (55) to sixty (60) degree) southward into the left rib of the excavation. It appeared that the slickensides allowed the upper gray claystone and some of the underlying coal/shale/claystone to detach and fall against the continuous mining machine and the victim.”

4) The rock that fell from the left rib was six (6) inches to sixteen (16) inches thick, ranging from twenty-four (24) inches to fifty-five (55) inches in height and approximately twenty-three (23) feet long.

5) The rock fell from near the top of the eight and one half (8½) feet high left rib.

6) The rock extended five and one half (5½) feet outby and extended seventeen and one half (17½) feet inby the bumper of the continuous miner. This was the location of the victim prior to the accident.

7) Rib roll protectors are installed on both sides of the Voest-Alpine, ABM 14 (Serial number 056) continuous miner at the integral mounted roof bolter station.

8) The Voest-Alpine continuous miner was operated by a remote control radio, Sandik MB450.

9) Mr. Jesse Adkins was a classified continuous miner operator working as the left side miner bolter.

10) Afternoon section foreman Gary Sloan had been reporting bad ribs. Two shifts prior to the accident Mr. Sloan had the continuous miner operator back up to clean up rock that had fallen from the ribs.

11) On the shift prior to the accident, the miner operator reported to the oncoming miner operator that he had backed the continuous miner out of the face because of rock that fell out of the face.

12) Both miner bolters on the shift prior to the accident reported that they had warned the oncoming crew of a bad left rib.

13) The left side miner bolter on the shift prior reported that he had tried to pull down the rock involved in the accident. The rock was estimated to be twelve (12) inches thick and a three (3) inch gap.
14) The right side roof bolter, Mr. Don Banko; continuous miner operator, Mr. Richard Barnhart; Foreman Mentor, Mr. Joseph Morgan; left side section foreman, Mr. Larry Mayle; and midnight section foreman, Mr. Brian Leonard, stated the ribs were “normal” prior to the accident.

15) At the time of the accident the eighteen (18) inch ventilation tubing was hung along the left rib at the roof line in the belt trench development area.

16) Rib protectors that are provided on both sides of the Voest-Alpine continuous miner were extended and contacted with both ribs.

17) The victim was standing near the rear of the continuous miner at the time of the accident. He was outby the protection zone of the rib protectors. It was a general practice that when mining in rock (example: an overcast), the roof bolters stand toward the rear of the continuous miner to prevent being struck by flying debris.

18) At the start of the shift Mr. Don Banko, the normal left side roof bolter on that machine, decided to change to the right side roof bolter.

19) The crews were in compliance with the approved roof control plan.

CONCLUSION

While working as a roof bolter on the left side of the continuous miner developing the 18-D belt trench, Mr. Jesse Adkins was fatally injured when he was struck by a falling section of rock and was pushed into the continuous miner.

ENFORCEMENT ACTION

The following enforcement action was taken as part of the investigation.

A non-assessed control order was issued in accordance with West Virginia Code Chapter 22A, Article 2, Section 68.

The West Virginia Office of Miners’ Health, Safety and Training issued two (2) Notices of Violation during the investigation.
One of these violations pertained to the accident and was issued as follows pursuant to West Virginia Code Chapter 22A, Article 2, Section 25(a):

It was determined during the investigation of a fatal accident that the ribs in the 18-D belt trench were not supported or controlled adequately to protect persons from falling rock. This is a violation of a health or safety statute; the violation is of a serious nature; and the violation involved a fatality.

RECOMMENDATIONS

An addendum to the Roof and Rib Control Plan for the Loveridge Mine has been submitted and approved to address rib bolting at the mine.

The Comprehensive Mine Safety Program for the mine has been amended to include on:

Page No. 4 b) (1) (A) “Any unusual or hazardous condition found during the workplace examination must be communicated with the miners involved in the area and must be communicated to the oncoming shift during the pre-shift call out.”

Page No. 5 c) (I) “Any unusual or hazardous condition found during the workplace examination must be communicated with the miners involved in the area and must be communicated to the oncoming shift during the pre-shift call out.”

ACKNOWLEDGEMENT

The West Virginia Office of Miners’ Health, Safety and Training, gratefully acknowledges the cooperation of the employees and management of Consolidation Coal Company’s Loveridge Mine, Mine Safety and Health Administration, and the United Mine Workers of America during this investigation.
MINE INFORMATION

COMPANY Consolidation Coal Company

MINE NAME Loveridge No.22 Mine

WV PERMIT D-403

ADDRESS P.O. Box 40, Fairview, WV 26570

COUNTY Marion County

DATE PERMIT ISSUED WORKING STATUS Active

LOCATION Metz, West Virginia

UNION X NON_UNION

DAILY PRODUCTION 21,000 Tons

ANNUAL PRODUCTION TO DATE 2,907,534 Tons

TOTAL EMPLOYEES 650 NUMBER OF SHIFTS 3

NAME OF COAL BED Pittsburgh

SEAM THICKNESS 7 Feet

ACCIDENT INCIDENT RATE 5.2 LOST TIME ACCIDENTS 21

TYPE OF HAULAGE Belt

WV OMSHT INSPECTOR Tadd Rankin

DATE OF LAST INSPECTION July 28, 2010
VICTIM INFORMATION

NAME OF VICTIM       Jesse Adkins
ADDRESS             400 Brown Ave., Belington, WV 26250
AGE 39              SOCIAL SECURITY NUMBER XXX-XX-1015
TOTAL MINING EXPERIENCE 7 years
EXPERIENCE AT THIS MINE 3 years
OCCUPATION AT TIME OF ACCIDENT Roof bolter on continuous miner
REGULAR OCCUPATION Continuous miner operator
AVERAGE NUMBER OF HOURS WORKED PER WEEK 60 hours
AVERAGE NUMBER OF HOURS WORKED PER DAY 10 hours
AVERAGE NUMBER OF DAYS WORKED PER WEEK 6 days
NORMAL HOURS WORKED PER SHIFT 10 hours
COAL MINER’S CERTIFICATION 1-14049
OTHER CERTIFICATIONS Mine Rescue Team Member (Not at this mine)
SPOUSE’S NAME         Melissa Adkins
DEPENDENTS One (1) Daughter and one (1) Son
DATE OF ACCIDENT 29th DAY OF July, 2010 AT 11:55 O’CLOCK a.m.
CAUSE OF ACCIDENT Rib roll pinned victim against continuous miner.