UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION
COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION
Surface Coal Mine

MACHINERY ACCIDENT
October 22, 2008

at

AM&E Coal Incorporated Mine #1
AM&E Coal Incorporated
Cornettsville, Perry County, Kentucky
ID No. 15-19283

Accident Investigators

John C. Boylen
Roof Control Specialist, District 7

Ronald Medina
Mechanical Engineer, Technical Support

Originating Office
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TABLE OF CONTENTS

OVERVIEW

At approximately 2:45 p.m., on Wednesday, October 22, 2008, Rodney Blevins, a 40 year old bulldozer operator was fatally injured in a machinery accident when the Caterpillar D8R bulldozer he was operating rolled down a steep 80 feet embankment. This was Blevins' first day on the job at this mine. The accident occurred as the victim was constructing a bench in preparation for an excavator. While constructing the bench, the bulldozer slid down the embankment and overturned. The victim was not wearing a seat belt. He was ejected from the bulldozer, and sustained fatal injuries.

The accident occurred because the victim had not been trained in safe working procedures while operating the Caterpillar D8R bulldozer to prevent overtravel and overturning when working on an elevated roadway. A program was not in place at the mine to ensure that seat belts are worn.

GENERAL INFORMATION

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

Marguarite Carroll ..... Owner
James P. Couch ..... Superintendent/Director, Health & Safety

Prior to the accident, the Mine Safety and Health Administration (MSHA) had not conducted an E01 inspection because the operation was placed in New Mine status on August 6, 2008 and was not placed in active status until October 9, 2008. The Training Plan for the mine was approved on September 22, 2008 and the Ground Control Plan was acknowledged on September 23, 2008. The mine had reported no accidents prior to October 22, 2008.

The AM&E Mine is a small surface mine that employed 10 miners at the date of the accident. The Mine is located 1.75 mines southwest on KY Highway 699 from Cornettsville, Perry County, Kentucky. The mine produces coal from the Hazard 5A seam using contour/mountain top removal. The drilling, blasting, and coal hauling operations are contracted. Removal of overburden, loading of coal trucks, reclaiming, and daily maintenance is accomplished by mine employees utilizing off road haul trucks, dozers, track loaders, and end loaders. The mine operates one shift (7:30 a.m. to 5:30 p.m.), 5 to 6 days per week.

DESCRIPTION OF ACCIDENT

On Wednesday, October 22, 2008 at approximately 7:00 a.m., Rodney K. Blevins arrived for his first day of work at this mine. Blevins rode in a company pick-up truck with J. P. Couch (Mine Superintendent/Safety Director) and Wayne Engle (Land Owner/Equipment Operator) to the area where Blevins would be working. Engle instructed Blevins to construct a pad so the excavator would be able to load rock trucks. After completing this assignment, Blevins was to construct a bench around the side of the mountain for the excavator. The three men returned to the area where a Caterpillar D8R dozer was parked. Couch instructed Blevins to fuel the dozer and back drag an area for the haul trucks, prior to proceeding to the area to construct the pad and the bench for the excavator.

Blevins arrived at the area where he was to construct the pad for the excavator between 8:00 and 8:30 a.m. Blevins constructed the pad and was working on constructing the bench around the mountain, as instructed. There was no contact with Blevins during this time frame, because of no radio communications in the dozer he was operating. At approximately 1:00 p.m., Couch noticed that Blevins had stopped the dozer. Blevins had completed approximately 100 feet of the bench. Unsure of the time because he had no watch, Blevins had stopped for lunch. Couch wanted to see if everything was all right, so he drove his truck up the grade to where Blevins had stopped the dozer. Couch observed the work that was completed and told Blevins to continue the bench as far as he could until quitting time. Couch then drove back down the grade to an area where Dyno Nobel, a blasting contractor, was loading holes in preparation to blast. From this vantage point, Couch stated he could see most of the mining operations, but as Blevins extended the bench, he was no longer in Couch's view.

At approximately 2:45 p.m., Justin Nataro, an employee of American Blasting Company, was the first person to notice the D8R dozer had rolled down the 80 foot embankment. He immediately notified his supervisor, David Lee, who was nearby and they immediately notified Couch of the accident. Michael Ayers, driver of a blasting truck, also became aware of the rollover and immediately scaled down the drilled bench, approximately 40 feet, and proceeded to the overturned D8R dozer. Ayers checked for a pulse and found no signs of life. He then motioned toward the drill bench for help. Both David Lee and Justin Nataro scaled down the drill bench to the D8R dozer. They also checked for vital signs, but found no signs of life.

After being informed that the dozer had turned over, Couch contacted Oliver "Ringo" Vandant, excavator operator, via CB radio. Couch asked Vandant if he was able to see the dozer working on the hill and Vandant replied that he "could not see the dozer." After the brief conversation with Vandant, Couch slid down the drill bench slope to reach the overturned dozer. Couch, who was also a Mine Emergency Technician (MET), checked for vital signs, but none were found. Couch was informed that the proper authorities, including MSHA, had been contacted. Couch then instructed his personnel to build a road for access to the overturned dozer. Clayton Brown, Perry County Coroner, arrived on the scene and pronounced the victim dead at 4:45 p.m.

INVESTIGATION OF THE ACCIDENT

The Mine Safety and Health Administration (MSHA) was notified of the accident at 2:55 p.m. on October 22, 2008, by telephone from Marguarite Carrol, Mine Owner, to the National Call Center. MSHA inspectors were dispatched to the mine. A 103 (k) Order was issued at 4:25 p.m. by Coal Mine Inspector, Charlie Fields. John Boylen, Roof Control Specialist District 7, traveled to the mine site and began an investigation the same day. Ron Medina, Mechanical Engineer of the MSHA Approval and Certification Center was also assigned to assist in the investigation. The accident investigation was conducted in cooperation with the Commonwealth of Kentucky Office of Mine Safety and Licensing (OMSL), with assistance from the mine operator, employees, and blasting contractors, Dyno Noble and American Blasting Company. Interviews were conducted on October 23, 2008, at the Kentucky OMSL office in Hazard, Kentucky. A list of persons who participated in the investigation is contained in appendix A.

DISCUSSION

Physical Factors

The accident occurred while Blevins was constructing a bench along a steep hillside. Blevins had completed approximately 200 feet of bench with a berm. Although a berm was present, it was marginal as it was constructed on roots, small trees and brush. Approximately 30 feet beyond this constructed bench, Blevins encountered a large rock, approximately 17 feet long, 6 ½ feet wide and 5 feet thick. While attempting to dislodge this rock, a segment of the improperly constructed berm (approximately 30 feet long and 8 feet thick) failed, allowing the D8R dozer to slide toward the right. The D8R dozer slid down the steep embankment approximately 55 feet before rolling over, making a complete revolution, and coming to rest on its left side. Blevins was ejected and was found lying in a prone position beside the D8R dozer.

General Machine Information

The machine involved in the accident was a Caterpillar D8R Track-Type Bulldozer (S/N 7XM0569) equipped with a fully enclosed operator's cab, elevated final drives for each track, a dozer blade, and a ripper attachment. The operating weight of the D8R Bulldozer was approximately 92,000 pounds. It was equipped with a six cylinder Caterpillar 3406 turbocharged and after-cooled diesel engine. The hour-meter showed 12,057.9 hours of operation. The transmission had three forward speeds and three reverse speeds. The machine was equipped with a rollover protective structure (ROPS), with a certification test weight of 105,800 pounds; and a falling object protective structure (FOPS). The machine was also equipped with a lap seat belt. The machine was examined and tested by Ron Medina, Mechanical Engineer from MSHA's Mechanical and Engineering Safety Division, Approval and Certification Center. When the bulldozer cab was examined, the roll over protection was intact and the seat belt was unlatched. When tested, the lap seat belt latched and unlatched properly. The victim was ejected from the bulldozer, resulting in fatal injuries. Other than damage caused by the accident, no equipment defect was found.

Weather

The weather at the time of the accident was approximately 50 degrees Fahrenheit, partly cloudy, no precipitation, and winds 5 to 11 miles per hour. Weather was not a factor in this accident.

Training

There are several issues concerning the training of Blevins. Blevins received five (5) hours annual refresher training on October 21, 2008, from Eastern Kentucky Coal Consultants. According to Jerry Gilliam of Eastern Kentucky Coal Consultants, Blevins was scheduled to receive the additional three (3) hours of training the next day. Instead of returning to receive the additional training, Blevins went to work on October 22, 2008 at AM&E.

The only documents Blevins presented to AM&E of previous surface mining experience was a Certified Surface Miner's card, issued by OMSL and five (5) hours annual refresher training. AM&E did not provide training for Blevins under 30 CFR, Section 48.26 (Experienced Miner Training), or Section 48.27 (Task Training), as required. James P. Couch stated on October 23, 2008, that he had not seen the Training Plan for AM&E Coal Incorporated Mine #1. The plan was approved by MSHA on September 22, 2008.

AM&E was required, by the Approved Training Plan, to provide Experienced Miner Training to Blevins, prior to any work assignments. This training would have introduced him to his work environment, which at the very least, included

traffic patterns, existing highwalls and conditions of highwalls, drainage ditches and ponds, blasting procedures and signals, mine map review, location of medical supplies, known present hazards, company rules and policies, hazard communications and location of Material Safety Data Sheet (MSDS) records, and the mine's communications system. A very important part of Experienced Miner Training required the Mine Operator to train Blevins in the parameters of the Ground Control Plan, dated September 23, 2008. On October 23, 2008 the Superintendent/Safety Director, James P. Couch, stated that he had not completely read the Ground Control Plan for the mine. Page 2 of the plan, requires a minimum bench width of twenty five (25) feet, but the bench, in some locations constructed by Blevins, measured only sixteen (16) to eighteen (18) feet in width.

AM&E was also required by their Approved Training Plan to provide Blevins New Task Training under 30 CFR, Section 48.27, prior to being assigned a new task. This training would have included safety and health aspects and safe work procedures of the assigned task. Task Training for the D8R Caterpillar Dozer would have required a demonstration and discussion of the company policies and rules, safe operating procedures for the work task, equipment or machinery operation, chemicals and protective measures to take against these hazards, and the mine's HAZ-COM program. Task Training would have informed Blevins that he was required to wear the seat belt where there is danger of overturning and where roll-over protection is provided for the equipment. On October 23, 2008, the Superintendent/Safety Director, James P. Couch, stated that he "Probably did not" instruct Blevins to wear the seat belt. Mr. Couch also stated, "Way I look at it, if a man got thirteen years experience, I shouldn't have to tell him, he should know better." This Task Training would have also required Blevins to participate in these demonstrations and discussions. Blevins would have to have attained proficiency operating the D8R Caterpillar Dozer through supervised practice during non-production, or supervised operation during production. The only miner on the property that had experience operating this particular dozer did not have any contact with Blevins prior to the accident. A discussion with the miner indicated that this D8R Caterpillar Dozer was "quick in second gear." Other than Blevins stating he could run the D8R Caterpillar Dozer, there were no records indicating he had any previous experience operating a D8R Caterpillar Dozer.

It was determined that the Mine Operator's failure to provide the required Experienced Miner Training and Task Training to Blevins was a root cause of this fatality. The training would have provided Blevins with the necessary information requiring the use of seat belts and minimum requirements of bench width. Additionally the training would have permitted the Mine Operator to evaluate Blevins' ability to operate the D8R Caterpillar Dozer through

supervised practice during non-production or supervised operation during production.

ROOT CAUSE ANALYSIS

An analysis was conducted to identify the most basic causes of the accident that were correctable through reasonable management controls. During the analysis, root causes were identified that, if eliminated, would have either prevented the accident or mitigated its consequences. The following root causes were identified as a result of the investigation. In each case, an effective management system, procedure or policy was not in place to assure compliance with the regulation or safe mining procedure.

Listed below are root causes identified during the analysis and the respective corrective actions implemented to prevent a recurrence of the accident:

1. *Root Cause:* The Mine Superintendent/Safety Director did not have a copy, and had not read the approved Training Plan for the mine.
   Corrective Action: The Mine Superintendent/Safety Director now has a copy and has read the Approved Training plan for the mine.

2. *Root Cause:* Management failed to provide the victim with Experienced Miner Training. An existing procedure, the Approved Training Plan for the mine, was not followed.
   Corrective Action: Management shall adhere to the existing training program and provide proper training. Also, the operator will assure that instructors are aware of the requirements affecting miners to be trained.

3. *Root Cause:* Management failed to task train the victim. An existing procedure, the Approved Training Plan for the mine, was not followed.
   Corrective Action: Management shall adhere to the existing training program and provide proper training. Also, the operator will assure that instructors are aware of the requirements affecting miners to be trained.

4. *Root Cause:* Management failed to make certain that all individuals operating equipment use seat belts.
   Corrective Action: Management has instructed all miners to use their seat belts while operating equipment.

5. *Root Cause*: Management training procedures were inadequate and failed to ensure that equipment operators could safely perform tasks assigned and maintain control of equipment.

Corrective Action: Management has trained miners properly on policies and procedures to ensure that equipment operators can safely perform assigned tasks.

CONCLUSION

The accident occurred as a result of AM&E's failure to ensure that the Training Plan for the mine was followed and assure all miners wear seat belts while operating equipment. The Superintendent/Safety Director responsible for conducting the training had not read the Training Plan for the mine.

Approved By:

Irvin T. Hooker
District Manager for District 7

April 15, 2009
Date

ENFORCEMENT ACTIONS

1. A 103(k) Order, No. 8331749, was issued to ensure the safety of the miners until the investigation could be completed.

2. A 104(d)(1) citation, S&S, High Negligence, Number 8333664, was issued to AM&E Coal Incorporated for violation of 30 CFR, Subpart 48.26(b)(6). On October 22, 2008, a dozer operator, working his first day on the job, was fatally injured when the D8R Caterpillar bulldozer (S/N 7XM05069) he was operating rolled down an eighty (80) feet embankment. The Operator failed to provide Newly Employed Experienced Miner training, as required by 30 CFR, 48.26. The Approved Training Plan, dated September 22, 2008, requires the Operator to conduct a mine tour to acquaint newly experienced miners to different work areas, traffic patterns, conditions of existing highwalls, drainage ditches and ponds, blasting procedures and signals, known hazards present at the time, company rules and policies, and communication systems.

   The Operator also failed to follow another important provision of the Training Plan. The plan requires that the Operator review the Ground Control Plan with newly employed experienced miners. The plan in effect at the time of the accident was dated September 23, 2008. The Ground Control Plan states specifically on Page 2, that benches are required to be a minimum of twenty five (25) feet in width. However, the bench constructed by Blevins was measured to be only sixteen (16) feet in width. The Superintendent/Safety Director also testified on October 23, 2008, that he had not read the Training Plan. These conditions and practices contributed to the occurrence of the fatal accident.

3. A 104(d)(1) order, S&S, High Negligence, Number 8333665, was issued to AM&E Coal Incorporated for violation of 30 CFR, Subparts 48.27(a)(2)(i) and (ii). The Operator failed to provide Task Training required by 30 CFR, 48.27(a). The Task Training and instruction in health and safety aspects and the safe operating procedures for work tasks of the D8R Caterpillar bulldozer (S/N 7XM05069) was not provided to Rodney Blevins. The only miner on the property with experience operating this D8R Caterpillar bulldozer did not have contact with Blevins prior to the fatal accident. During a discussion, the miner stated that this D8R Caterpillar bulldozer was "quick in second gear." The required "supervised practice" training was not given to Blevins during non-production activities, nor was training for "supervised operation" during production, given to Blevins. Task Training, if given, would have also

instructed Blevins that the seat belt was required to be worn where there is danger of overturning and where rollover protection is required. Roll over protection was provided on the D8R Caterpillar bulldozer involved in the fatal accident on October 22, 2008. The Superintendent/Safety Director testified on October 23, 2008 that he had not read the training plan, dated September 22, 2008, which contains provisions for Task Training. These practices contributed to the occurrence of the fatal accident.

4. A 104(a) citation, S&S, Moderate Negligence, Number 8333666, was issued to AM&E Coal Incorporated for violation of 30 CFR, Subpart 77.1710(i). The fatal accident investigation of the Machinery Accident determined that the seat belt provided for the Caterpillar D8R Bulldozer (S/N 7XM05069) was not being worn as required. When the bulldozer cab was examined, the roll over protection was intact and the seat belt was unlatched. When tested the lap seat belt latched and unlatched properly. The victim was ejected from the bulldozer resulting in fatal injuries.

5. A 104(a) citation, S&S, Moderate Negligence, Number 8333667, was issued to AM&E Coal Incorporated for violation of 30 CFR, Subpart 77.1607(b). The fatal accident investigation on the Machinery Accident determined that the operator of the Caterpillar D8R bulldozer was not in full control while it was in motion. On October 22, 2008 a dozer operator received fatal injuries as a result of the Caterpillar D8R overturning from the elevated mine bench.

Appendix A
List of Persons Participating in the Investigation

AM&E Mining Coal Incorporated

Marguarite Carroll ..... Owner
James P. Couch ..... Mine Superintendent/Safety Director
Tonya Wagers ..... Rock Truck Operator/MET
Wayne Engle ..... Equipment Operator/Land Owner
Oliver Vanzant ..... Mechanic
Bill McMurray ..... Numan Tractor Technician
Levi Stidham…… Bulldozer Operator

Blasting Contractor

David Lee ..... American Blasting Company
Justin Notaro ..... American Blasting Company
Bobby Gray ..... Dyno Noble
Michael Ayers ..... Dyno Noble

Commonwealth of Kentucky Office of Mine Safety and Licensing

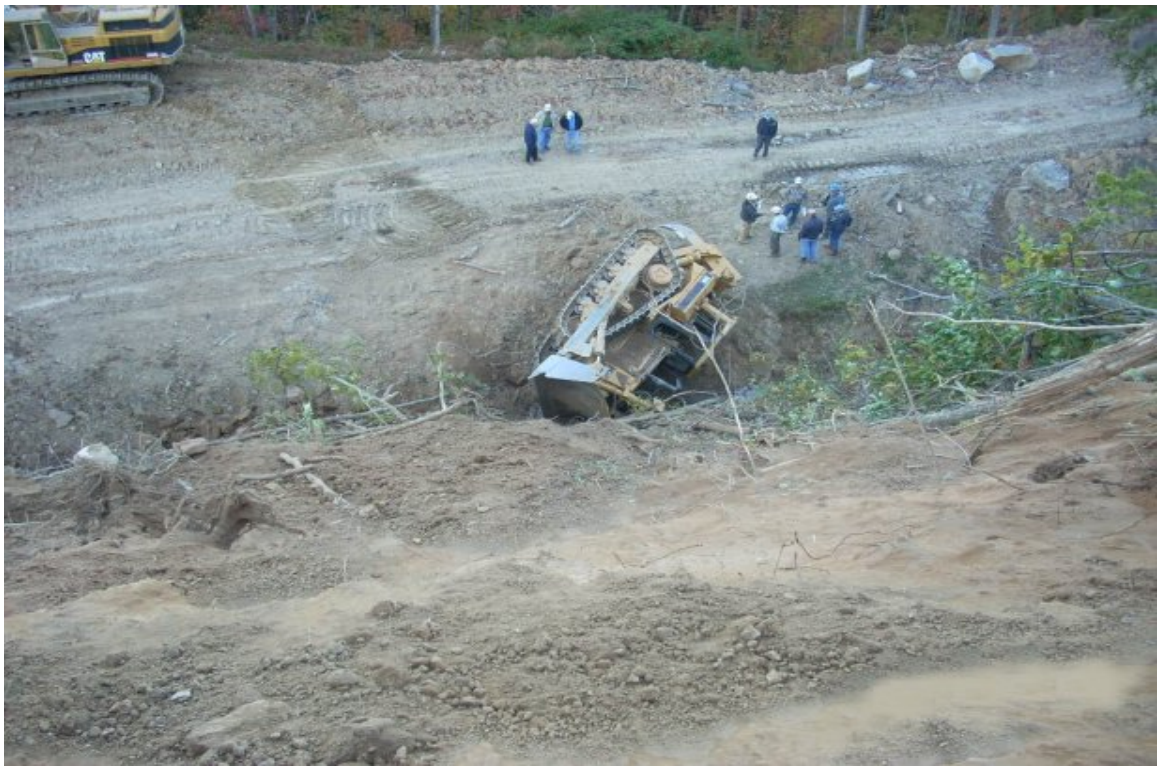
Greg Goins ..... Deputy Chief Accident Investigator
Tim Fugate ..... Accident Investigator
Neil Honeycutt ..... Surface Safety Analysis

Mine Safety and Health Administration

John Boylen ..... Accident Investigator
Dennis Cotton ..... Supervisor District 7
Debbie Combs ..... Educational Field Service MSHA
Ron Medina ..... Mechanical Engineer Certification/Approval
Terry Marshall ..... Engineer/MSHA Tech Support
Matt Shepherd ..... Attorney/DOL/SOL
Joseph Luckett ..... Attorney/DOL/SOL

Appendix B - Pictures

BENCH UNDER CONSTRUCTION



DISTANCE FROM BENCH/BERM TO OVERTURNED D8R APPROXIMATELY 85 FEET