

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Surface Coal Mine

Fatal Powered Haulage Accident
July 2, 2007

Mine #2, #3, #4
Twin Pines Coal Company, Inc.
Bremen, Cullman County, Alabama
I.D. No. 01-03117

Accident Investigators

Russel Weekly
Mine Safety and Health
Specialist (Electrical)

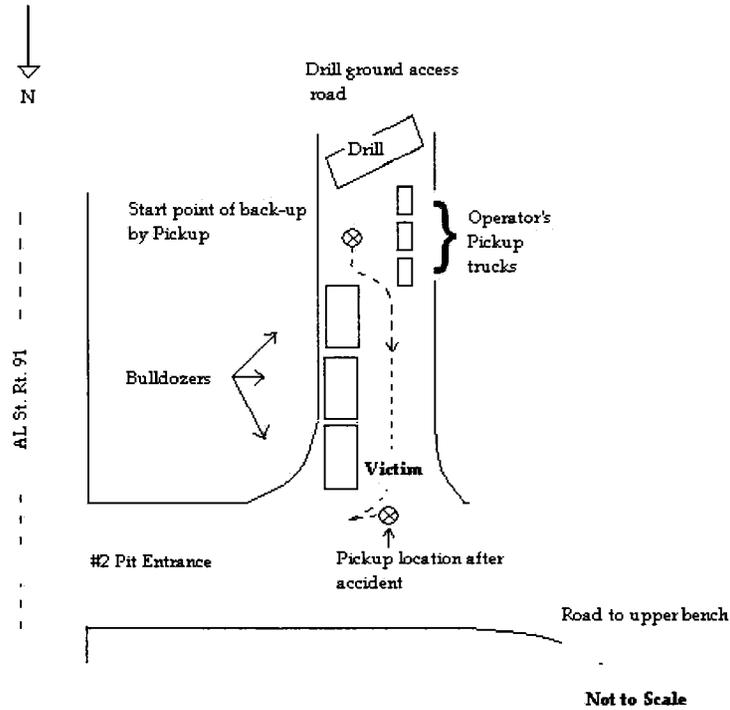
Brandon Russell
Mining Engineer

Originating Office
Mine Safety and Health Administration
District 11
135 Gemini Circle, Suite 213
Birmingham, Alabama 35209
Gary J. Wirth, Acting District Manager

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OVERVIEW



On July 2, 2007, a 59 year old bulldozer operator with over 35 years experience was fatally injured when struck by a pickup truck operating in reverse (being backed-up). The victim and two other bulldozer operators were at their personal vehicles, which were parked in front of, and to the right of, their bulldozers. The bulldozers were parked in a line along the drill ground access road (see sketch). The pit foreman drove up to the three operators and instructed them to move their bulldozers to an area across the entrance road in preparation for a highwall shot. The victim was walking back to his bulldozer when the foreman, who was using only the side view mirrors of the pickup truck, backed over him. The accident occurred because all available means (looking over the driver's shoulder and using the inside rearview mirror) were not used to assure that it was safe to operate the truck in a reverse direction.

GENERAL INFORMATION

Mine #2, #3, #4, MSHA No. 01-03117, is owned and operated by Twin Pines Coal Company, Inc. The mine is located at 1874 County Road 15, Bremen, Alabama, Cullman County. The mine provides employment for 66 persons and operates 6 days per week, 2-10 hour shifts per day. Coal is produced 6 days per week on all shifts. The mine produces an average of 50,000 clean tons of coal per month.

The mine operates in the Black Creek coal seam, with an average seam thickness of 26 inches. The mine uses diesel powered highwall drills, bulldozers, and excavators to remove overburden from the coal seam, which is then loaded from the pit utilizing diesel powered front end loaders and coal hauling trucks.

The principal officials of the mine at the time of the accident were:

Phillip Starnes..... Mine Manager
Billy Orick..... Safety Director

A Safety and Health Inspection was completed on April 11, 2007, and no inspection was ongoing at the time of the accident. The Non-Fatal Days Lost (NFDL) injury incidence rate for the mine for the previous quarter was 3.99 compared to the national NFDL rate of 1.99 for surface coal mines.

DESCRIPTION OF THE ACCIDENT

On the day of the accident, Linton and two other bulldozer operators had driven their bulldozers to the drill ground access road, which runs south of the main entrance road of the mine (see Overview Sketch). The bulldozers were parked on the left side of the road with Linton's bulldozer parked first in line, as depicted in the overview sketch. The three operators were standing at their personal vehicles, which were parked on the right side of the drill ground access road in front of the bulldozers. The pit foreman drove up and instructed the men to move their bulldozers to the upper bench, to the right of the main entrance road. The bulldozers needed to be moved to allow the rock drill to be moved away from an intended blast area. The rock drill had been out of service for approximately two shifts, was now repaired, and was idling in the roadway, approximately 100 feet from their location.

One bulldozer operator walked to his personal vehicle to leave his lunch bucket. Linton and the third operator walked toward the bulldozers. The bulldozer operator with Linton stopped the foreman, who was backing the pickup truck toward them, and

handed the foreman some time slips. The foreman then continued backing slowly towards the main entrance road. After giving the foreman the time slips, the bulldozer operator saw Linton walking down the middle of the road toward his bulldozer. The operator climbed onto his bulldozer. As he reached the right side track he observed Linton roll out from under the front of the foreman's pickup truck at approximately 3:15 p.m.

The foreman and bulldozer operators immediately went to the victim's aid. Paramedics were summoned, and arrived within 15 minutes. Upon their arrival the paramedics notified Life Flight services out of Cullman County who arrived within 15 minutes. The victim was transported to a Huntsville, Alabama area hospital, but died of his injuries while in flight.

INVESTIGATION OF THE ACCIDENT

At approximately 3:30 pm, July 2, 2007, Billy Orick, Director of Safety for Twin Pines Coal, notified MSHA Assistant District Manager Gary Wirth that a serious, life threatening accident had occurred at the Twin Pines Coal Company Mine #2, #3, #4. MSHA accident investigators responded and an order pursuant to Section 103(k) of the Federal Mine Safety & Health Act of 1977 was issued to ensure the safety of the miners until an investigation could be conducted. The accident investigators made an examination of the accident scene, interviewed employees and non-employee witnesses, and reviewed the physical relative to the scene. MSHA conducted the investigation with the assistance of state investigators, mine management, and employees (Appendix A). Seven people were interviewed during the investigation.

DISCUSSION OF THE ACCIDENT

Mine Conditions

The area of the accident site was an access road leading to drill ground on the south end of the #2 pit. The road ran in a southerly direction turning left from the mine entrance road at a point approximately 180 feet from Alabama State Route 91. The road continued from this point approximately 140 feet up a slight grade, then remained relatively level from this point to the drill ground area. The road was constructed of shot rock, well compacted, approximately 25 feet in width, with no irregularities. There was no dust observed on this road surface that would become airborne and obscure visibility. Weather conditions on the day of the accident were sunny and hot, in the 90 degree range, and dry, with little to no wind. There was however, an idling rock drill

that was loud enough to obscure any noise the pickup would have made as it backed down the roadway.

Work Activities

The accident occurred near the end of the dayshift on July 2, 2007, at approximately 3:15 p.m. The pit foreman noticed that the three bulldozer operators had parked their machines in an area which blocked the travel way of the rock drill. This machine had been broken down for approximately two shifts, and due to its location was very close to an intended highwall shot. The foreman drove to the location of the bulldozer operators and instructed them to move their machines to the upper bench on the right side of the #2 pit entrance road and to park their bulldozers there. The victim's bulldozer was approximately 100 feet behind the point where the foreman had stopped his pickup truck. This would also allow the rock drill, which had been started and was idling in the roadway, to be moved to the same location, and out of the way of the intended highwall shot.

The foreman did not begin to back out of the area for several seconds after telling the bulldozer operators to move. When he began backing, he used only his side view mirrors, due to the reduced width (approximately 15 feet) of the road resulting from the location of the parked bulldozers. His main concern was hitting either a bulldozer blade, or the berm opposite the bulldozers. By using only the side view mirrors, there existed a blind spot behind and in the center of the trucks rear sight line for a distance of 16 to 20 feet (see Appendix C). The bulldozer operators began walking from the site, one toward his personal vehicle, the victim and the other toward their respective bulldozers. It was determined that when the one operator stopped the foreman to give him time slips, the victim kept walking toward his bulldozer. This delayed the foreman approximately 3 to 4 seconds, allowing the victim, who was walking in the middle of the roadway, just enough time to get into the blind spot of the foreman's side view mirrors. When he resumed backing, he could not see the victim in his mirrors. He struck and ran over the victim, inflicting fatal injuries.

Work History and Training

Linton had over 35 years surface mining experience, with 6 years experience as a bulldozer operator at this mine. A review of his training records indicated that he had received all his required training.

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, a root cause was identified that, if eliminated, would have either prevented the accident or mitigated its consequences.

Root Cause: The driver of the pickup truck did not make certain that persons were clear before proceeding in a reverse direction on the drill ground road. An effective policy or procedure was not in place to assure that persons were clear before placing vehicles in motion.

Corrective Action: The mine operator shall train all persons operating pickup trucks on mine property to make certain that prior to moving their vehicle they will assure, by all means necessary, and by using all available safety equipment installed within their vehicles, i.e. mirrors and horns, that persons are clear of the intended path of the operating vehicle.

CONCLUSION

On July 2, 2007, a 59 year old bulldozer operator with over 35 years experience was fatally injured when struck by a pickup truck operating in reverse (being backed-up). The accident occurred because all available means (looking over the driver's shoulder and using the inside rearview mirror) were not used to assure that it was safe to operate the truck in a reverse direction.

Approved by:



Gary J. Wirth
Acting District Manager

9-24-07
Date

ENFORCEMENT ACTIONS

§103(k) Order No. 7692276

A serious life threatening accident has occurred at approximately 3:15 pm on 7/2/2007 when a 2005 Toyota Tundra pickup truck ran over a dozer operator. This order is issued to protect the health and safety of the miners until an investigation can be conducted.

This order was modified on 7/9/2007 from a non-fatal accident investigation to a fatal accident investigation upon notification to MSHA of the death of the victim at approximately 10:00 pm on 7/2/2007.

§104(a) Citation No. 7692279: Issued to Twin Pines Coal Company, Mine #2,#3,#4 for a violation of 77.1607(g)

On July 2, 2007 at approximately 3:15 pm, a foreman operating a 2005 Toyota Tundra pickup truck, failed to be certain by signal or other means, that all persons were clear before moving. This failure resulted in the foreman striking a bulldozer operator who was walking toward his bulldozer on the drill ground access road, fatally injuring him. The foreman stated to MSHA accident investigators that while he was backing his truck down the drill ground road he never looked in the center rear view mirror of the pickup. This condition resulted in the bulldozer operator being in the truck operator's blind spot.

APPENDIX A

Persons Participating in the Investigation

TWIN PINES COAL COMPANY, INC

Billy Orick, Director of Safety
Phillip Starnes, Mine Foreman

ALABAMA DEPARTMENT OF INDUSTRIAL RELATIONS
MINE SAFETY AND INSPECTION

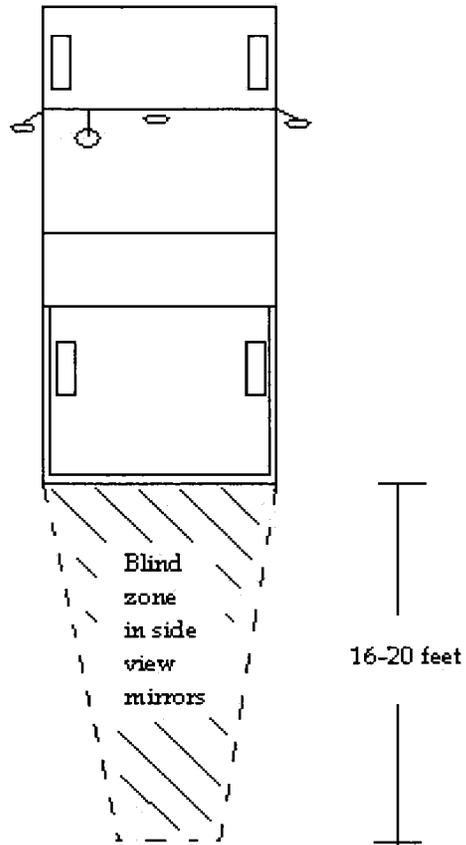
Jim Rivers, Mine Inspector
Lou Maben, Mine Inspector

MINE SAFETY AND HEALTH ADMINISTRATION

Russel Weekly, Accident Investigation Team Leader (Electrical Specialist), District 11
Brandon Russell, Mining Engineer, District 11
Joseph O'Donnell, Supervisory Mine Safety and Health Inspector, District 11

APPENDIX B

Operator Visibility Behind Pickup Truck



Not to Scale

APPENDIX C

Accident Investigation Data - Victim Information

U.S. Department of Labor
Mine Safety and Health Administration



Event Number: **4 2 9 9 8 5 3**

Victim Information: **1**

1. Name of Injured/ill Employee: <i>Eddie Linton</i>		2. Sex: <i>M</i>	3. Victim's Age: <i>59</i>	4. Last Four Digits of SSN:	5. Degree of Injury: <i>01 Fatal</i>
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 07/02/2007 b. Time: 16:00</i>			7. Date and Time Started: <i>a. Date: 07/02/2007 b. Time: 7:00</i>		
8. Regular Job Title: <i>168 Surface Dozer Operator</i>		9. Work Activity when Injured: <i>092 Walking</i>		10. Was this work activity part of regular job? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
11. Experience a. This Work Activity: <i>35 0 0</i>		b. Regular Job Title: <i>6 0 0</i>		c. This Mine: <i>6 0 0</i>	
12. What Directly Inflicted Injury or Illness? <i>103 Pickup Truck</i>		13. Nature of Injury or Illness: <i>370 Multiple Injuries</i>			
14. Training Deficiencies: Hazard: <input type="checkbox"/> <i>New/Newly-Employed Experienced Miner:</i> <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>					
15. Company of Employment: (if different from production operator) <i>Operator</i>			Independent Contractor ID: (if applicable)		
16. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input checked="" type="checkbox"/> CPR: <input type="checkbox"/> EMT: <input checked="" type="checkbox"/> Medical Professional: <input checked="" type="checkbox"/> None: <input type="checkbox"/>					
17. Part 50 Document Control Number: (form 7000-1)			18. Union Affiliation of Victim: <i>9999 None (No Union Affiliation)</i>		

Victim Information:

1. Name of Injured/ill Employee:		2. Sex:	3. Victim's Age:	4. Last Four Digits of SSN:	5. Degree of Injury:
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death:			7. Date and Time Started:		
8. Regular Job Title:		9. Work Activity when Injured:		10. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>	
11. Experience a. This Work Activity:		b. Regular Job Title:		c. This Mine:	
12. What Directly Inflicted Injury or Illness?		13. Nature of Injury or Illness:			
14. Training Deficiencies: Hazard: <input type="checkbox"/> <i>New/Newly-Employed Experienced Miner:</i> <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>					
15. Company of Employment: (if different from production operator)			Independent Contractor ID: (if applicable)		
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8. Regular Job Title:		9. Work Activity when Injured:		10. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>	
11. Experience a. This Work Activity:		b. Regular Job Title:		c. This Mine:	
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