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UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Coal Mine

Fatal Powered Haulage Accident October 19, 2008

McElroy Mine McElroy Coal Company Glen Easton, Marshall County, West Virginia I.D. No. 46-01437

Accident Investigators

Jason W. Rinehart Industrial Hygienist

Kenneth Dudics Coal Mine Safety and Health Specialist – Ventilation

Frank Thomas Coal Mine Safety and Health Specialist - Electrical

> Originating Office Mine Safety and Health Administration District 3 604 Cheat Road Morgantown, West Virginia 26508 Bob E. Cornett, District Manager

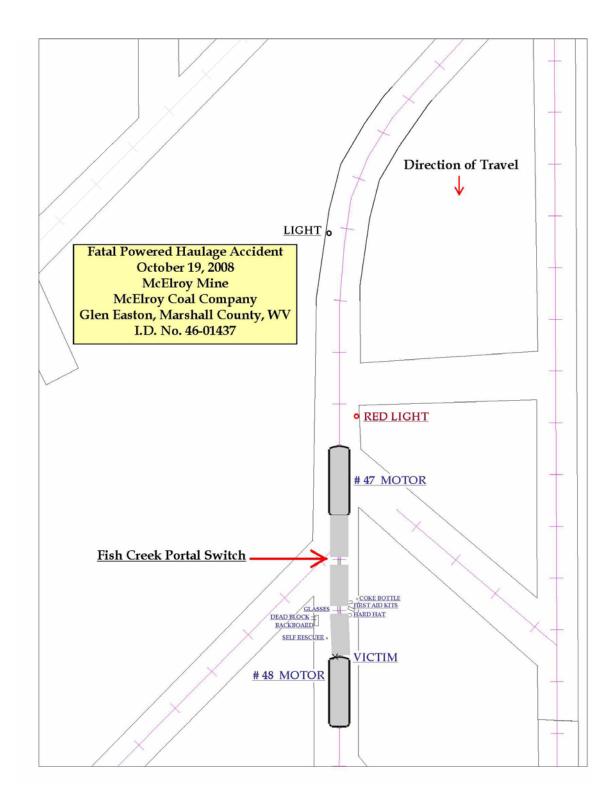
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PHOTO OF ACCIDENT SCENE



SKETCH OF ACCIDENT SCENE



OVERVIEW

On October 19, 2008, at approximately 12:10 p.m., Victor Goudy, a 58-year old rock dust motorman with 30 years mining experience was fatally injured when he was pinned between a trip of empty dollies (lowboys) and the No. 48 locomotive (lead motor). The victim had uncoupled the dollies from the lead locomotive and was in the process of removing the drawbar from the dollies when the No. 47 locomotive (trail motor) rounded a turn and struck the uncoupled dollies. The trail locomotive, which was not coupled to the trip, was approximately 3-4 minutes behind the lead locomotive.

The accident occurred because there were no policies and procedures in place to require the locomotive operators to communicate the stopped location of the lead locomotive and dollies, or prohibit miners from working in between the dollies and locomotive without knowing the location of the trail locomotive. Also, the reflective streamers attached to the inby end of the parked dollies, in combination with the trail locomotive operator turning off the headlights while still in motion, did not provide a sufficient visual warning and contributed to the accident.

GENERAL INFORMATION

The McElroy Mine, I.D. No. 46-01437, is located near Glen Easton, Marshall County, West Virginia. McElroy Coal Company, a subsidiary of Consol Energy, Inc., operates the underground mine in the Pittsburgh No. 8 coal seam. There are 851 persons working at the mine, of which 777 are underground employees. The mine's average production is approximately 16,666 tons of coal daily from five continuous-mining machine units and two longwall units. Miners enter the mine at three portals: The Fish Creek Portal, the Blake's Ridge Portal and the Grapevine Portal. Coal is transported from the working sections to the surface via conveyor belts. Both battery and trolley-powered, rail-mounted vehicles are used to transport supplies and mine personnel. The mine liberates approximately 18 million cubic feet of methane every 24 hours.

The principal officials for the McElroy Mine were:

J. Brett Harvey	President & CEO
Charles Shaynak	Vice President, Ohio Valley Operations
David Kelly	Superintendent, McElroy Mine
Kevin Weber	Manager of Safety, Ohio Valley Operations
Jack Price	Safety Supervisor, McElroy Mine

The last MSHA regular Health and Safety Inspection (E01) was completed on September 30, 2008, and another E01 investigation was ongoing at the time of the accident. The Nonfatal Days Lost (NFDL) incidence rates during the previous quarter and for the 2008 fiscal year for the McElroy Mine were 2.40 and 2.89 compared to the national averages of 5.29 and 4.82, respectively.

DESCRIPTION OF ACCIDENT

On October 19, 2008, Victor Goudy and Gerald Louden, rock dust motormen entered the mine at the Blake's Ridge Portal at 8:00 a.m. They were assigned to rock dust in the 4-A section. After getting the rock dust machine and locomotives ready, they were delayed at the Blake's Ridge Portal bottom due to work on the trolley wire. While waiting, Andrew Simpson, Assistant Shift Foreman, called them on the mine phone and ordered them to talk with Mike Conjeski, Mine Foreman, about going to the Fish Creek portal to get a piece of belt for the 5-North No. 2 beltline. After discussing the situation with Conjeski, they determined there were not any operable locomotives at the Blake's Ridge Portal that could be used to retrieve the belt. Conjeski decided to have William Coulson, General Inside Laborer, and Darnell Fulks, bring the No. 47 and No. 92 locomotives to the Blake's Ridge Portal from the Fish Creek portal.

At approximately 10:00 a.m., Goudy and Louden went to the 4-North area to see if there were any empty dollies (lowboys) that could be used to transport the belt. They found three empty dollies and the No. 48 locomotive. They coupled the No. 48 locomotive to the dollies and waited on Coulson and Fulks, so they could have a trail locomotive. After Coulson and Fulks arrived, they arranged and attached the locomotives and dollies in the order they wanted, then started towards Fish Creek Portal at approximately 11:30 a.m. Louden operated the No. 48 lead locomotive with Goudy riding with him. Coulson operated the No. 47 trail locomotive behind the trip while Fulks followed in the No. 92 locomotive.

Coulson was following approximately 1,500 to 2,000 ft. behind the No. 48 locomotive and dollies. Louden called Donald Beyser, Dispatcher, to tell him they had cleared the mainline switch on the Fish Creek Portal bottom. The trip proceeded to the Fish Creek Portal track switch.

Goudy told Louden to stop just outby the Fish Creek Portal track switch where he would uncouple the dollies from the locomotive, attach the trail (No. 47) locomotive to the empty dollies, and push the dollies to the slope bottom. Goudy put a skid under one of the outby wheels of the dollies between himself and the No. 48 locomotive to prevent the dollies from drifting towards him. When Goudy uncoupled the drawbar from the locomotive and the dollies drifted away (inby) from him approximately 5 to 10 feet and stopped in a dip in the track. Goudy saw the lights of the No. 47 locomotive. To stop the locomotive, he stood to the side and signaled (flagged off) Coulson to stop the locomotive with his cap light, until the lights of the No. 47 locomotive were shut off. Goudy knelt down over the drawbar to unhook the safety pin. Louden had just gotten out of the No. 48 locomotive, when the No. 47 locomotive hit the inby end of the dollies and pinned Goudy between the outby end of the dollies and the frame of the No. 48 locomotive. The coupler of the No. 47 locomotive rode over the bumper of the inby dolly, locking the dollies to the locomotive.

After observing the accident, Coulson moved the No. 47 locomotive and empty dollies back to free Goudy. Coulson used the No. 47 locomotive radio to request help. Louden used the No. 48 locomotive radio and called for Alfred "Chip" Ratcliffe, Shift Foreman and Emergency Medical Technician (EMT) at the Fish Creek Portal, to notify him of the accident and request that he come to the Fish Creek Portal bottom.

Louden went to the mine phone to call the dispatcher for an ambulance. Ratcliffe caught a ride on the No. 92 locomotive and was already headed toward the Fish Creek Portal when he heard someone call for help. Ratcliffe arrived at the scene and observed Goudy lying face down in the middle of the track, approximately 10 feet inby the No. 48 locomotive. Ratcliffe checked for a pulse and respiration, but was not able to detect either. He went to the phone to notify Mark Courtney, Assistant Superintendent, of the accident. Ratcliffe sent Coulson and Fulks to the portal bottom to get a mantrip and a stretcher for Goudy. There were no mantrips on the bottom and they could not find the stretcher. After hearing someone call for help on the mine radio, Chris Sterling, Belt Foreman and EMT, and Robert Gallentine, Master Mechanic, also went to the accident scene. Sterling checked Goudy and found a faint pulse with short, faint respirations. Sterling sent miners to get a trauma kit. Gallentine went to get a four wheel cart. Goudy was moved to the cart, transported to the elevator, and transported to the surface. Sterling again checked Goudy for pulse and respiration at the elevator but did not detect either. Sterling was in the process of administering oxygen to Goudy when the Tri-State Ambulance Service arrived. Goudy was transferred to the ambulance service where a paramedic, in consultation with Dr. Phillips at the medical communication center, pronounced him dead at 12:46 p.m.

INVESTIGATION OF THE ACCIDENT

The MSHA call center was notified at 12:27 p.m. on October 19, 2008 that a serious accident had occurred at the mine. The call center notified Greg Fetty, Staff Assistant at 12:39 p.m. The mine was called and verbally notified a 103 (k) order would be issued to ensure the safety and health of miners until an investigation of the accident could be completed. Jason Rinehart, Industrial Hygienist, and Fetty traveled to the mine to begin the investigation.

Upon arriving at the mine, the investigation team was briefed regarding the circumstances of the accident. The team traveled to the accident site and jointly began the investigation in conjunction with the West Virginia Office of Miners' Health, Safety, and Training (WVOMHST), mine management, and the United Mine Workers of America (UMWA). Photographs, measurements, and sketches were made of the area.

On October 20, 2008, persons having knowledge of the facts surrounding the accident were interviewed by MSHA and WVOMHST officials. Representatives of the Company and UMWA were also in attendance. A list of those persons who participated in the investigation is contained in Appendix A of this report. Ken Dudics, Coal Mine Safety & Health Specialist – Ventilation, Frank Thomas and Todd Anderson, Coal Mine Safety & Health Specialists – Electrical, joined the investigation. Other documents and relevant information were gathered by the investigators.

DISCUSSION

Accident Scene

The dollies were stopped within approximately 75 feet of a turn in the track, where the visibility of the No. 47 locomotive operator was limited. The dollies were stopped in this location because there was a dip in the track where the dollies could settle after being uncoupled from the locomotive.

<u>Equipment</u>

The equipment involved were two 27-ton General Electric locomotives (Company No. 47 and No. 48) and three empty dollies. The locomotives were used in conjunction with the dollies to haul supplies and equipment throughout the mine. The dollies were coupled together and to the No. 48 locomotive by the use of drawbars. When checked, there were no deficiencies on the locomotives or with any associated equipment which would have contributed to this accident.

Haulage Practice and Policy

The trailing (inby) end of the dollies was provided with two red reflective streamers. The streamers would have been difficult to see because the lights of the locomotive were off and the dolly height was approximately eight inches off of the mine floor. It was management's policy to use streamers to mark the ends of supply-carrying equipment that were not attached to trail locomotives. The streamers did not give a sufficient visual warning as to the location of equipment that was stopped or parked on the track

The lead motormen stopped the trip at a location that could not be seen until the trail locomotive was approximately 75 feet inby the parked dollies. A streamer was positioned on each inby corner of the dolly. In these positions, the streamers are difficult to see because the dolly is far below the operator's compartment of a 27 ton locomotive. The victim began disconnecting the trip of dollies from the lead locomotive before he knew exactly where the trail locomotive was located.

Communication

There was no communication between the miners operating the locomotives after they left the 4-North area. The trail locomotive operator did not know where the lead locomotive and dollies were going to stop and uncouple. Louden stopped the trip just outby the Fish Creek Portal track switch. Goudy had told him to stop at the location where they had uncoupled and coupled dollies. In the past, Louden normally switched at another track switch closer to the supply slope bottom. Coulson also expected and assumed they would stop closer to the supply slope bottom.

There was a miscommunication between Goudy and Coulson. Goudy flagged off Coulson with his cap light so that he would stop the No. 47 locomotive. Coulson turned off the lights of the locomotive when he rounded the turn, attempting to see the trip in front of him or any lights on the track, not in response to the Goudy's signaling. Goudy may have assumed Coulson shut the lights off to acknowledge the location of the stopped trip, but this was not the case as Coulson continued tramming the locomotive toward them. It is a common practice for equipment operators, once they see a "flag-off" signal, to stop their piece of equipment and turn off the lights.

<u>Training</u>

The training records of the miners involved were reviewed and no deficiencies were found.

ROOT CAUSE ANALYSIS

An analysis was conducted to identify the most basic causes of the accident that were correctable through management controls. During analysis, root causes were identified that, if eliminated, would have either prevented the accident or mitigated its consequences.

Listed below are causal factors identified during the analysis and their corresponding corrective actions implemented to prevent a reoccurrence of the accident.

<u>*Root Cause*</u>: A root cause of the accident was management's policy of using streamers to mark the ends of supply-carrying equipment that were not attached to trail locomotives. The streamers did not give a sufficient visual warning as to the location of equipment that was stopped or parked on the track. An indirect cause is that the inby end of the dollies was not marked with an effective trip light or reflective device that could be easily seen by approaching haulage vehicles, no matter where the trip was positioned along the haulage.

<u>*Corrective Action*</u>: A Notice to Provide a Safeguard was issued requiring a light attached to the trip within 3 feet of the end of the dolly, supply car, or coal car not attached to a locomotive. If the farthest projection on the end of the trip not attached to a motor is due to overhanging equipment or supplies, the light will be placed within 3 feet of the end of the overhanging equipment or supplies.

<u>*Root Cause*</u>: A root cause of this accident was management's failure to establish a policy prohibiting miners from working on or along side a trip of cars until all haulage equipment associated with the trip has been stopped, including unattached trail locomotives. Working between the uncoupled dollies and the lead locomotive, without knowing the location or expected movement of the trail locomotive, was an indirect cause of the accident. No communication by the lead motormen, stating their stopping location prior to the trail locomotive traveling around the curve in the track, is also an indirect cause of the accident.

<u>*Corrective Action*</u>: A Notice to Provide a Safeguard was issued requiring each locomotive operator who is part of a trip to confirm with each locomotive operator that all locomotives of the trip have come to a complete stop prior to any person exiting the confines of the operator's compartment. Additionally, no one will be permitted on or alongside the trip, except in the protection of a crosscut or areas excavated in the coal pillars for this purpose (manhole) until it is confirmed that all locomotives that are part of the trip have come to a complete stop.

CONCLUSION

The accident occurred because there were no policies and procedures in place to require the locomotive operators to communicate the stopping location of the locomotive and dollies or prohibit miners from working in between the dollies and locomotive without knowing the location of the trail locomotive. Also, the reflective streamers attached to the inby end of the parked dollies, in combination with the trail locomotive turning off the headlights while it was still in motion, did not provide a sufficient visual warning to the trail locomotive.

18. Comett

Bob E. Cornett District Manager

05-27-09

Date

ENFORCEMENT ACTION

- 1. A 103 (k) Order No. 6610605 was issued to ensure the safety of all miners.
- 2. A 314 (b) Safeguard, No. 8015201 was issued in accordance with 30 CFR, 75.1403. On October 19, 2008, a miner was fatally injured while releasing a drawbar from between a locomotive and a set of three dollies on the Fish Creek Portal bottom. The miner was positioned between the No. 48 locomotive and a set of dollies when the No. 47 trail locomotive rounded a curve and struck the dollies, which pinned the victim between the No. 48 locomotive and the outby dolly.

This is Notice to Provide Safeguard requiring each locomotive operator who is part of a trip to confirm with each locomotive operator that all locomotives of the trip have come to a complete stop prior to any person exiting the confines of the operator's compartment. Additionally, no one will be permitted on or alongside the trip, except in the protection of a crosscut or manhole until it is confirmed that all locomotives that are part of the trip have come to a complete stop.

3. A 314 (b) Safeguard, No. 8015202 was issued in accordance with 30 CFR, 75.1403-10(a). On October 19, 2008 a miner was fatally injured while releasing a drawbar from between a locomotive and a set of three dollies on the Fish Creek Portal bottom. The miner was positioned between the No. 48 locomotive and a set of three dollies when the No. 47 trail locomotive rounded a curve and struck the dollies which pinned the victim between the No. 48 locomotive and the outby dolly.

This is Notice to Provide Safeguard requiring a conspicuous light attached to the trip within 3 feet of the end of the dolly, supply car or coal car not attached to a locomotive. If the farthest projection on the end of the trip not attached to a motor is due to overhanging equipment or supplies, the light will be placed within 3 feet of the end of the overhanging equipment or supplies.

APPENDIX A - Victim Information

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. Date(MM/DD/YY) and Time(24 Hr.) Of					6. Date			0 h Times - 0					
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APPENDIX B – Persons Participating in the Investigation

Listed below are persons furnishing information and/or were present during the investigation:

McElroy Coal Company/Consol Energy

Charles Shaynak	Vice President - Ohio Valley Division
Todd Moore	Director – Safety Services
Kevin Weber	Manager of Safety – Ohio Valley Division
Mike Sinozich	Director of Safety - Mining
David Kelly	Superintendent
Jack Price	Safety Supervisor
Tom Kulavik	Safety Inspector
Rob Galletine	Master Mechanic
Alfred Ratcliffe	Shift Foreman – Fish Creek
Doug Artimez	Safety Mentor
Mark Fudala	Assistant Superintendent – Grapevine
Mark Courtney	Assistant Superintendent –Blake's Ridge
Jason Adkins	Human Resources - McElroy
Chris Sterling	Belt Foreman
Andrew Simpson	Assistant Shift Foreman

United Mine Workers of America

William Coulson	General Inside Laborer
Gerald Louden	Rockdust Motorman
Donald Beyser	Dispatcher
Rick Altman	Vice President Local 1638
Tom Stern	Safety Committee Local 1638
Terry Lewis	President – Local 1638
Jim Lamont	
Rich Eddy	International District 31 Vice President
Clemmy Allen	Region 1 Director

West Virginia Office of Miners Health Safety & Training

Ron Wooten	Director
Alan Lander	District Inspector-at-Large
Colin Simmons	District Inspector

Mine Safety and Health Administration

Greg Fetty	Accident Coordinator & Staff Assistant
Jason Rinehart	
Kenneth Dudics	50
Frank Thomas	1
Todd Anderson	1