West Virginia Office of Miners' Health, Safety and Training

November 20, 2004

Highwall Failure Fatality Investigation Report Independence Coal Company, Inc. Red Cedar Surface Mine Permit No. S-5030-97A

> Region Three – Danville Office 137 Peach Court, Suite 2 Danville, West Virginia 25053 Harry Linville, Inspector-at-Large

TABLE OF CONTENTS

•	SKETCH with MAP	
•	GENERAL INFORMATION	
•	DESCRIPTION	
•	FINDINGS OF FACT	
•	CONCLUSION	
•	ENFORCEMENT ACTION	
•	RECOMMENDATIONS	
•	ACKNOWLEDGMENT	
•	APPENDIX (plus attachments)	

Highwall Failure Accident Investigation Report Independence Coal Company, Inc. Red Cedar Surface Mine Permit No. S-5030-97A

GENERAL INFORMATION

A fatal accident resulting from a highwall collapse occurred on Saturday, November 20, 2004 at the Independence Coal Company, Red Cedar Surface Mine located near Van in Boone County, West Virginia. Kevin L. Lupardus, a 40 year-old hydraulic excavator operator, suffered fatal crushing injuries when a highwall collapsed at approximately 2:00 a.m. on November 20. Mr. Lupardus was operating a Terex O & K RH 120-E excavator in a surface mining pit where contour mining was in progress at the Upper Clarion coal seam level when the highwall collapse occurred. His body was recovered approximately eight (8) hours later. Mr. Lupardus is survived by two children and resided at Mabscott, West Virginia. He had been employed at this mine since April 12, 2004 when he became a coal miner after working approximately twenty (20) years as a heavy equipment operator.

The West Virginia Office of Miners' Health, Safety and Training was notified at approximately 2:45 a.m. on November 20, 2004 by John Lawrence. A joint investigation with the Mine Safety and Health Administration (MSHA) was started immediately. The body was recovered at approximately 10:00 a.m.

The Red Cedar Surface Mine is permitted with the Office of Miners' Health, Safety and Training as Independence Coal Company and does business as Endurance Mining. The mine was permitted to commence operation on July 2, 2002 and employs 68 people on two ten-hour shifts. Coal is mined in the Coalburg, Stockton, Lower Clarion, Upper Clarion, Kittaning and 5-Block seams. Mountaintop and contour mining methods are currently used. The area where the accident occurred is referred to as the Glory Pit 42 area.

DESCRIPTION

The evening shift crew at the Red Cedar Surface Mine began their shift at their normal starting time of 5:00 p.m. on Friday, November 19 under the direction of pit foreman, Christopher S. Brown. Terex O & K RH 120-E excavator operator, Kevin L. Lupardus, began his shift in an area near the eventual accident site known as Pit 43 where coal was being mined from the Lower Clarion seam. While the excavator was working in Pit 43, pit foreman Christopher S. Brown arranged for two bulldozers to build a "pad" and a road into Pit 42 on the Upper Clarion coal seam level. (The "pad" is essentially a platform constructed from overburden material to elevate the excavator, therefore, minimizing the distance the load boom must be raised to load trucks.)

Mr. Lupardus moved the excavator to the contour mining site on the Upper Clarion coal seam level known as Pit 42 at approximately 7:15 p.m. The area had been shot (blasted) prior to the evening shift and was ready to be loaded. Three rock trucks driven by Ronald Halley, Paul Williams, and Mike Ferrell were assigned to haul from the Pit 42 site. Leonard Combs was also operating a dozer on the Pit 42 shot area nearby.

Loading of the Pit 42 shot continued until approximately 11:30 p.m. when a problem with the excavator occurred. An anti-freeze hose had apparently ruptured necessitating repair. According to Brown, the repairs were completed in about an hour and fifteen minutes. Brown stated that he left the Pit 42 area at approximately 1:30 a.m. to obtain parts needed to repair a bulldozer.

Upon completion of the excavator repairs, loading of the Pit 42 shot continued until approximately 2:00 a.m. Bulldozer operator, Leonard Combs stated that Lupardus asked him to bring his bulldozer to clean the Pit 42 floor. As Combs was cleaning the pit floor, rock truck driver, Ronald Halley had backed his truck to the side of the excavator to be loaded. A second rock truck driven by Paul Williams was positioned nearby and next in line to be loaded.

Halley stated that as his truck was being loaded he noticed in his rear view mirror that a couple of "basketball size rocks", as he described them, tumbled down from the highwall. According to Halley the highwall collapse then occurred within seconds with no communication between himself and Lupardus. Halley then instinctively drove his truck away from the highwall. Halley, Combs, and Williams then began calling immediately to Lupardus with no response. Williams also called pit foreman, Christopher S. Brown, before exiting his equipment along with Combs and Halley. Brown was nearby and arrived very shortly after receiving the call.

Williams, Halley and dozer operator, Richie Coffman, approached the excavator while Brown and Combs maintained a watch over the highwall. They were able to reach Lupardus and check for a pulse. No vital signs were detected. EMTs, Harvey Hanshaw and Dennis Craddock also came to the scene shortly thereafter and were unable to detect any vital signs. None was detected then or at anytime afterward. The Boone County 911 center records indicate they were called at 2:10 a.m. The Boone County Ambulance Authority, Van EMS unit arrived at the accident site at 2:41 a.m. Several other emergency services units also responded.

The body was eventually recovered later the same morning at approximately 10:00 a.m. The victim was determined to be deceased by all emergency service and on site personnel. Since the potential for an additional highwall failure was uncertain and a significant amount of material had to be moved, rescue and recovery operations were conducted in a very deliberate manner to ensure the safety of those involved.

FINDINGS OF FACT

- 1. Kevin L. Lupardus was operating a Terex O & K RH 120-E excavator when the accident occurred. The machine has an operating weight of 284 tons and measures 23 feet and ___ inches from the ground to the top of the operator's compartment located on the left front side of the machine.
- 2. The excavator operator's compartment was positioned on the highwall side with the loading/digging boom facing toward the machine's rear. The machine was approximately 29.5 feet from the highwall at the time of the accident. The wall height was 54.98 feet from the top of the "pad" to the top of the wall. (The pad is a platform constructed from overburden material to elevate the excavator, therefore, minimizing the distance the loading boom must be raised when trucks are loaded.) The "pad" at the time of the accident was approximately 6 to 8 feet thick. (See Attachment "A")

- 3. Mining maps and inspection of the work area after the accident revealed that underground mining had previously been conducted in the Upper Clarion coal seam being mined by the contour method at the time of the accident. The presence of the underground workings may have contributed to the highwall failure. However, there was no evidence to suggest that signs of an impending failure were present prior to the accident. All persons interviewed stated that they saw no signs of a potential highwall failure prior to the accident.
- 4. Pit foreman, Christopher S. Brown made his pre-shift examination of the area where the accident occurred at 4:00 p.m. on Friday, November 19. He also examined the area at 8:00 p.m., 10:48 p.m. and at 1:36 a.m. on Saturday, November 20. He stated that the highwall where the failure ultimately occurred looked just like the highwall area to the right of the accident site at the time of his examinations. All others interviewed had the same description of the highwall. (The highwall area to the right of the accident site appeared to be solid following the accident.)
- 5. Rock truck driver, Ronald Halley, stated that he saw two "basketball size" rocks tumble from the highwall when looking through his rear view mirror as his truck number RT-1701 was being loaded. Halley stated that he then heard a loud crash a few seconds later as the highwall failure occurred.
- 6. All persons interviewed described the weather at the time of the accident as clear.
- 7. Mr. Lupardus had been employed as a coal miner and excavator operator at this mine since April 12, 2004. He had obtained a surface coal miner's certificate on November 1, 2004. He had approximately 20 years previous non-coal mining experience operating various excavators and heavy equipment. (See Attachment "B")

CONCLUSION

Mr. Kevin L. Lupardus was fatally injured by a sudden highwall failure as he was operating a Terex O & K RH120-E excavator. The excavator was being used to remove overburden and load trucks.

ENFORCEMENT ACTION

An order of withdrawal was issued under Title 56, Series 3, Section 51.1 for the protection of other employees and to control and preserve the scene of the accident pending the investigation.

One notice of violation was issued but was non-contributing. (See Attachment "C")

RECOMMENDATIONS

Amendments to the MSHA required ground control plan to address highwall failure prevention measures and operation of excavators were accepted by the OMHST as measures to prevent a recurrence. These measures will be added to the mine operator's comprehensive mine safety program in accordance with WV Administrative Regulations 56-8-9.4. (See Attachment "D")

ACKNOWLEDGEMENT

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the employees and management of Independence Coal Company, Inc., Red Cedar Surface Mine, the Mine Safety and Health Administration, and Gary Jones, field service advisor for Terex, Inc. during this investigation.

Respectfully submitted:	
Tempfaller.	1-19-05
Terry Farley, Health and Safety Administrator	Date
Hany Limitle	1-7-05
Harry Linville, Inspector-at-Large	Date
Bandall D Bailey	1-13-05
Randall Bailey, Surface Inspector #77	
Eugene Vhite #79	1/7/05
Eugene White, District Inspector #79	/ /

APPENDIX

- Mine Information Sheet
- Victim Information Sheet
- Supplemental Information
- Persons Present During Investigation
- Attachments

MINE INFORMATION

VICTIM INFORMATION

NAME Kevin Lee Lupardus
ADDRESS P. O. Box 48 Mabscott, WV 25871
TELEPHONE NO(304) 256-4094_ AGE41_SOCIAL SECURITY NO5670_
TOTAL MINING EXPERIENCE EXPERIENCE AT THIS MINE 7 months
AVERAGE NUMBER OF DAYS WORKED PER WEEK6
AVERAGE NUMBER OF HOURS WORKED PER WEEK 60 PER DAY 10
LENGTH OF SHIFTS AT THIS MINE <u>10 hrs.</u> TRAVEL TIME TO/FROM WORK <u>1 hr. +</u>
OCCUPATION AT TIME OF ACCIDENT Excavator Operator
REGULAR OCCUPATION Excavator Operator
COAL MINER'S CERTIFICATION 4-5978
OTHER CERTIFICATIONS None
SPOUSE'S NAME None
DEPENDENTS 2 children
DATE OF ACCIDENT: 20th. DAY OF November , 2004
AT 2:05 O'CLOCK a.m.
CAUSE OF ACCIDENT: Mr. Lupardus was fatally injured by a sudden highwall failure as
he was operating a Terex O & K RH120-E excavator.
DATE OF DEATH: 20 th . DAY OF <u>November</u> , 2004

SUPPLEMENTAL INFORMATION

Mr. Kevin L. Lupardus received newly employed experienced miner training on April 12, 2004 and annual refresher training on April 24, 2004.

INVESTIGATION

The following persons were present during the onsite investigation and recovery operations conducted on November 20, 2004.

INDEPENDENCE COAL COMPANY, INC.

Mike Snelling

President – Massey Energy, Surface Operations

Chris Adkins

Corporate Operations Officer

H. Drexel Short

Director

Frank Foster

Safety Coordinator - Massey Coal Services

Art Hale Robert Brooks

Senior Mine Manager General Mine Foreman

Tommy Ellison

Superintendent

Barry Casto

Maintenance Superintendent

John Lawrence Charlie Scott

Foreman

Charlie Scott Brian Petrosky

Foreman Safety Director

Shane Harvey

Attorney

MINE SAFETY AND HEALTH ADMINISTRATION

Luther Mars

Assistant District Manager

Sherman Slaughter

Accident Investigator

Vaughn Gartin

Coal Mine Inspector

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Doug Conaway

Director

Terry Farley
Harry Linville

Health and Safety Administrator

Harry Linville Randall Bailey

Inspector-at-Large

Eugene White

Surface Inspector District Inspector

INTERVIEWS

The following persons were present during interviews conducted on November 2, 2004.

INDEPENDENCE COAL COMPANY, INC.

Frank Foster

Safety Coordinator - Massey Coal Services

Art Hale

Edward Morris

Brian Petrosky

Christopher Brown*

Leonard Combs*

Ronald Halley*

Paul Williams* Shane Harvey

* Denotes persons interviewed

Senior Mine Manager

Safety Technician Safety Director

Foreman

Dozer Operator

Dozer Operator/Truck Driver

Truck Driver

Attorney

MINE SAFETY AND HEALTH ADMINISTRATION

Sherman Slaughter

Accident Investigator

Eric Gottheld

Tech Support

Donald Kirkwood

Tech Support

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley

Randall Bailey Eugene White

Health and Safety Administrator

Surface Inspector

District Inspector

INSPECTION

The following persons were present during recovery operations of the Terek O & K excavator on November 22, 2004.

INDEPENDENCE COAL COMPANY, INC.

Frank Foster

Eddie Morris Tommy Ellison

Barry Casto

Tom Butcher

? :

Safety Coordinator - Massey Coal Services

Safety Technician

Superintendent

Maintenance Superintendent

Mechanic

Excavator Operator

TEREX, INC.

Gary Jones

Field Service Technical Advisor

MINE SAFETY AND HEALTH ADMINISTRATION

Sherman Slaughter

Eric Gottheld

Donald Kirkwood

Accident Investigator

Technical Support

Technical Support

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley Randall Bailey Eugene White Health and Safety Administrator

Surface Inspector District Inspector

INTERVIEWS

The following persons were present during interviews conducted on November 30, 2004.

INDEPENDENCE COAL COMPANY, INC.

Frank Foster

Safety Coordinator – Massey Coal Services

Art Hale

Senior Mine Manager

Robert Brooks*

General Mine Foreman

Kermit Fincham, Jr.*

Engineer

Shane Harvey

Attorney

MINE SAFETY AND HEALTH ADMINISTRATION

Sherman Slaughter

Accident Investigation

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley

Health and Safety Administrator

Randall Bailey

Surface Inspector

^{*} Denotes persons interviewed