West Virginia Office of Miners' Health, Safety and Training

October 27, 2009

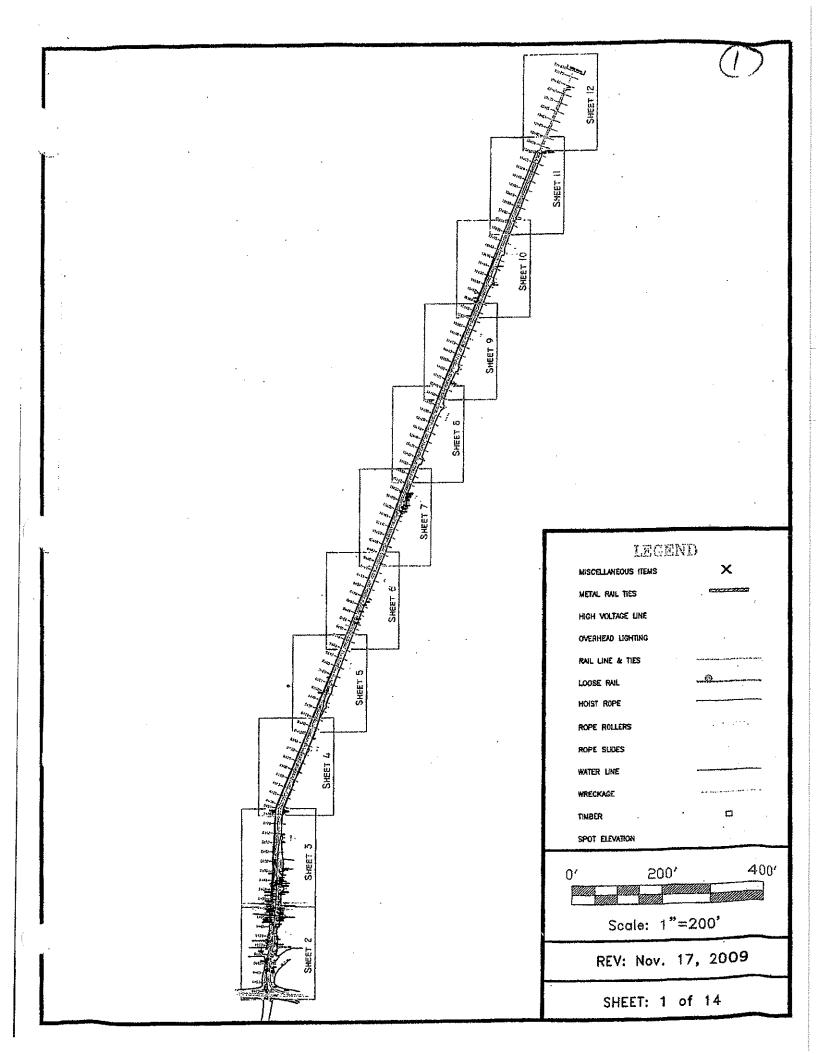
Amended Report of Investigation Underground Coal Mine Fatality Hoist Haulage Accident

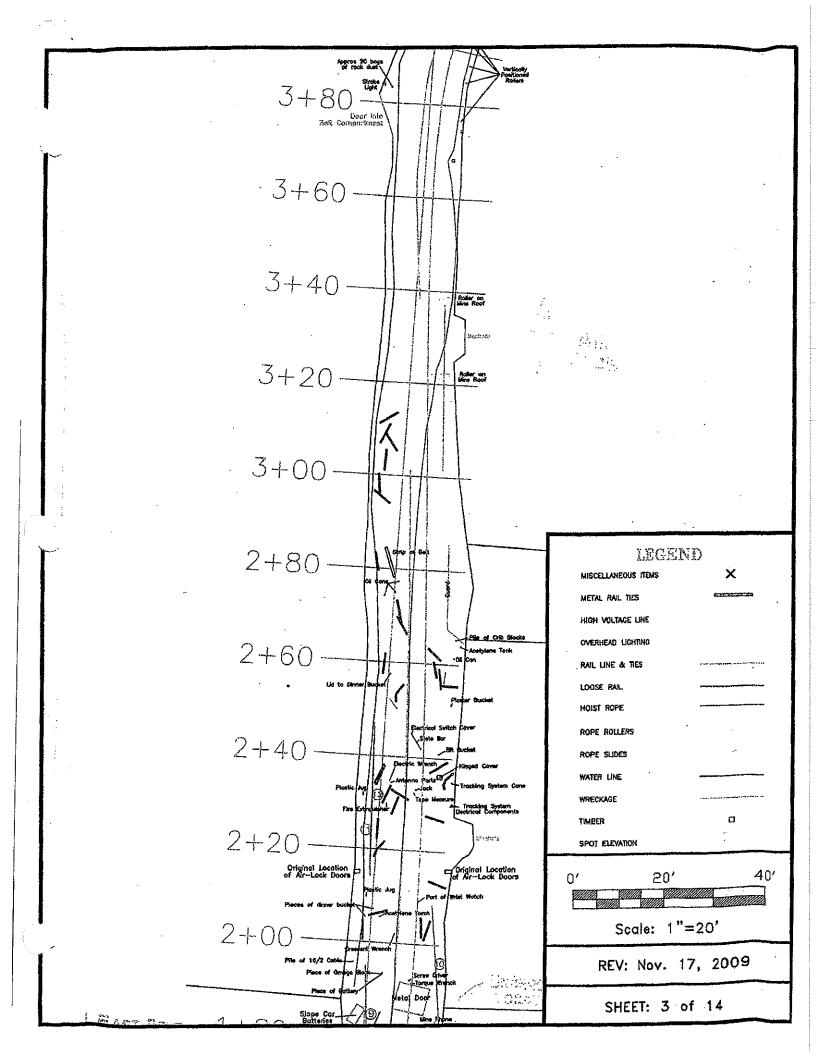
Newtown Energy, Inc.
Eagle Mine
Permit Number U-179-83-AA

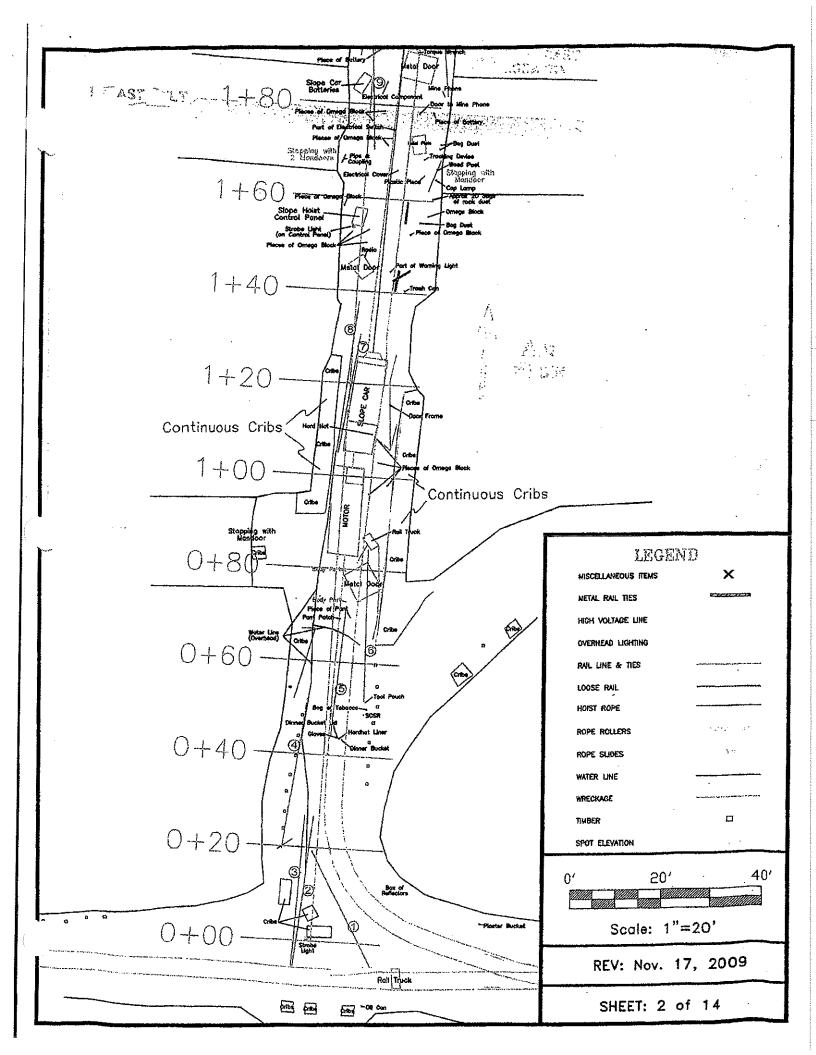
Region III Office 137 Peach Court, Suite 2 Danville, West Virginia 25053 Eugene White, Inspector-at-Large

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Report of Investigation
Underground Mine Fatality
Hoist Haulage Accident
Newtown Energy, Inc.
Eagle Mine
Permit No. U-179-83-AA

General Information

This report is based on an investigation conducted in accordance with Chapter 22A, Article 2, Section 68 of the Code of the State of West Virginia.

Newtown Energy, Inc. was permitted to operate the Eagle Mine on July 11, 2001. The employees enter the mine by means of an elevator shaft and hoist slope. The mine employs 200 people on three shifts and operates six (6) continuous mining machine units to produce coal from the Eagle coal seam. Personnel and supplies are primarily transported by battery powered track mounted equipment, and diesel is also utilized at this mine.

Mr. Charles E. Dixon, a 53 year old trackman from Scarbro, West Virginia, was employed at the Newtown Energy, Inc., Eagle Mine for six (6) years and had twenty-five (25) years total mining experience. Mr. Dixon received annual refresher training on February 21, 2009.

At approximately 7:00 a.m. on October 27, 2009, Mr. Charles E. Dixon received fatal crushing injuries when he was struck by equipment and track supplies from a runaway trip. Two other Eagle Mine employees, who were riding the trip at the time of the accident were also injured.

At 7:04 a.m. on October 27, 2009, the West Virginia Mine Emergency Call Center notified Eugene White, Inspector-at-Large for the West Virginia Office of Miners' Health, Safety and Training, Region 3, Danville Office, about the accident.

Boone County Ambulance Authority, Whitesville Fire and Rescue and Kanawha County Ambulance responded to the mine. Boone County Ambulance Authority transported Daniel Ewing to the Charleston Area Medical Center, General Division, and Kanawha County Ambulance transported David Morgan to the Charleston Area Medical Center, General Division. Both were treated for injuries then released.

At 8:00 a.m. October 27, 2009, District Inspector Michael R. Pauley issued to mine foreman Bobby Harper an investigation control order in accordance with West Virginia Code, Chapter 22A, Article 2, Section 68.

A joint investigation with the Mine Safety and Health Administration (MSHA) and representatives of Newtown Energy, Inc. began immediately.

Description

David Morgan, the third shift hoist operator, started his normal nine (9) hour shift at 11:00 p.m. on October 26, 2009, under the supervision of foreman Wilson L. Goad. The third shift track crew consisting of Charles E. Dixon, trackman (crew leader), and Daniel A. Ewing, trackman, started their normal nine (9) hour shift at 11:30 p.m. on Monday, October 26, 2009, under the supervision of Wilson L. Goad. Both track men portaled at the hoist slope.

At the beginning of their shift, the track crew was instructed to go to the No. 2 miner section to recover and load 85 pound track rails, ties, fish plates and track bolts. To accomplish this task, the track crew needed to use a 14 ton locomotive that was located at the bottom of the slope and a rail car that was located at the surface. At approximately 11:45 p.m., Charles E. Dixon rode the hoist car to the slope bottom where Mr. Dixon coupled the 14 ton locomotive to the hoist car. The hoist car and the locomotive were then hoisted to the surface where Mr. Morgan and Mr. Ewing coupled the empty rail car to the 14 ton locomotive and hoist car and lowered them to the slope bottom.

At the slope bottom, the track crew then uncoupled the rail car from the hoist car and proceeded to the No. 2 section where they recovered and loaded twelve (12) 85 lb. track rails (30 feet long), track ties, fish plates and track bolts. They completed their assignment at approximately 5:50 a.m. and were instructed to send the track rails and track supplies to the surface.

The track crew arrived back at the slope bottom at approximately 6:40 a.m. on October 27, 2009, with the 14 ton locomotive and the loaded rail car. The track rails were secured to the rail car with a chain hoist, "come-a-longs." Mr. Morgan walked up to the hoist car located at the slope bottom just as Mr. Dixon and Mr. Ewing were coupling the locomotive and rail car to the hoist car. Mr. Morgan stated he would ride to the surface also.

Mr. Morgan and Mr. Ewing boarded the hoist car. Mr. Ewing was seated in the front compartment, and Mr. Morgan was positioned in the second compartment inby. Mr. Dixon pushed the button to start the hoist and remained at the slope bottom.

After arriving at approximately 6:40 a.m., Richard Lambert, day shift hoist operator, began his normal shift at 7:00 a.m. Mike Taylor, day shift belt man, was present when Mr. Lambert entered the hoist house. From the bottom of the slope, Charles Dixon paged Mr. Lambert on the radio to inform Mr. Lambert that, he was sending the rail car to the surface.

As the equipment was being hoisted to the surface and was within approximately 525 feet of the surface bull wheel, the hoist rope failed (broke). Daniel Ewing, who was riding in the hoist car, stated that they started normally then he heard David Morgan say, "push the button, push the button." He did not know anything was wrong. He looked out and saw they were going back down instead of up, and he reached over and pushed the emergency stop button. He stated "it won't stop," and jumped out. Mr. Morgan and Mr. Ewing jumped clear of the hoist car as the equipment started back down the slope. Mr. Morgan, who was injured, began walking up the slope. Mr. Ewing stated that he found himself back at the slope bottom but did not know how he got there.

At the time the hoist rope failed (broke), Mr. Lambert, who was on the surface, noticed a red alarm light on the hoist panel indicating rope slack. At about the same time, Mike Taylor walked out of the hoist house to wait on the hoist car and noticed that the hoist rope was not there and that dust was coming up the slope. Mr. Taylor stated that he started down the slope to see what happened and met Dave Morgan coming up the slope. Mr. Taylor helped Mr. Morgan walk back up to the surface. Mr. Taylor then proceeded back down the slope to look for Mr. Ewing and Mr. Dixon. At the bottom of the slope, Mr. Taylor found Mr. Ewing, who was also injured. Mr. Ewing told Mr. Taylor that he could not find Mr. Dixon. Shortly thereafter, Mr. Ewing and Mr. Taylor found Mr. Dixon lying at the bottom of the slope, Mr. Dixon had no vital signs.

Mr. Lambert notified Superintendent Jamie Dotson that an accident had occurred. Mr. Dotson was at the Spice Lick Portal when he was notified.

After receiving information of the accident, mine manager Richard T. Asebes and mine foreman Bobby Harper drove from the Spice Lick office to the hoist slope. Foreman Mike Herndon and foreman Sammy Gore went to the accident site via mantrip from Spice Lick through the mine to the slope bottom.

Third shift foreman Wilson L. Goad was at the Spice Lick elevator bottom when he learned of the accident. Mr. Goad and fireboss Robbie Davis immediately traveled by mantrip to the slope bottom. Upon arrival, Mr. Goad, an EMT, and other co-workers located Mr. Dixon and determined that he had no pulse. Mr. Goad then located Daniel Ewing and assisted Mike Taylor with administering first-aid to Mr. Ewing.

Mike Herndon and Sammy Gore transported Daniel Ewing to the surface at the Spice Lick mine office where the Boone County Ambulance Authority transported him to the Charleston Area Medical Center, General Division. Kanawha County Ambulance transported David Morgan to Charleston Area Medical Center, General Division. Larry Boggs, Mike Herndon, Sammy Gore and Richard Asebes removed Mr. Dixon from the mine. Upon their arrival on the surface, they released Mr. Dixon's body to a representative of the West Virginia State Medical Examiner at South Charleston, West Virginia.

Conclusion

While hoisting a hoist car, locomotive and supply car (trip) up a slope, the hoist rope broke causing the trip to travel back down the slope out of control. The out of control trip struck and killed Mr. Dixon who was at the bottom of the slope.

Findings of Fact

- 1. Both an elevator and slope which utilizes a hoist transport the employees in and out of the mine. Once at mine level, the miners use track mounted battery and diesel powered equipment for conveyance to the active workings and outby areas of the mine.
- 2. The elevator shaft is 300+ feet in depth, and the slope is a track/belt combination. The slope hoist car travels approximately 1749.4 feet in length at a 16 degree incline. It is 25 feet 6 inches wide and has an average height of 8 feet.
- 3. Third shift track crew members Daniel Ewing and Charles E. Dixon were concluding their shift and were in the process of hoisting a 14 ton A. L. Lee/Goodman battery powered locomotive and a rail car loaded with twelve (12) eighty-five (85) pound steel rails along with the brake car out of the mine. When the accident occurred, Mr. Dixon was at the slope bottom while Mr. Ewing and David Morgan were riding the trip as it was being hoisted out of the mine.
- 4. The A. L. Lee/Goodman locomotive, serial number 00E-7182, weighed 15.7 tons; the rail car weighed 2.53 tons; the twelve rails weighed 5.10 tons; the Sanford Day brake car weighed 6.83 tons; and the brake car batteries weighed 1.49 tons. The combined weight being hoisted was 32.17 tons. Ottumwa Hoist Company manufactured the hoist, and Taft Construction Company installed it on May 5, 1999. The hoist rope is 1 and 1/8 inch outside diameter poly stretch lay 6x30 EE1PS, RLL flattened strand which was installed on June 23, 2007.
- 5. Based upon records provided to WVOMHS&T, Certified NDT Inc. conducted examinations of the hoist rope on April 3, 2009 and August 17, 2009. The examination on April 3, 2009, indicated the following: strength loss of 6.14 percent, anomalies of wear, broken internal and external wires and fretting corrosion. The area of greatest wear was 425-600 feet above the conveyance. On August 17, 2009, the rope was found to have strength loss of 6.95 percent, anomalies of wear, broken internal and external wires and fretting corrosion. Areas of wear were not recorded on this test.
- 6. The hoist rope failed at approximately 525 feet above the conveyance at the bull wheel allowing the load to proceed down the slope with the 2 passengers exiting the brake car. The load continued down the slope to the area where Mr. Dixon was waiting, striking him and causing fatal injuries.

- 7. WVOMHS&T concluded that the victim was not located in a designated waiting area at the time the incident occurred. Investigators found the victim's tools and mining equipment in various locations in the slope track entry.
- 8. On October 30, 2009, the Mine Safety and Health Administration Technical Support performed a non-destructive test on the hoist rope. Results of the test show that additional damage was present to approximately 14 to 32 percent of lost metallic area (LMA). WVOMHS&T inspectors witnessed the testing results. The results are included in this report.
- 9. An examination of the slope entry, the rope rollers and rope pads revealed the following conditions: four rollers were stuck; seven rollers were missing; five rollers were extremely tight; one roller had worn out bearings; two rollers were dislodged from the roller mounts; and one roller was stuck with a groove cut into the shell exposing the roller shaft. The purpose for the rollers and pads is for the hoist rope to travel upon.
- 10. The Sanford-Day brake car used to raise and lower personnel at the Eagle Mine slope was not being maintained in a safe condition. The power wire and packing gland had been removed from the right side overspeed centrifical switch, and the conductors had been shunted together, taped up, and suspended above the unit thereby making the switch inoperable. Under this condition, only one centrifical switch remains functional to activate the brakes in the event of an overspeed condition.
- 11. WVOMHS&T observed evidence during the investigation which revealed that Mr. Dixon was not located in the designated waiting station at the slope bottom while equipment/supplies were being hoisted to the surface when the hoist rope broke thus allowing said equipment/supplies to travel back down the slope striking the victim.
- 12. The active hoisting equipment operating at the slope track travelway was not maintained in a safe condition. The investigation/inspection of the hoist rope guide rollers revealed the following conditions: four stuck rollers; seven missing rollers; five rollers were extremely tight; one roller had worn out bearings; two rollers were dislodged from the roller mounts; one roller was stuck, groove cut into shell exposing roller shaft. The purpose of these rollers is for the hoist rope to travel up and down the slope travelway while in motion.
- 13. The hoist rope was not properly maintained. Due to excessive pitting of the crown wire and fretting corrosion, the hoist rope failed. This was verified by evidence of the non-destructive test performed on October 30, 2009 by MSHA Tech Support on the rope showing approximately 14% to 32% loss of metallic area. WVOMHS&T inspectors observed the testing and the results.

- 14. Based upon records obtained at the mine during the investigation and witness interviews, WVOMHS&T found that the hoisting machinery being operated at the slope track travelway was not examined daily by a qualified electrician.
- 15. There was no record provided to WVOMHS&T of the weekly electrical examination by a qualified person to assure safe operating conditions of the hoist and brake car being used at the Eagle Mine slope.
- 16. Based on information received during the investigation, WVOMHS&T determined that an adequate twenty-four (24) hour examination of the hoisting equipment was not completed. If an adequate twenty-four (24) hour examination was completed that examination would have revealed the following conditions: four stuck/frozen rollers; seven missing rollers; five rollers that were extremely tight; worn out bearings in one roller; two rollers that were dislodged from the roller mounts; and, one roller that was frozen with a groove cut into the shell exposing inner roller shaft. These conditions were not recorded in the approved record book provided for that purpose.

Enforcement Action

The following enforcement actions were taken as a result of the investigation.

A non-assessed control order was issued in accordance with Chapter 22A, Article 2, Section 60 of the West Virginia Code to preserve evidence following the accident.

A total of eight (8) violations were issued during this investigation. Five (5) violations were violations of a health and safety rule, were of a serious nature, and involved a fatality.

(Violation 17038) Chapter 22A, Article 2, Section 36(A): the Sanford-Day brake car used to raise and lower personnel at the Eagle Mine slope was not being maintained in a safe condition. The power wire and packing gland had been removed from the right side overspeed centrifical switch, and the conductors had been shunted together, taped up, and suspended above the unit thereby making the switch inoperable. Under this condition only one centrifical switch remains functional to activate the brakes in the event of an overspeed condition. This incident is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

(Violation 17039) Chapter 22A, Article 2, Section 36(A): During the investigation of a fatal accident that occurred at this mine, evidence observed revealed that the victim was not located in the designated waiting station at the slope bottom while equipment/supplies were being hoisted to the surface when the hoist rope broke thus allowing said equipment/supplies to travel back down the slope striking the victim resulting in fatal injures. This incident is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

(Violation 17041) Chapter 22A, Article 2, Section 36(A): The active hoisting equipment being operated at the slope track travelway is not being maintained in safe condition in that an investigation/inspection of the hoist rope guide rollers revealed the following conditions: four stuck rollers; seven missing rollers; five rollers were extremely tight; one roller had worn out bearings; two rollers were dislodged from the roller mounts; one roller was stuck, groove cut into shell exposing roller shaft. The purpose of these rollers is for the hoist rope to travel up and down the slope travelway while in motion. This incident is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

(Violation 17042) Chapter 22A, Article 2, Section 36(A): The hoist rope was not being properly maintained in that due to excessive pitting of the crown wire and fretting corrosion the hoist rope failed. This is also verified by evidence of the non-destructive test performed on the rope by Tech Support personnel of MSHA on October 30, 2009 which verified areas of approximately 14% to 32% loss of metallic area. Personnel of the Office of Miners' Health, Safety and Training were present to witness the testing and the results. This incident is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

(Violation 17043) Chapter 22, Article 2, Section 38(A): The requirement that each mantrip shall be operated independently of any loaded trip of coal or other heavy material is not being complied with at the active hoist slope, in that at approximately 7:00 a.m. on October 27, 2009, two employees were riding inside the hoist mantrip car which was coupled to a 14-ton battery locomotive and a track railcar loaded with twelve (12) 85 lb. steel track rails measuring 30 feet long (each), track ties, fish plates, etc., while being hoisted to the surface from the slope bottom (1,749.4 feet). The hoist rope broke after traveling approximately 1,225 feet. Both men jumped out of the hoist mantrip car when said car started traveling back down the slope thus causing injuries to the men. The slope grade is 16 degrees. This incident is a violation of a health and safety rule, is of a serious nature, and involved a fatality.

(Violation 17035) Chapter 22A, Article 2, Section 36(A): During the investigation of a fatal accident that occurred at this mine, records obtained from mine management and testimony received revealed that the hoisting machinery being operated at the slope track travelway is not being examined daily by a qualified electrician.

(Violation 17036) Chapter 22A, Article 2, Section 40(20): No record could be provided of the weekly electrical examination by a qualified person to assure safe operating conditions of the hoist and brake car being used at the Eagle Mine slope.

(Violation 17037) Chapter 22A, Article 2, Series 36(A): Based on information received during the investigation of a fatal accident, it was determined that an adequate twenty-four (24) hour examination of the hoisting equipment is not being conducted in that the following conditions were observed following an examination of the guide rollers and mats in the slope track entry: four stuck/frozen rollers; seven missing rollers; five rollers were extremely tight; one roller had worn out bearings;

two rollers were dislodged from the roller mounts; one roller was frozen with a groove cut into shell exposing inner roller shaft. These conditions are not recorded in approved record book provided for that purpose.

Recommendations

In accordance with Title 56, Series 8, Section 9.4 of the West Virginia Administrative Regulations, the comprehensive mine safety program for Newtown Energy, Inc., Eagle Slope, shall be modified to include the following:

Newtown Energy, Inc. Eagle Mine

Hoisting Rope Safety Precautions

- When a new rope is installed, baseline measurements will be established every three hundred feet of the normally used portion of the rope and recorded in hoist book. These measures will be taken with an electronic jaw caliber. The measurements will be taken after the manufacturer's stretch has been taken out and before wear begins but in no case will exceed three weeks from time the rope is installed and placed in service. Non-destructive testing will be performed on the new rope within a month of installation and the same testing will be performed at least every six months thereafter.
- Visual examination of the normally used portion of the rope will be performed every day the slope hoist is operated and recorded in the hoist book.

WVOMHS&T shall provide the Board of Coal Mine Health and Safety with proposed regulations addressing this fatality and shall submit those proposed regulations under separate cover.

Acknowledgement

The West Virginia Office of Miners' Health, Safety and Training gratefully acknowledges the cooperation of the employees and management of Newtown Energy, Inc., Ketchum Construction, West Virginia Electric, Alpha Engineering, R & W Cable, Task Force 1 and the Mine Safety and Health Administration during this investigation.

Appendix

- Mine Information
- Victim Information

MINE INFORMATION

COMPANY Newtown Energy, Inc.			
MINE NAME Eagle Mine			
WV PERMIT <u>U-17983-AA</u> MSHA PERMIT NO. <u>46-08759</u>			
ADDRESS P. O. Box 189, Comfort, WV 25049			
COUNTY Boone/Kanawha PHONE NO. (304) 837-8581			
DATE PERMIT ISSUED July 11, 2001			
WORKING STATUSActive			
LOCATION Left Hand Fork of Joe's Creek			
UNIONNON-UNIONX			
DAILY PRODUCTION 4000 clean tons			
ANNUAL PRODUCTION TO DATE 1,000,000 clean tons			
TOTAL EMPLOYEES 200 NUMBER OF SHIFTS 3			
COAL SEAM NAME AND THICKNESS Eagle			
ACCIDENT INCIDENT RATE 7.09 LOST TIME ACCIDENTS 7.09			
TYPE OF HAULAGE Belt			
WVOMHST INSPECTOR Danny Jarrell			
DATE OF LAST INSPECTION July 2009			
NOTIFIED BY Darrell Ooten			
NOTIFICATION TIME 7:15 a.m. on October 27, 2009			
CMSP-ANNIVERSARY DATEJuly 31, 2010			
CMSP-CONTACT PERSON Jamie Dotson			