## West Virginia Office of Miners' Health, Safety and Training

June 27, 2011

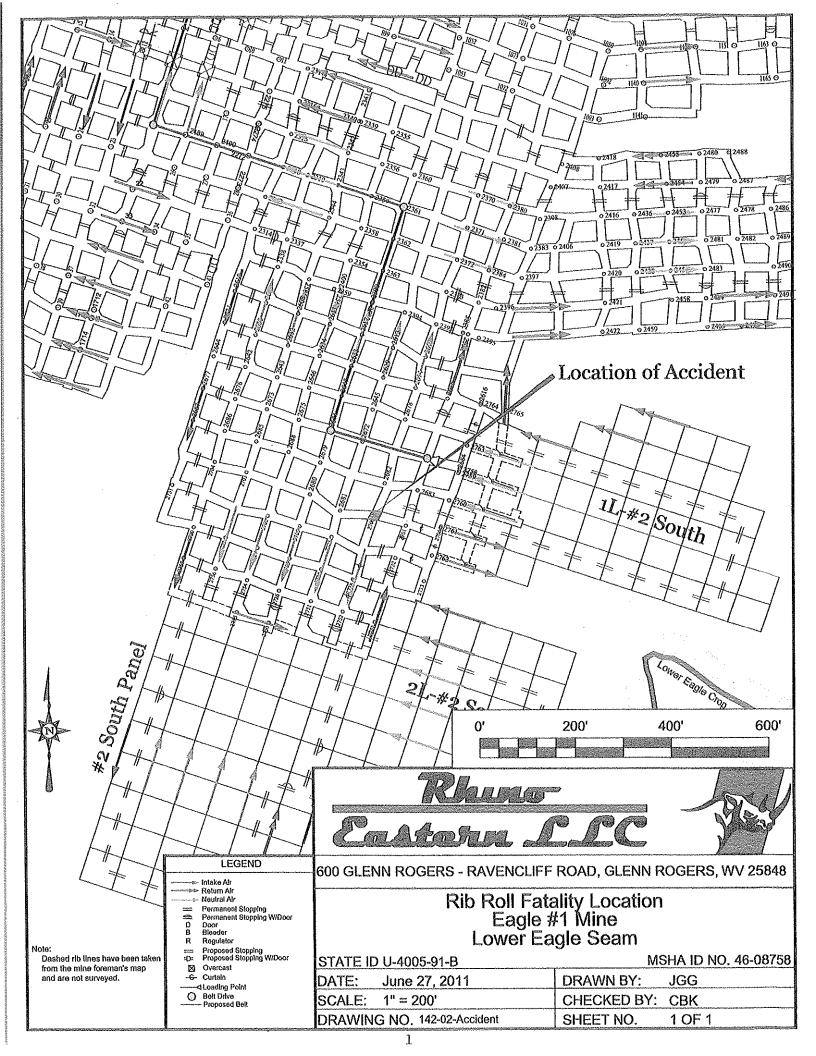
Report of Investigation Underground Coal Mine Fatality (Roof and Rib Fall)

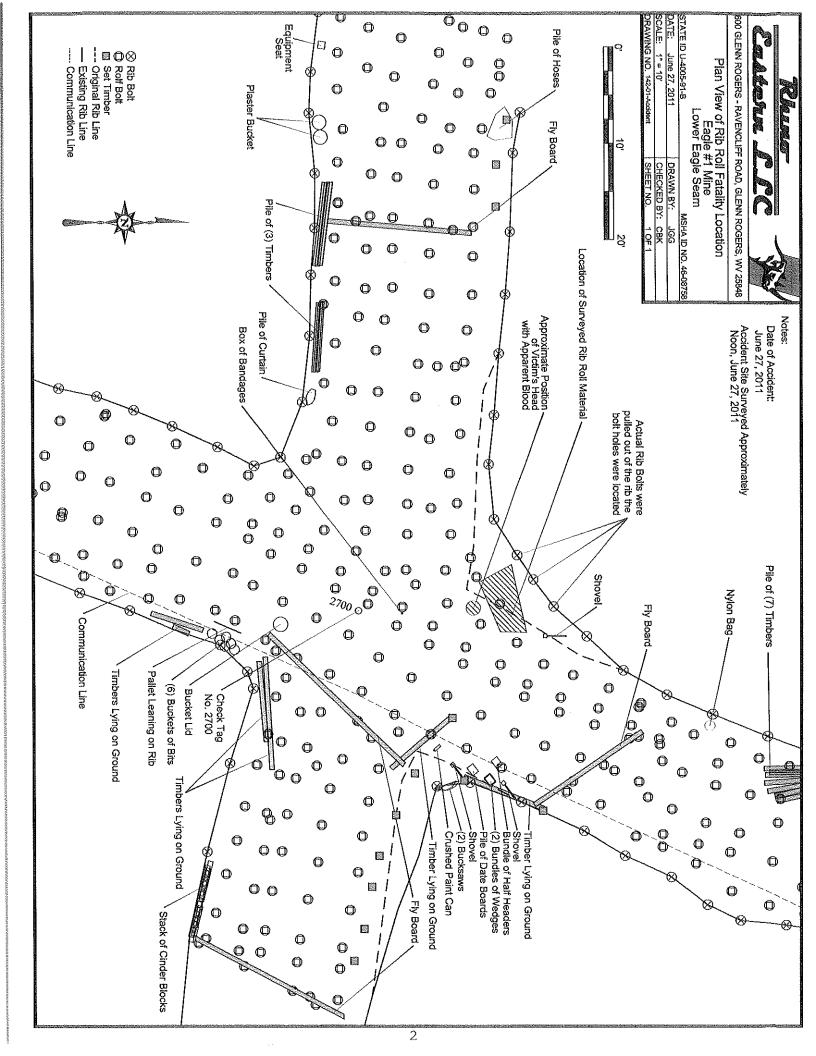
Rhino Eastern, LLC Eagle #1 Mine Permit Number U00400591B

Region IV Office
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# Report of Investigation Underground Coal Mine Fatality Rhino Eastern, LLC Eagle #1 Mine, Permit Number U-00400591B

#### **GENERAL INFORMATION**

This report is based on an investigation conducted in accordance with Chapter 22A, Article 1, Section 14 of the mining laws of the State of West Virginia.

Joseph M. Cassell, an employee of the Rhino Eastern, LLC – Eagle #1 mine, was fatally injured in an accident which occurred at approximately 1:10 a.m., on June 27, 2011. Mr. Cassell was working as a crew leader of the move crew on the No. 4 working section, rehabilitating an area of bad rib, when he was struck with material that had dislodged from the mine roof and rib.

The Raleigh County 911 Emergency Service was notified of the accident at 1:17 a.m., and the Mine and Industrial Accident Emergency Operations Center was notified of the accident at 1:21 a.m. by Bill Ferguson, the Eagle #1 mine, 3<sup>rd</sup> shift communication and tracking attendant. The West Virginia Office of Miners' Health, Safety and Training was notified of the accident by the Mine and Industrial Accident Emergency Operations Center at 1:27 a.m. A joint investigation with the Mine Safety and Health Administration was started immediately.

#### DESCRIPTION

The Rhino Eastern, LLC- Eagle #1 mine is located on Old Peach Tree Road, Route 99, Bolt, WV, in Raleigh County. This underground mine has two (2) sections actively extracting coal in the Lower Eagle coal seam. This coal seam is approximately 84 inches in height. The mine is staffed by 87 employees and operates five (5) days a week and every other Saturday. The day and evening shift are primarily coal producing shifts. Maintenance activities, section belt installations, and power moves, etc., are routinely performed on the midnight shift.

On June 26, 2011, the employees on the midnight shift of the Eagle #1 Mine participated in a safety meeting conducted by Eric Beller, move boss on the no. 3 section. The safety meeting began at 11:00 p.m. and lasted for approximately 20 minutes. At approximately 11:20 a.m., Mr. Cassell, crew leader; Steve Cole, section electrician; Anthony Halstead, apprentice miner/welder; Guy Brunty, apprentice miner/general laborer; and Tony Lester, apprentice miner/general laborer, entered the mine and used a rubber tire personnel carrier to travel to the No. 4 section. Benjamin Stovall, scoop operator, drove the scoop to the section. The travel time from the surface of the mine to the No. 4 section took approximately ten (10) minutes.

Upon arriving on the section at approximately 11:30 p.m., Mr. Cole and Mr. Halstead proceeded to the 1-left, No. 2 South section to perform maintenance duties. Mr. Cassell, Mr. Brunty, Mr. Lester, and Mr. Stovall's initial job of the shift was to rehabilitate a section of faulty rib located in the No. 3 left crosscut (just left of survey spad No. 2700) on the old No.2 South Panel, which is three (3) crosscuts outby the new 1- Left, No. 2 South Section.

After completing the rehabilitation work in the No. 3-left crosscut, the crew then proceeded to the second job site to rehabilitate a section of faulty rib located in the No. 3 entry, continuing into the No. 3-right crosscut (just right of survey spad No. 2700) of the old No. 2 South Panel.

When Mr. Cassell, Mr. Lester, Mr. Brunty, and Mr. Stovall arrived at the second job site, they found that five or six timbers had already been knocked and stacked in the No. 3 right crosscut. Mr. Stovall used the scoop to clean the bulk of the loose coal at the rib line. The remaining loose coal was shoveled, by hand, into the roadway prior to reinstalling the timbers that had been previously knocked out. During this final step of reinstalling the timbers, Mr. Lester and Mr. Brunty were positioned closely on either side of Mr. Cassell. Mr. Lester heard the roof crack, looked up, and saw the roof and rib material falling. He yelled to warn Mr. Cassell and Mr. Brunty and then jumped sideways to avoid the falling material. He witnessed the dislodged roof and rib material falling on Mr. Cassell, crushing him to the mine floor.

Mr. Brunty, Mr. Stovall, Mr. Lester and Mr. Halstead immediately attempted to lift the fallen material off of Mr. Cassell. Due to the size and weight of the roof and rib material, they could not remove it. Mr. Stovall, with the aid of the battery powered scoop, lifted the material from Mr. Cassell, victim. The victim was removed from beneath the material, and first aid was administered by Mr. Cole. The victim was then placed on a stretcher and transported to the surface via an A. L. Lee rubber tired personnel carrier.

The victim arrived on the surface area of the mine at approximately 1:45 a.m. Mr. Cassell was pronounced dead at the mine site by the Medical Examiner at approximately 4:03 a.m. Best Ambulance service then transported the body from the mine site to the Blue Ridge Funeral Home in Beckley, West Virginia.

#### FINDINGS OF FACT

- 1. Joseph M. Cassell was working as a Crew Leader on the 3<sup>rd</sup> shift move crew for the no. 4 section at the time of the fatal accident.
- 2. Benjamin Stovall, Guy Brunty, Tony Lester and Mr. Cassell were in the process of rehabilitating a section of faulty rib line at spad no. 2700, when the fatality occurred.

- 3. The seam thickness at this mine is approximately 84 inches. The overall height in the area of the accident was approximately 108 inches.
- 4. The coal block rib in the No. 3 entry, where the fatality occurred, consisted of a section of bad rib composed of laminated coal and rock that had been supported with forty-two (42) inch bolts and wooden straps.
- 5. The accident was caused by material that fell from the mine roof and rib.

#### CONCLUSION

Mr. Joseph M. Cassell was fatally injured when he was struck with material that had dislodged from the mine roof and rib.

#### **ENFORCEMENT ACTION**

A non-assessed control order was issued in accordance with Chapter 22A, Article 2, Section 68 of the West Virginia Mining Laws in order to preserve the scene of the accident and to complete an investigation.

The WV Office of Miners' Health, Safety and training issued sixteen notices of violation during this investigation. The following notices of violation were issued to Rhino Eastern, LLC, Eagle #1 Mine:

Notice of Violation: Chapter 22(A), Article 2, Section 4(A): No air movement could be detected in the last open crosscut between #1 and 2 entries on #4 section.

Notice of Violation: Chapter 22(A), Article 2, Section 4(A): No air movement could be detected behind line curtains in face of #1 on 4 section, face is approximately 50 feet deep.

Notice of Violation: Chapter 22(A), Article 2, Section 4(A): No air movement could be detected behind line curtain of # 2 face on 4 section which is approximately 60 feet deep.

Notice of Violation: Chapter 22(A), Article 2, Section 4 (A): No air movement could be detected behind line curtain in face of #4 on 4 Section which is 60 feet deep.

Notice of Violation: Chapter 22(A), Article 2, Section 4(A): No air movement could be detected behind curtain in face of # 5 which is approximately 20 feet deep on # 4 section.

Notice of Violation: Chapter 22(A), Article 2, Section 37 (Y): At least 15 feet of clearance is not provided between the #1 shuttle car and check in #1 entry on 4 section.

Notice of Violation: Chapter 22(A), Article 2, Section 37 (Y): At least 15 feet of clearance is not provided between the miner boom and check curtain in # 2 entry at last open crosscut on 4 section. Only 5 1/2 feet of clearance is provided.

Notice of Violation: Chapter 22(A), Article 2, Section 37 (Y): At least 15 feet of clearance is not provided between the roof bolter and check curtain in crosscut between # 3 and 4 entries on 4 section. Roof bolter parked flush against check.

Notice of Violation: Chapter 22(A), Article 2, Section 40 (20): The energized # 4 section power center is not maintained in good condition in that large amounts of combustible material is being stored on top, creating fire hazard.

Notice of Violation: Chapter 22(A), Article 2, Section 46 (F): A plug is not provided for the acetylene tank being stored at # 4 section power center.

Notice of Violation: Chapter 22(A), Article 10, Section 1 (A): An emergency medical service personnel is not provided for the 3<sup>rd</sup> shift while at least 16 workers were underground.

Notice of Violation: Title 36, Series 10, Section 3.1: The mine ribs are not being supported or otherwise controlled on # 4 section where persons work or travel. Approximately 20 feet outby spad No. 2701 on left rib there is a loose unsafe rib due to visible crack.

Notice of Violation: Title 36, Series 10, Section 3.1: The mine ribs are not being supported or otherwise controlled on # 4 section where persons work or travel. Approximately 20 feet inby spad No. 2684 on right rib there is a loose unsafe rib due to visible crack.

Notice of Violation: Title 36, Series 10, Section 3.1: The mine ribs are not being supported or otherwise controlled on the # 4 section where men work or travel. There is a large unsafe rib in # 2 entry approximately 20 feet outby last open crosscut on right rib due to visible crack in rib.

Notice of Violation: Title 36, Series 10, section 3.1: The mine ribs are not being supported or otherwise controlled on No. 4 section where persons work or travel. There is a large unsafe mine rib on left rib 10 feet outby section power center due to crack in rib.

Notice of Violation: Tile 36, Series 10, Section 3.1: The mine ribs are not supported or otherwise controlled on the # 4 section where men work or travel. Unsafe rib and roof bolt missing is present on inby right corner of # 2 intersection of last open crosscut due to visible crack.

### MINE INFORMATION

COMPANY Rhino Eastern, LLC
MINE NAME Eagle No. 1
WV PERMIT <u>U00400591B</u>
ADDRESS P.O. Box 260. Bolt, WV 25817
COUNTY Raleigh
DATE PERMIT ISSUEDJuly 28, 2008
LOCATION Off of State Route 99, near Bolt, WV
UNIONNON-UNIONYes
DAILY PRODUCTION 1,400 tons
ANNUAL PRODUCTION TO DATE 326,300 tons
TOTAL EMPLOYEES 95 NUMBER OF SHIFTS 2
NAME OF COAL BED Lower Eagle
SEAM THICKNESS 7 feet
ACCIDENT INCIDENT RATE 8.74 LOST TIME ACCIDENTS _1
TYPE OF HAULAGE Conveyor Belt
WV OMHST INSPECTOR Larry Wine No. 171
DATE OF LAST INSPECTION June 21, 2011
NOTIFIED BY Bill Ferguson
TIME OF NOTIFICATION 1:15 a.m.
CMSP – ANNIVERSARY DATE <u>July 1, 2011</u>
CMSP - CONTACT PERSON Don McKenzie