

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH
AMENDED REPORT OF INVESTIGATION

Surface Mine

Fatal Machinery Accident
March 12, 2004

Mountaintop Clearing LLC (C858)
Fairdale, West Virginia

at

Paynter Branch Surface Mine
Simmons Fork Mining Incorporated
Oceana, Wyoming County, West Virginia
ID No. 46-08582

Accident Investigator

Sherman L. Slaughter
Mine Safety and Health Specialist

Originating Office
Mine Safety and Health Administration
District 4
100 Bluestone Road
Mt. Hope, West Virginia 25880
Jesse P. Cole, District Manager

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Note: Page 2 was amended to change the age of the victim from 33 to 32 years of age.



OVERVIEW

At 12:45 p.m. on Friday, March 12, 2004, a 32-year old tree cutter with five years of mining experience was fatally injured at Simmons Fork Mining Incorporated's Paynter Branch Surface Mine. The accident occurred while the victim was cutting trees to clear for strip mining operations. The victim cut a tree that did not fall to the ground. Instead, it leaned slightly in the direction of a nearby standing tree. As the victim was cutting the nearby tree, the previously cut tree fell and struck him.

The clearing crew was not properly trained in hazard avoidance and safe work procedures. The failure to use proper techniques to correct the hazardous condition and to keep persons a safe distance from the dangerous tree resulted in the occurrence of the accident.

GENERAL INFORMATION

The Paynter Branch Surface Mine is located near Oceana, Wyoming County, West Virginia. The Buffalo, Winifrede, Cedar Grove, and Alma coal seams are mined utilizing both contour and mountaintop mining methods.

The mine works two-10 hour production shifts a day, five days per week, and employs 41 people. An average of 2,300 tons of coal is produced daily.

The principal officers for the mine at the time of the accident were:

Mark WeaverPresident
Richard Wriston..... Superintendent
John D. Mollohan..... Foreman

Prior to the accident, the Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection of the mine on February 23, 2004. The Non-Fatal Days Lost (NFDL) injury incidence rate for the mine in 2003 was 0.00 compared to a National NFDL rate of 1.86.

At the time of the accident, Mountaintop Clearing was contracted to cut trees and brush in advance of mining. The Non-Fatal Days Lost (NFDL) injury incidence rate for Mountaintop Clearing in 2003 was 0.00 compared to a National NFDL rate of 2.55.

DESCRIPTION OF ACCIDENT

Benny May, crew leader, Steven M. Workman, and Lawrence Payne, Jr. (victim), all clear cutters employed by Mountaintop Clearing LLC (contractor), arrived at the mine at 7:15 a.m. on Friday, March 12, 2004. They traveled on the mine haul road from the security building through the active coal pits to their work area located approximately 500 feet northeast of the Buffalo Pit on the Litz permit. They had worked at the same location the preceding Tuesday and Wednesday.

When the workers arrived at the work site at 7:30 a.m., May examined the work area where they would start cutting trees and cautioned Workman and Payne about some hanging trees. May also directed them where to begin cutting. They began cutting where they had stopped the previous day. The trees on the lower part of the slope were to be cut first, and the cutting would progress up the slope.

At approximately noon, the workers finished cutting to an old access road at the top of the slope and stopped for lunch. During lunch the wind began to blow hard. The crew went back to work at 12:50 p.m.

The crew returned to work in an adjacent cut which had been started by another crew the day before. The workers examined the work area prior to cutting trees. Afterwards, Workman cut on the left side of the work area (facing downhill), Payne cut in the middle, and May cut on the right side. Payne had cut about six trees when May motioned for Payne to bring him a file to sharpen his saw. As Payne approached May, he cut some saplings and a large maple tree. As Payne was cutting the maple tree, May was located up hill directly behind him, and the shavings were hitting May. After the maple tree was cut, it leaned back on its stump in an up hill direction, but did not fall. The wind blew the tree slightly to the left, but the tree still did not fall. Payne gave May the file and May told him that after he sharpened his saw, he would cut a nearby tree into the large maple tree, causing it to fall downhill. Payne did not believe that May's proposed procedure would work. He thought that the maple tree would fall into a nearby poplar tree. The tree was discussed momentarily.

While May was preparing to sharpen his saw, Payne walked to the nearby poplar tree and began to cut. While cutting the poplar tree, the previously cut maple tree fell into a tree directly behind the poplar tree. It lodged momentarily, then rolled into the poplar tree and slid down striking Payne on the back.

May heard Payne's saw start cutting and tree limbs breaking. He looked up and saw the maple tree falling towards Payne. May yelled to Payne, but Payne continued cutting and did not look up.

Workman heard May yell, and looked up to see the tree fall onto Payne. Workman and May ran to Payne. May used Payne's saw to cut the maple tree and free Payne. The tree was removed and they checked Payne's pulse, but none was detected. May began CPR on the victim.

Workman ran to their truck, located approximately 1,100 feet from the accident site, and called for help using a CB radio. Steve Amos, operating a coal loader in the nearby coal pit, heard the call and contacted John Mollohan, Foreman, at about 12:45 p.m. Mollohan took Billy Legg, emergency medical technician (EMT), to the nearest vehicle-accessible location to the accident site, where Workman was waiting at the truck. Legg went to the victim, performed an examination, and could not detect any vital signs. He immediately used a cell phone to contact the mine office at 1:00 p.m. The office clerk contacted 911 for help. Danny Bragg and Roger McGrady, mine employees, took the EMT equipment to the accident site. A Jan-Care ambulance arrived at the mine at 1:24 p.m. At 2:39 p.m., the victim was transported from the mine to Adam Toler Funeral Home at Oceana, West Virginia, where he was pronounced dead by the coroner.

INVESTIGATION OF THE ACCIDENT

The MSHA Pineville, West Virginia, field office was notified of the accident at 1:08 p.m. on Friday, March 12, 2004. An MSHA accident investigator was immediately dispatched to the mine. A 103(k) order was issued to insure the safety of all persons at the mine. The investigation was conducted in cooperation with the West Virginia Office of Miners' Health, Safety, and Training, with the assistance of the mine operator and employees (refer to Appendix A for a list of persons who participated in the investigation).

The investigation team traveled to the accident scene to conduct an investigation of existing physical conditions. Photographs and relevant measurements were taken. An initial interview was conducted at the mine office with one of the witnesses. Formal interviews were later conducted at the MSHA office in Pineville, West Virginia, with seven persons who had knowledge relevant to the accident. The physical portion of the investigation was closed on April 27, 2004, and the 103 (k) order was terminated.

DISCUSSION

Examination

Mollohan observed the tree cutters on the site during the morning prior to the accident. Mollohan's normal duties included conducting examinations of the active working areas of the mine, except for the clear cutter work areas. He did not consider the clear cutting area an active work area for miners. Mollohan did not consider the timber cutters to be miners. The clear cutting work area was not examined by the mine operator.

The clear cutters normally went to the mine office before going to their work area to inform the mine operator of their planned work areas for blasting purposes. However, they did not do this on the day of the accident.

May was the team leader and directed where the cutters would work. He had been clear cutting at surface mines for about five years. He examined the work areas along with the other two cutters. May was not a certified person for making examinations at active working areas for hazardous conditions. He did not consider himself to be a foreman but was a certified miner.

Accident Site

The tree that fell on the victim was a maple tree that measured an average of 18 inches in diameter across the butt end and 79.5 feet long. The maple tree was of a typical height for the trees in the area. The butt end of the tree slid down the slope 17 feet from its stump. The stump of the tree was completely cut through with two side cuts and a back cut, except for a small round area in the center approximately ½ inch in diameter. This area had pulled, or broken, when the tree fell. The tree had a pronounced curve that caused it to lean uphill.

The maple tree was not cut using well established felling techniques. The tree was cut using two side cuts and one back cut. This method used to cut the maple tree did not leave any hinge wood to hold the tree and did not undercut (notch) the tree to control the direction of its fall. Tree felling techniques established by the Occupational Safety and Health Administration (OSHA) require that an undercut be made of sufficient size so the tree will not split and will fall in the intended direction. In addition, a backcut shall be made to leave sufficient hinge wood to hold the tree to the stump during most of its fall so that the hinge is able to guide the tree's fall in the intended direction.

After the accident, the tree located immediately behind the poplar tree being cut when the maple tree fell on the victim contained freshly broken limbs. The only cut tree that could have broken the tree limbs was the maple tree that struck the victim. All the other trees that had been cut had fallen down slope away from this tree. The slope of the ground was 36 degrees directly above the location where the maple tree was laying.

Workman and May both dropped their saws and moved toward the victim when they observed the maple tree falling. The locations of these saws, which were not moved prior

to the investigation, were used to determine the workers' relevant positions at the time of the accident. Workman's saw was located 71 feet from the poplar tree and 113 feet from the maple tree stump. May's saw and hard hat were located approximately 10 feet from the uphill side of the maple tree stump. The poplar tree being cut by the victim was located approximately 41 feet from the stump of the maple tree. The poplar tree was approximately 55 feet high.

The maple tree that fell on the victim was in May's cut area. May was going to cut the tree after he sharpened his saw as he cleared the trees in his area. The victim was working between May and Workman. The victim and the other workers were working about 57 feet, or less, from one another. The workers were cutting too close to each other. They would have gotten closer as the cutters worked to the perimeter of their assigned cut areas.

Weather Conditions

The wind was blowing hard during lunch at 12:00 noon. It blew May's hard hat off three times during lunch. The wind had settled down some but was still blowing when the cutters went back to work after lunch. The wind caused the maple tree that hit the victim to blow sideways, somewhat perpendicular to the slope towards the victim's cutting area, after it was cut.

May warned the victim not to cut after lunch because it was too windy. May and Workman did not want to cut after lunch. The three of them discussed the possibility of getting injured and damaging their chain saws. May told the victim that they could turn in 6 hours and go home. May believed their supervisor, Richard Breton, would not question the decision. The victim wanted to work eight hours and went back to cutting. May said he could only give the victim advice and could not make him quit cutting.

Training

The clearing crew was not provided with experienced miner training that included hazard avoidance specific to tree cutting. Mountaintop Clearing, LLC documented hazard recognition training. Neither the contractor nor the mine operator was able to provide any additional training documentation. The hazard recognition training, received by the victim, included instruction to inspect each tree before cutting and to look for dangers.

Workman stated that he was never told that if a tree was too dangerous to cut, it should be left. He said that no matter how dangerous it was to cut a tree he would get it down one way or the other. He stated he had never had a tree he could not cut.

Workman had cut logs for about four years, and had only been clear cutting for two months. When cutting logs, Workman utilized a hinge cut method, but he had to modify his cutting method when clear cutting. The methods being used at the accident site did not include the hinge cut method and took less time to complete. Workman was improperly task trained by the victim and May. He was using the same method of cutting

that the victim and May were using at the time of the accident. The task training provided to the victim by the contractor did not include instruction to notch and hinge cut trees.

Workman stated if he were cutting a leaning tree he would make two side cuts on the front and then cut the back. The maple tree that fell on the victim had been leaning and was cut in this manner. The manner the maple tree was cut conflicted with established tree felling techniques which require an undercut (notch) and a backcut. The established technique leaves sufficient hinge wood to hold the tree to the stump during most of its fall so that the hinge is able to guide the tree's fall in the intended direction. The statements made by Workman relative to the method being used to clear cut trees, the stumps of the other trees that had been cut prior to the accident, and the method used to cut the maple tree indicate that the workers had not been task trained to notch and hinge cut the trees.

The mine operator provided hazard training to the clear cutters at the security building at the mine entrance. The training did not address clear cutting activity. The workers were cutting closer than two tree lengths distance from one another. The documented hazard recognition training given to the workers did not include definitive instruction on how close to work to each other when cutting trees. Mountaintop Clearing, LLC left it up to the cutters to decide. Workman stated that the workers tried to maintain an individual cut area which was normally 100 feet wide.

Breton gave the cutting crew a copy of the state comprehensive safety plan. The plan cautioned the workers to identify hazards that could exist in the cut areas but did not include instruction on how to avoid those hazards.

The workers were also trained by a contractor who used the mine operator's training plan. The plan listed tasks which, if utilized at the mine, would require "New Task Training" when applicable. Clear cutters were not included in the listing.

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, causal factors 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 recurrence of the accident:

1. *Causal Factor:* Although May was the team leader of the crew, he did not have the authority to require the workers follow his instructions. When May decided on a corrective action to eliminate the hazardous condition, the victim disagreed with him. When May told the victim not to expose himself to the danger tree, the victim ignored him.

Corrective Action: Mountaintop Clearing, LLC should provide each cutting crew with a person with the authority to discipline workers who fail to follow safe work procedures and company policies.

2. *Causal Factor:* The person designated to examine the work area was not a certified person and hazardous conditions, which were present, were not corrected. The standing cut maple tree and the blowing wind produced a hazardous condition. The hazardous condition was identified, but the hazard was not reported or corrected.

Corrective Action: A certified person should be provided to conduct examinations for hazardous conditions of work areas.

3. *Causal Factor:* The workers were not using safe cutting methods. They were not using an undercut (notch) and leaving a hinge to control the direction of fall when cutting the trees. The workers were not keeping a safe distance between persons on the ground and the trees being cut.

Corrective Action: The contractor should provide training to all persons to ensure that safe cutting methods are used.

4. *Causal Factor:* The workers were not provided with training in hazard avoidance. Even though they would recognize a tree as being dangerous they would still cut it. They had not received training that stipulated what methods to use to avoid danger trees or that defined a safe distance between cutters.

Corrective Action: The contractor should provide training in hazard avoidance to all persons for the avoidance of danger trees and safe cutting distances.

CONCLUSION

The accident occurred because proper tree cutting procedures were not used. A hazardous condition resulted which was not corrected appropriately – resulting in a fatal accident. Required examinations were not being conducted and training was lacking. Also contributing to the accident was the failure to provide an appropriate level of supervision in that no one had authority or responsibility for safety at the work site.

Approved By:

ORIGINAL SIGNED BY

Jesse P. Cole
District Manager

JUNE 20, 2005

Date

ENFORCEMENT ACTIONS

1. A 103(k) Order, Number 4642606, was issued to Simmons fork Mining Incorporated on March 12, 2004, to ensure the safety of persons at the mine until all areas and equipment were deemed safe.

2. A 104(a) citation, Number 7214025, was issued to Mountaintop Clearing LLC, for a violation of 30 CFR 77.1713(a) stating in part The person designated by the operator to examine active working areas where three clear cutters were cutting trees near the Buffalo pit at the mine did not report and correct hazardous conditions found during a shift on March 12, 2004. The contractor did not designate a certified person to examine active working areas.

Lawrence Payne, victim, cut through a tree which did not fall completely to the ground.

3. A 104(a) citation, Number 7214026, was issued to Mountaintop Clearing LLC, for a violation of 30 CFR 48.27(c) stating that when the miners were hired, they were not provided training for safe procedures to cut trees. The workers were using unsafe methods to cut trees when Payne was fatally injured by a tree he cut. When the miners were hired, they were trained to use unsafe procedures instead of safe methods to cut trees.

4. A 104(a) citation, Number 7214027, was issued to Mountaintop Clearing LLC, for a violation of 30 CFR 48.26(b)(7) stating that Benny May, Steven M. Workman, and Lawrence Payne, Jr., were cutting trees at the mine March 12, 2004, and had not received the safety training as required by Section 115 of the Act. They had not received training that included the avoidance of hazards present when cutting trees specific to what a safe distance between a tree being cut and a person on the ground was, or the methods to use to avoid standing trees that presented a hazard to the workers.

5. A 104(a) citation, Number 7214030, was issued to Simmons Fork Mining Incorporated, for a violation of 30 CFR 77.1713(a) stating that the production operator failed to assure that a certified person made examinations of the workplace on March 12, 2004. The tree-cutting contractor designated a non-certified person to make workplace examinations. The production operator knew that these contractors were working in the area, but did not assure that the active work areas were examined by a certified person and that action was taken to correct hazardous conditions.

**Appendix A
Persons Participating in the Investigation**

Simmons Fork Mining Incorporated

Mark A. Weaver.....President
Richard Wriston..... Superintendent
John D. Mollohan..... Foreman
Randy McMillion..... Health and Safety Officer
Randy Hansford..... President of Riverton Coal Production Inc.
Julia K. Shreve..... Attorney
Jason Young..... Engineer

Alliance Consulting

Harrold Trent, Jr.....Survey Engineer
Donald BaileySurvey Engineer

Mountaintop Clearing, LLC

Steven M. WorkmanTimber Cutter
Benny MayTimber Cutter
Richard Breton..... Supervisor
Mark Heath Attorney

Labor

Danford Bragg Mobile Equipment Operator
Randy Browning..... Mobile Equipment Operator
William Legg Mobile Equipment Operator

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

C. A. Phillips..... Deputy Director
Terry Farley Accident Investigator
Mike Rutledge.....Safety Instructor
Eddie MillerInspector
Gilbert R. WittInspector

Mine Safety and Health Administration

Sherman L. Slaughter Mine Safety and Health Specialist
Preston T. White Training Specialist
Michael K. Woodrome Assistant Chief, Tri-State Initiative