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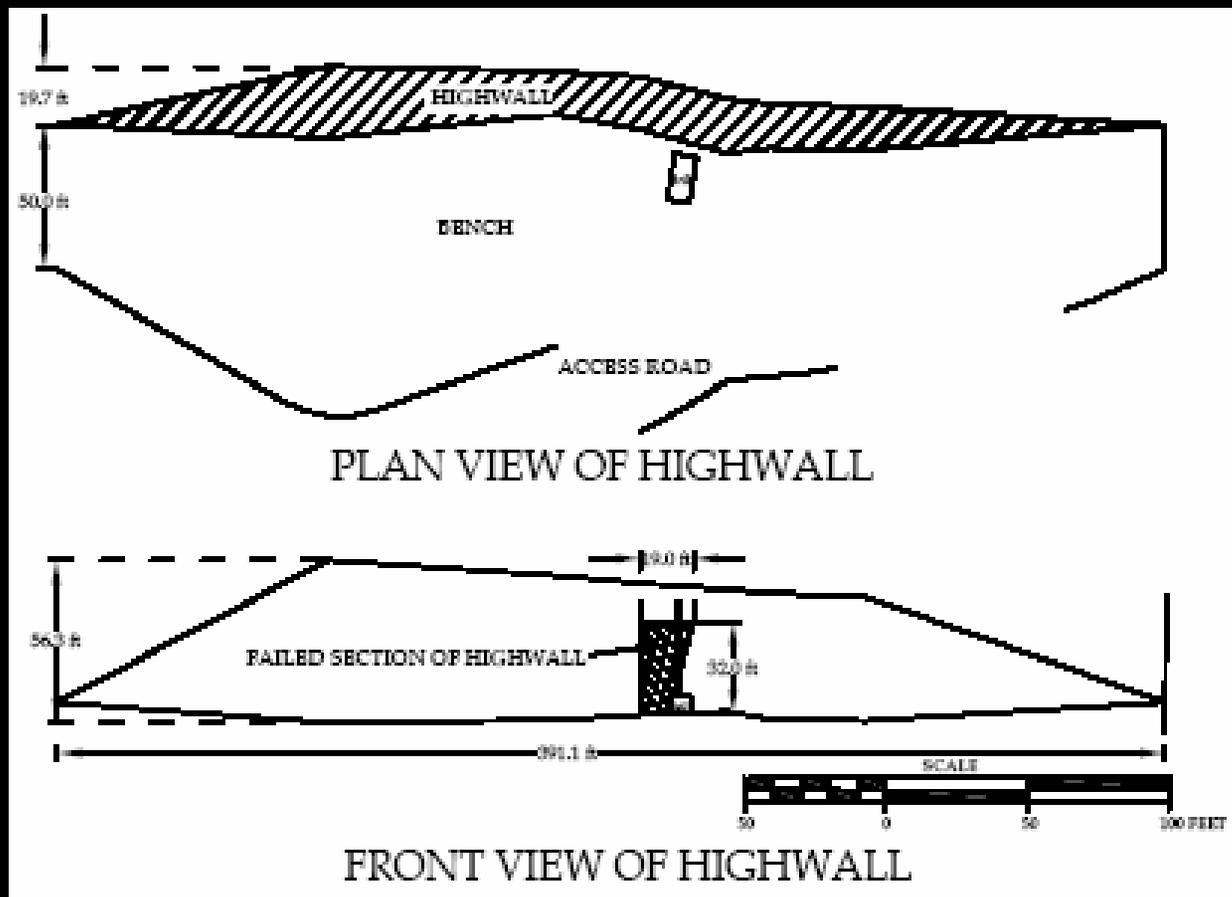
GENERAL INFORMATION

Coal Mine Fatal Accident 2006-35



Operator:	Hendrickson Equipment, Inc.
Mine:	Smith Branch No. 1
Accident Date:	July 18, 2006
Classification:	Fall of Highwall
Location:	Dist. 6, Knott County, Kentucky
Mine Type:	Surface Coal Mine
Employment:	7
Production:	150 Tons/Day

ACCIDENT DESCRIPTION



At approximately 9:45 a.m. on Tuesday, July 18, 2006, a 28-year-old highwall drill operator, was fatally injured in a fall of highwall accident at the Hendrickson Equipment, Inc., Smith Branch No. 1 mine. The victim had 6 years of total mining experience and had worked 36 weeks at this mine. The accident occurred as the victim was operating a highwall drill adjacent to a 43-foot highwall. As he was drilling the eighth hole of the day, rock fell onto the cab of the drill, resulting in fatal injuries. The rock fall measured 32 feet high by 19 feet wide by 7 feet thick.

ROOT CAUSE ANALYSIS

Root Cause: Mine management did not ensure that the ground control plan was being followed. The highwall drill was positioned perpendicular to the highwall with the operator's compartment immediately adjacent to the highwall. The operator's ground control plan established for this mine states that drill operators shall not drill from positions that expose them to hazardous highwall conditions. The plan further states that the drill will be positioned with the operator's compartment on the side opposite the highwall.

Corrective Action: All persons working at this mine received additional training in all aspects of the ground control plan including the positioning of the highwall drill with the operator's compartment on the side opposite the highwall. Mine management should also institute a procedure or program to ensure that their plan is being followed during the course of the work day.

ROOT CAUSE ANALYSIS con't

Root Cause: Mine management performed inadequate on-shift examinations of the drill bench working area and thereby failed to identify hazardous conditions and to implement corrective measures. The on-shift examination conducted on July 17, 2006, and July 18, 2006, at the first bench above the Hazard No. 4 Rider seam failed to detect and subsequently correct the hazardous condition created by the positioning of the highwall drill without the operator's compartment on the side opposite the highwall.

Corrective Action: The operator had all work areas examined and hazardous conditions were recorded. All persons at this mine received additional training relative to identifying hazards associated with the positioning of the highwall drill.

ROOT CAUSE ANALYSIS con't

Root Cause: Mine management failed to ensure that persons did not work near or under dangerous highwalls. Obvious discontinuities evidenced by a hill seam intersected by vertical jointing were present in the highwall where the accident occurred and should have been seen by examiners and management. These conditions were present when the highwall was exposed during the previous week.

Corrective Action: All persons working at this mine, including the mine examiner, were given additional training covering the identification and correction of ground control hazards. Additionally the ground control plan was revised to include a safety bench to increase the distance between the highwall drill and the exposed highwall.

ENFORCEMENT ACTIONS

§104(d)(1) Citation No. 7428781, was issued to Hendrickson Equipment, Inc. for a violation of 30 CFR 77.1000

Condition or Practice: On July 18, 2006, a highwall drill operator was fatally injured when the highwall collapsed crushing the operator's cab of the machine as he was removing the drill steel from a blast hole. The mine operator's established ground control plan was not being followed where a highwall drill was being used to drill blast holes. The highwall drill was positioned perpendicular to the highwall with the operator's compartment immediately adjacent to the highwall. The operator's ground control plan established for this mine states that drill operators shall not drill from positions that expose them to hazardous highwall conditions. The plan further states that the drill will be positioned with the operator's compartment on the side opposite the highwall. Evidence indicates that 23 holes were drilled on July 17, 2006, in the same manner with the drill positioned perpendicular to the highwall. These holes were observed by the superintendent on the evening of July 17, 2006.

ENFORCEMENT ACTIONS cont'd

§104(d)(1) Order, No. 7428782, was issued to Hendrickson Equipment, Inc. for a violation of 30 CFR 77.1713

Condition or Practice: On July 18, 2006, a highwall drill operator was fatally injured when the highwall collapsed crushing the operator's cab of the machine as he was removing the drill steel from a blast hole. An adequate mine examination was not conducted of the working area where pre-split blast holes were being drilled. The highwall drill was positioned perpendicular to the highwall with the operator's compartment immediately adjacent to the highwall. The operator's ground control plan established for this mine states that drill operators shall not drill from positions that expose them to hazardous highwall conditions. The plan further states that the drill will be positioned with the operator's compartment on the side opposite the highwall.

This condition was not detected or recorded in the examination record and was not corrected prior to persons working in the area.

ENFORCEMENT ACTIONS cont'd

§104(a) Citation, No. 7428783, was issued to Hendrickson Equipment, Inc. for a violation of 30 CFR 77.1006(a)

Condition or Practice: On July 18, 2006, a highwall drill operator was fatally injured when the highwall collapsed crushing the operator's cab of the machine as he was removing the drill steel from a blast hole. The victim was assigned to work and was working while a dangerous highwall condition was present. The hazard was immediately adjacent to the highwall drill as evidenced by a hill seam that was parallel to the highwall face and was intersected by vertical jointing. This condition was present for several days after the highwall was exposed on or about July 13, 2006. The shift foreman failed to take corrective action for this obvious hazard.

BEST PRACTICES

- Position the operators' compartment as far away as possible from the highwall, preferably at least $\frac{1}{4}$ the height of the highwall.
- Examine highwalls and work areas thoroughly and scale any loose material from the highwall.
- Consider the location and orientation of hill seams (open joints) and other fracture planes when examining highwalls. Remove or avoid hazards.
- Thoroughly train personnel in the requirements of the ground control plan.
- Conduct blasting in a manner that maintains the integrity of the highwall.