UNITED STATES DEPARTMENT OF LABOR MENE SAFETY AND HEALTH ADMINISTRATION

District 2

REPORT OF INVESTIGATION (PREPARATION PLANT)

FATAL FALL OF PERSON ACCIDENT

Russellton Mine (ID No. 36 00808)

BCNR Mining Corporation
Russellton, Allegheny County, Pennsylvania

Injured: June 8, 1984 Died: June 9, 1984

Ъу

Gerald F. Moody, Jr.
Coal Mine Safety and Health Inspector

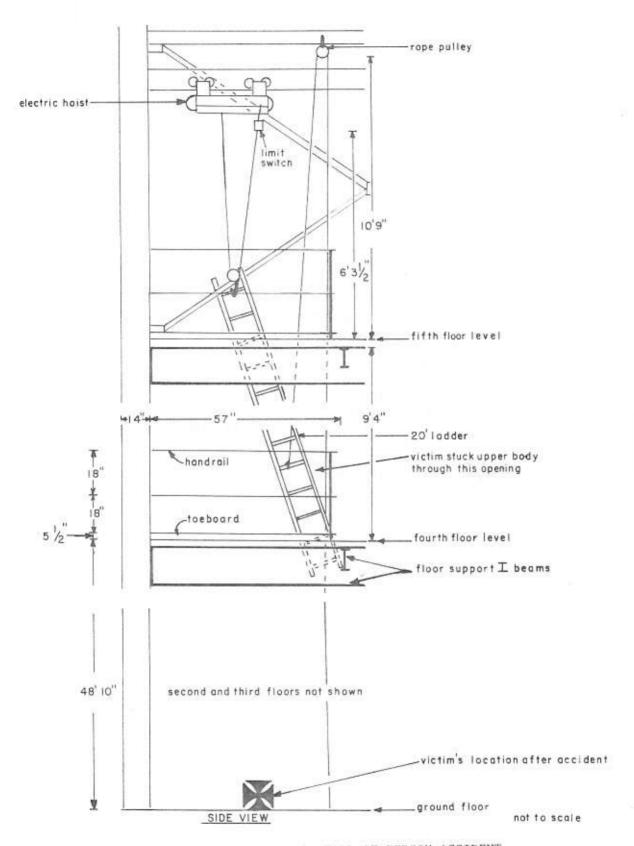
REPORT OF INVESTIGATION (PREPARATION PLANT)

FATAL FALL OF PERSON ACCIDENT

Russellton Mine (ID No. 36 00808)

BCNR Mining Corporation
Russellton, Allegheny County, Pennsylvania

Injured: June 8, 1984 Died: June 9, 1984



SKETCH OF FATAL FALL OF PERSON ACCIDENT
Russellton Mine (ID No. 36 00808)
BCNR Mining Corporation
Russellton, Allegheny County, Pennsylvania

Injured: June 8, 1984 Died: June 9 1084

U.S. Department of Labor

Mine Safety and Health Administration



Authority - This report is based on an investigation made pursuant to the Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164.

Section A-Identification Data		
Title of investigation:	Date MSHA investigation started:	
Fatal Fall of Person Accident	June 8, 1984	
3. Report release date:	4. Mine:	
August 27, 1984	Russellton	
5. Mine ID number:	6. Company:	
36 00808	BCNR Mining Corporation	
7. Town, County, State:	8. Author(s):	
Russellton, Allegheny County, PA	Gerald F. Moody, Jr.	
Section B-Mine Information		
9. Daily production:	10. Surface employment:	
0	26	
11. Underground employment:	12. Name of coalbed:	
4	Double Freeport	
13. Thickness of coalbed:		
48 to 84 inches		
Section C-Last Quarter Injury Frequency Rate (HSAC) for:		
14. Industry:	15. This operation:	
7.67	0.00	
16. Training program approved:	17. Mine Profile Rating:	
Yes	DNA	
Section D-Originating Office		
18. Mine Safety and Health Administration	Address 200 James Place	
Coal Mine Health and Safety District No. : 2	Monroeville, PA 15146	
Section E-Abstract		

On Friday, June 8, 1984, at about 9:30 p.m., a fall of person accident occurred at the preparation plant of BCNR Mining Corporation's Russellton mine, inflicting injuries to Howard K. Wilhelm, Jr., repairman-first class. Wilhelm, age 53, had 12 years 9 months mining experience with the last 4 months as a repairman. The accident occurred when a ladder, being hoisted from the ground floor with an electric hoist became wedged between steel beams on the fourth and fifth floors of the plant. Wilhelm leaned out between the top and middle rails around an opening in the fourth floor and began pushing on the ladder. As the ladder became free, he lost his balance and fell to the concrete ground floor. As a result of his injuries, Wilhelm died at 12:20 a.m., on Saturday, June 9, 1984. Cause of death was multiple blunt force trauma of the trunk, head and limbs.

The accident occurred because work was being performed in a hazardous location and a safety belt and line was not being used where there was a danger of falling.

Company officials:	Name	Address
19. President	G. P. McBride	P.O. Box 500, 455 Race Track Road Meadow Lands, Pennsylvania 15347 P.O. Box 500, 455 Race Track Road
20. Safety Supervisor	Henry M. Pollick, Jr.	Meadow Lands, Pennsylvania 15347
21. General Mine Foreman	Raymond Newcomer	P.O. Box 308 Russellton, Pennsylvania 15076
22.		
23. Labor Organization:	United Mine Workers of America	
24. Chairman—H&S Committee:	George R. Olar	1320 McArthur Drive Russellton, Pennsylvania 15076

MSHA Form 2000-57, Apr 82 (revised)

Commentary

On Friday, June 8, 1984, at about 4 p.m., the preparation plant maintenance crew under the supervision of Arthur J. Colland, Shift Foreman, began their assigned duties within the plant. At about 9:10 p.m., Colland instructed Wilhelm to help Larry Kerleski, repairman-first class, remove a pan in the cone classifier, bring a 20-foot long ladder to the fourth floor and begin relining the inside of the cone. After removing the pan in the cone classifier, Wilhelm went to the ground floor and hooked a 20-foot long ladder onto a wire rope for the electric material hoist. Kerleski, operating the hoist controls from the fifth floor, raised the ladder until the electric hoist was stopped by the wire rope limit switch. At this point, the top of the ladder was about 6 feet above the fifth floor level and bottom of the ladder was 3 to 4 feet below the fourth floor level. Kerleski went to the fourth floor level, laced a hemp rope through the sixth rung and attached it to the fifth rung from the bottom of the ladder. Wilhelm, who had proceeded to the fourth floor, pulled on the rope, but could not raise the ladder high enough to get the bottom of it over the railing. Wilhelm then lowered the ladder with the electric hoist while Kerleski pulled on the rope to move the bottom of the ladder. During this time the ladder became wedged between a steel beam that supported the fourth floor and an angle beam between vertical beams on the fifth floor. (See sketch). Wilhelm went to the fifth floor and started to go out onto a horizontal beam over the opening to free the wedged ladder. Kerleski saw this and told him not to go out on the beam. Wilhelm returned to the fourth floor and both men tried several unsuccessful attempts to free the ladder by pushing on it with their hands or feet. Kerleski returned to the fifth floor and tried to move the ladder with the hoist, but the ladder would not move.

At about 9:30 p.m., Wilhelm leaned out between the top and middle rails around the fourth floor opening and began pushing on the ladder with one hand while he held onto the toeboard with the other hand. The ladder became free, Wilhlem lost his balance and fell to the concrete ground floor. Kerleski summoned help from other workmen in the plant and proceeded to the ground floor. The West Deer Township Ambulance Company was notified and arrived at the preparation plant at about 9:45 p.m. Emergency treatment was administered to Wilhelm and at about 10:10 p.m., the Life Flight helicopter arrived and transported Wilhelm to the Allegheny General Hospital, Pittsburgh, Pennsylvania. Wilhelm died at 12:20 a.m., on Saturday, June 9, 1984. Cause of death was multiple blunt force trauma of the trunk, head and limbs.

Discussion and Evaluation

The investigation revealed the following factors relevant to the occurrence of the accident:

1. The preparation plant was a multi-story structure of steel and concrete, covered with corrugated metal and built in 1947. Coal from Russellton and Newfield mines was processed at the plant until it was shutdown in November 1982. The plant remained idle until February 1984, when coal processing operations resumed on the day (8 a.m. to 3:15 p.m.) shift and maintenance was performed on the afternoon (4 p.m. to 11:15 p.m.) shift.

- 2. An opening of 71 inches by 13 feet 4 inches was provided at each floor level above the ground floor. The opening was used to raise and lower materials inside the plant. Steel handrails, about 42 inches in height, were provided at the perimeter of each floor opening. These handrails consisted of a 1-inch diameter rod on top and another rod 18 inches below, with a toeboard 5-1/2 inches in height, 18 inches below the middle rail. Hinged gates, 44 inches to 5 feet 5 inches in width, 42 inches in height and constructed of steel plate or angle iron and stainless steel screens were built into the railing around the opening. The height from the fourth to fifth floors was about 9 feet 4 inches.
- 3. Materials were raised through the floor openings with a rope and pulley or a Shepard Niles, 3-ton capacity, 440-volt alternating current electric hoist with a 3/8-inch wire rope. The rope pulley was attached to a beam 10 feet 9 inches above the fifth floor and the electric hoist was attached to another beam 9 feet 8 inches above the fifth floor. The height from the fifth floor to the hoist rope electric limit switch was 6 feet 3-1/2 inches. (See sketch).
- 4. According to Kerleski, this was the first time he had hoisted a 20-foot long ladder to the fourth floor. He used the electric hoist because he felt the ladder was too heavy to hoist with the hemp rope and pulley. The ladder was raised vertically until the electric hoist limit switch stopped the hoist; however, there was 3 to 4 feet of the ladder below the fourth floor level. After Kerleski attached the hemp rope near the bottom of the ladder, he and Wilhelm tried to maneuver the ladder so that it could be unloaded at the fourth floor level. This maneuvering continued until the ladder became wedged. After several unsuccessful attempts to free the wedged ladder, Wilhelm leaned out between the top and middle rails around the fourth floor opening and began pushing on the ladder with one hand while holding onto a toeboard with the other hand. As the ladder became free, Wilhelm fell 48 feet 10 inches to the concrete ground floor.
- 5. Conversations with other plant personnel revealed that whenever they found it necessary to hoist a ladder to the various floor levels in the plant, they used the rope and pulley. Several plant personnel demonstrated how they used the rope and pulley to hoist the ladder to the fourth floor without exposing themselves over the floor opening. Plant personnel also stated that when working inside the cone, they were a safety belt and line.
- 6. According to Joseph Walko, Preparation Plant Foreman, a 3-foot long metal hook bar, provided about 20 feet away from the fourth floor opening, was used to grab motors, pipes, ladders, etc., and pull them from the opening onto the floor. A safety belt and line was provided in a locker located in an office on the ground floor and this office was open to plant employees.
- 7. Training records indicated that on February 20, 1984, Wilhelm received task training for a repairman-first class. Walko stated that this training included a Joh-Safety Analysis (JSA) in the use of safety belt and line where there was a danger of falling.

Findings of Fact

The victim was not wearing a safety belt and line when he placed his body between the top and middle rails around an opening in the fourth floor of the preparation plant. The victim was attempting to free a ladder wedged between beams inside the opening and when the ladder became free, he lost his balance and fell to the concrete ground floor. A violation of Section 77.1710(g).

Conclusion

The accident occurred because work was being performed in a hazardous location and a safety belt and line was not being used where there was a danger of falling.

Approved by:

Joseph J. Garcia

Subdistrict Manager -- Coal Mine Safety and Health District 2

Donald W. Huntley

District Manager--Coal Mine Safety and Health District 2 Level 7. modyfr.

Gerald F. Moody, Jr.

Appendix

List of persons furnishing information and/or present during the investigation.

BCNR Mining Corporation Officials

Joseph J. Walko
Arthur J. Colland
Ray Newcomer
Jack Conner
Henry Pollick, Jr.
Henry Pollick, Sr.
Charles Rosewell
Roberta Yinger
William Maxwell

General Preparation Plant Foreman Shift Foreman General Mine Foreman Superintendent of Safety Safety Supervisor Superintendent Safety Supervisor Personnel Supervisor Surface Foreman

BCNR Mining Corporation Employees

Larry R. Kerleski Henry Eckenrod Stanley Troyak William Bialas Repairman - First Class (Eyewitness) Cone Operator Repairman - First Class Trimmer

Family of Victim

Ron Wilhelm

Brother

Representatives of Miners

Denny J. Swigart

Henry L. Decker

Rich Olar

Edward P. Lorrie

Thomas P. Letunik

Louis J. Maholic

Health and Safety Representative,
U.M.W.A.

President, Local Union No. 3506,
U.M.W.A.

Vice President, Local Union No. 3506,
U.M.W.A.

Member, Health and Safety Committee,
Local Union No. 3506, U.M.W.A.

Member, Health and Safety Committee,
Local Union No. 3506, U.M.W.A.

Member, Local Union No. 3506, U.M.W.A.

Pennsylvania Department of Environmental Resources

James G. Richards Domineck F. Sabatini Michael D. Scarton Bituminous Underground Inspector Bituminous Underground Inspector Bituminous Mine Electrical Inspector

Mine Safety and Health Administration

John E. Chambers Dennis J. Swentosky Richard J. Zilka Gerald F. Moody, Jr. Coal Mine Safety and Health Inspector Coal Mine Safety and Health Inspector Coal Mine Safety and Health Inspector Coal Mine Safety and Health Inspector

U.S. Department of Labor

Mine Safety and Health Administration



Section A-Victim Data		
1. Name 2. Sex	3. \$	Social Security Number
⊠ M	fale Female	
Howard K. Wilhelm	222 101000000	
4. Age 5. Job Classification		
53 Repairman-1st Class		
6. Experience at this Classification	7. Total Mining Experience	
	13 Total Willing Experience	
4 months	12-3/4 years	
8. What activity was being performed at time of accident?	9. Victim's Experience at this Activity	10. Was victim trained in this task
Hoisting material	4 months	Yes
Section B-Victim Data for Health and Safety Courses/Training Received	ved (related to accident)	Date Received
11.		
Newly Employed, Experienced Miner		2/17/0/
12.		2/17/84
Repairman-1st Class (Task Training)		2/20/84
13.		
14.		
Section C-Supervisor Data (supervisor of victim)		
5. Name	16, Certified	
The state of the s		
Arthur J. Colland	☐ Yes 🎦 No	
17. Experience as Supervisor	18. Total Mining Experience	
	S 3	
5 years	5 years	
Section D—Supervisor Data for Health and Safety Courses/Training Re	ceived (related to accident)	Date Received
9.		
Novel of Equations of Economic and Minima		0/17/0/
Newly Employed, Experienced Miner		2/17/84
21,		
22.		
23. When was the supervisor last present at accident scene prior to the	124 What 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
accident?	24. What did he do when he was th	**************************************
20-25 minutes		and coworker to bring Loor and remove pan from
20-25 mindles	inside cone.	.oor and remove pan from
	and the cone.	
25. When was he last in contact with the victim?	26. Did he issue instructions relative	e to the accident?
	Bring ladder to fou	orth floor and remove
About 9:10 a.m.	pan from inside cor	
 Was he aware of or did he express an awareness of any unsafe pract 	ice or condition?	
No		

Section I (Coal Only)			
MSH4 and/or State Certifi	cation and/or Qua	lification N	line ID 36 00808
Date Training 4/27/79 Plan Approved Revised 3/13	Date Training /84 Received		Date Training Received
*Certified Person (Underground)	-	Dust (Sampling) Dust (Calibration)	-
*Certified Person (Surface)		Noise	
* Methane & Oxygen Deficiency Testing	*	Impoundments Hoisting Engineer	7
* Electrical			
* Energized Surface High Voltage			
* Annual Retraining Requi	red		
Section II (Metal-Non-met MSHA Training Progra Date of Hire 6/15/70	ms Completed Date Tr	raining Plan Approved	
Required Training (Victim)	Date Training Received	Required Training (Victim)	Date Training Received
New Miner (U.B.)		Hazard Training (U.G.)
New Miner (Sur.)		Hazard Training (Sur.)
Newly Employed Experienced (U.G.)			
Newly Employed Experienced (Sur.)	2/17/84	Task Training Specify Type:	
Annual Refresher (U.	G.)	Repairmen-1st Class	2/20/84
Annual Refresher (Su	ir.)		
		1	
Section III			
Company Training Program	Completed:		
Training	OJT/Formal	Instructor	Date Co: pleted

Section IV	<u> </u>	
DID VICTIM	4 HAVE TRAINING	SPECIFICALLY RELATED TO THE TASK BEING PERFORMED
AT THE TIM	ME OF THE ACCID	ENT?
		/X/ YES // NO WHEN? 2/20/84
BY WHOM?_	J. J. Walko	HOW WAS TRAINING GIVEN? Classroom and in
Plant		
Section V RECOMMEND	TRAINING PLAN	EVALUATION BY EDUCATION & TRAINING OFFICE
		YES /X/ NO