

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION
Metal and Nonmetal Mine Safety and Health

REPORT OF INVESTIGATION

Surface Metal Mine
(Copper)

Fatal Fall of Person Accident
October 11, 2007

Washington Group International, Inc.
Contractor I.D. No. D50

at

Pinto Valley Operations
BHP Copper Inc.
Miami, Gila County, Arizona
Mine I.D. No. 02-01049

Investigator

Steve I. Pilling
Supervisory Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Rocky Mountain District
Denver Federal Center 6th & Kipling
2nd Street, Bldg. 25, E-16
Denver, CO 80225
Richard R. Laufenberg, District Manager

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OVERVIEW

On October 11, 2007, Elmer L. Randolph, water truck driver, age 66, was fatally injured when he fell from the water truck he was assigned to operate. Randolph had stopped to wash the windows on the truck. There was no conclusive evidence to determine the cause of the accident. Although there were no witnesses, the victim's injuries were consistent with a fall from an elevated location. The victim was either standing on the truck's deck or ascending or descending the truck's ladder when he fell to the ground.

GENERAL INFORMATION

Pinto Valley Operations, a surface copper operation, owned and operated by BHP Copper Inc., was located in Miami, Gila County, Arizona. The principal operating official was Michael M. Eamon, general manager. The mine normally operated two 12-hour shifts per day, seven days a week. Total employment was 280 persons.

Washington Group International, Inc., located in Boise, Idaho, was a contractor working for BHP Copper Inc. The principal operating official was William V. Orr, project manager. The contractor normally operated two 12 hour shifts per day, seven days a week. Total employment was 76 persons.

Washington Group International, Inc., was contracted to drill, blast, and transport copper ore to the crusher.

The ore was then crushed and sent to the mill or to the leaching area. The processed copper was sold for commercial use.

The last regular inspection of this operation was completed on May 10, 2007.

DESCRIPTION OF ACCIDENT

On October 11, 2007, Elmer L. Randolph, (victim), reported to work at 5:45 a.m., his normal starting time. Randolph attended a safety meeting and then conducted a pre-shift examination of the water truck he was assigned to operate. He drove the truck to the water filling station, filled the tank, then watered the roadways in the pit.

At 11:30 a.m., Rhonda L. Taylor, water truck driver, talked to Randolph at the water filling station about changes in the traffic patterns and parking. Randolph filled his truck tank and went to the atmospheric tank area where he parked it.

Brandon A. Walker, oiler, was traveling from the pit to the shop. As he drove through the atmospheric tank area, Walker saw Randolph get out of the cab of the truck with a bottle of window cleaner and paper towels in his hand.

James Salazar, heavy equipment operator, drove to the atmospheric tank area about 11:50 a.m., and noticed Randolph lying on the ground in front of the water truck. Salazar drove to the back of the water truck, parked his vehicle, and radioed for emergency medical assistance.

Hugh Lawrence, manager of health, safety and environment, and Garry W. Wilson, emergency medical technician, arrived and performed Cardiopulmonary Resuscitation (CPR). Randolph was transported to a local hospital where he was pronounced dead by the attending physician. Death was attributed to blunt force trauma.

INVESTIGATION OF THE ACCIDENT

The Mine Safety and Health Administration (MSHA) was notified of the accident at 12:10 p.m., on October 11, 2007, by a telephone call from Henry Lopez, safety coordinator, to the National Call Center. The message was forwarded to Michael Dennehy, acting district manager. An investigation was started the same day.

An order was issued under the provisions of Section 103(k) of the Mine Act to ensure the safety of the miners. MSHA's accident investigators traveled to the mine, made a physical inspection of the accident scene, interviewed employees, reviewed conditions and work procedures relevant to the accident. MSHA conducted the investigation with the assistance of mine management, contractor management and employees, and the State of Arizona Mine Inspectors.

DISCUSSION

Location of the Accident

The accident occurred in a parking area at the atmospheric tank area, north of the shop. The water truck was parked on about a 4 percent incline.

The victim was found on dry ground in front of a ladder that provided access to the cab of the water truck.

Water Truck

The vehicle involved at the accident was a Caterpillar, Model 777D haul truck converted into a water truck. The capacity of the water tank was 10,000 gallons. A ladder was positioned to the left of the truck allowing persons to access the deck to the right or left side of the cab. The deck was 10 feet above the ground. The ladder was 8 feet 6 inches and the first step was 18 inches above the ground. The opening at the top of the ladder and deck measured 2 feet 5 inches.

The truck was equipped with service brakes, park brake, retarder brake and a secondary braking system. The braking systems were tested and no defects were found. The steering and hydraulic systems were inspected and no defects were found.

Cleaning Material

A round plastic quart bottle was found near the victim's left side. It had a spray nozzle and was half full of a liquid window cleaner. Paper towels were also found near the victim.

Window Cleaning

When a water truck was filled with water, a film routinely developed on the truck's windows impairing visibility. As a practice, drivers would stop and wash the windows after filling the trucks with water. The windows on the victim's truck were clean indicating that they had been recently washed.

Training and Experience

Elmer L. Randolph had 7 weeks and 4 days experience at this mine as a water truck driver and had received training in accordance with 30 CFR, Part 48. He had previously been employed for 22 years as an over-the-road commercial truck driver and also had 8 years experience as a front-end loader operator.

Weather

The weather on the day of the accident was mostly clear with a temperature of 86 degrees Fahrenheit and calm winds.

ROOT CAUSE ANALYSIS

A root cause analysis was conducted. There was no conclusive evidence to determine the cause of the accident.

CONCLUSION

There was no conclusive evidence to determine the cause of the accident. Although there were no witnesses, the victim's injuries were consistent with a fall from an elevated location. The victim was either standing on the truck's deck or ascending or descending the truck's ladder when he fell to the ground.

ENFORCEMENT ACTION

BHP Copper Inc.

Order No. 6320657 was issued on October 11, 2007, under the provisions of Section 103(k) of the Mine Act:

A fatal accident occurred at this mine on October 11, 2007. A miner was found lying in front of a Caterpillar 777D, 10,000 gallon water truck, No. 1157-0002. This order is issued to ensure the safety of all persons at this operation. It prohibits all activity in and around the water truck until MSHA has determined that it is safe to resume normal mining operations in this area. The mine operator shall obtain approval from an Authorized Representative for all actions to recover and or restore operations in the affected area.

This order was terminated on October 13, 2007.

Approved by,

Date: February 20, 2008

Richard Laufenberg
District Manager

APPENDICES

- A. Persons Participating in the Investigation
- B. Victim Data Sheet

APPENDIX A
Persons Participating in the Investigation

BHP Copper Inc.

John T. Kline	health and safety environmental manager
Michael M. Eamon	general manager
Kenneth W. Pickering	vice president of projects
Carleton P. Peltz	safety coordinator
Arthur J. Fernandez	mine manager

Washington Group International, Inc.

Richard K. Sinsel	director of US operation mining
William V. Orr	project manager
Bradley D. Giles	corporate vice president
Rick Callor	corporate safety training director
Joel C. Atchison	environmental health and safety director

Gila County Sheriff's Office

Johnny Holmes	detective
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State of Arizona

Jack Speer	deputy mine inspector
Wes Cruea	assistant state mine inspector

Mine Safety and Health Administration

Steve I. Pilling	supervisory mine safety and health inspector
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APPENDIX B Victim Data Sheet

Accident Investigation Data - Victim Information

U.S. Department of Labor
Mine Safety and Health Administration



Event Number: **1 1 0 7 2 6 5**

Victim Information: 1

1. Name of Injured/Ill Employee: <i>Elmer Randolph</i>		2. Sex <i>M</i>	3. Victim's Age <i>66</i>	4. Last Four Digits of SSN:	5. Degree of Injury: <i>01 Fatal</i>
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 10/11/2007 b. Time: 12:47</i>				7. Date and Time Started: <i>a. Date: 10/11/2007 b. Time: 5:45</i>	
8. Regular Job Title: <i>176 Water Truck Driver</i>			9. Work Activity when Injured: <i>011 Washing windows on water truck</i>		10. Was this work activity part of regular job? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
11. Experience a. This Work Activity:	Years <i>0</i>	Weeks <i>7</i>	Days <i>4</i>	b. Regular Job Title: <i>0 7 4</i>	c. This Mine: <i>0 7 4</i>
12. What Directly Inflicted Injury or Illness? <i>117 Ground</i>			13. Nature of Injury or Illness: <i>370 Multiple injuries</i>		
14. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>					
15. Company of Employment: (If different from production operator) <i>Washington Group International, Inc.</i>				Independent Contractor ID: (if applicable) <i>D50</i>	
16. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input checked="" type="checkbox"/> CPR: <input checked="" type="checkbox"/> EMT: <input type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>					
17. Part 50 Document Control Number: (form 7000-1)			18. Union Affiliation of Victim:		

Victim Information:

1. Name of Injured/Ill Employee:		2. Sex	3. Victim's Age	4. Last Four Digits of SSN:	5. Degree of Injury:
6. Date(MM/DD/YY) and Time(24 Hr.) Of Death:				7. Date and Time Started	
8. Regular Job Title:			9. Work Activity when Injured:		10. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>
11. Experience: a. This Work Activity:	Years	Weeks	Days	b. Regular Job Title:	c. This Mine:
12. What Directly Inflicted Injury or Illness?			13. Nature of Injury or Illness:		
14. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>					
15. Company of Employment: (If different from production operator)				Independent Contractor ID: (if applicable)	
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8. Regular Job Title:			9. Work Activity when Injured:		10. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>
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14. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>					
15. Company of Employment: (If different from production operator)				Independent Contractor ID: (if applicable)	
16. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input type="checkbox"/> CPR: <input type="checkbox"/> EMT: <input type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>					
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