MIA-2002-42

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 Other Accident

December 20, 2002

Phelps Dodge Morenci, Inc.
Phelps Dodge Morenci, Inc. (Mine)
Morenci, Greenlee County, Arizona
Mine ID No. 02-00024

Investigator

Jerry Kissell
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Rocky Mountain District
P.O. Box 25367, DFC, Denver, CO 80225-0367
Irvin T. Hooker, District Manager

MIA-2002-42

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 Other Accident

December 20, 2002

Phelps Dodge Morenci, Inc.
Phelps Dodge Morenci, Inc. (Mine)
Morenci, Greenlee County, Arizona
Mine ID No. 02-00024

Investigator

Jerry Kissell
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Rocky Mountain District
P.O. Box 25367, DFC, Denver, CO 80225-0367
Irvin T. Hooker, District Manager

OVERVIEW

On December 20, 2002, Mitchell Palomino Sr., stacker operator, age 45, was injured as he walked down an elevated conveyor belt walkway. Palomino had removed an idler roller that was lying on top of material on a conveyor belt. He let it fall on the walkway and took two steps forward when he heard a “pop” and felt numbness in his left ankle. Palomino was assisted off the walkway and taken to the local medical clinic where he was diagnosed with a fractured left fibula. On January 8, 2003, Palomino died of a pulmonary thromboemboli, due to deep venous thrombosis, due to a fracture of the left lower extremity.

GENERAL INFORMATION

Morenci Mine, an open pit copper operation, owned and operated by Phelps Dodge Morenci, Inc., was located at Morenci, Greenlee County, Arizona. The principal operating official was David C. Naccarati, president. The mine was normally operated two, 12-hour shifts a day, seven days a week. Total employment was 2,073 persons.

Copper ore was drilled, blasted, loaded on trucks, and transported to various locations throughout the mine in preparation for crushing and milling.

A regular inspection was being conducted at the time of the accident.

DESCRIPTION OF THE ACCIDENT

On December 19, 2002, Mitchell Palomino, Sr., (victim) stacker operator, reported for work at approximately 5:00 p.m., his normal starting time. Palomino attended a crew safety meeting at the beginning of the shift and was assigned to perform various maintenance activities on conveyor belts and a chute, which he performed without incident.

At about 12:20 a.m., Palomino went to the A1A conveyor to determine why the conveyor belt had stopped. A metal detector installed on the conveyor belt had detected metal debris on the belt and tripped off the conveyor. Palomino cleared the alarm siren and told John Trujillo, operator, not to start the conveyor. Palomino found that the metal debris was a defective idler roller lying in the material on the belt, hanging partially off the side of the belt.

Palomino walked up the north walkway adjacent to the conveyor belt. He pulled the idler roller off the belt and let it fall on the walkway. Palomino stepped past the idler roller, walked forward, heard a “pop”, and felt numbness in his left ankle. He stopped, waited for a few seconds, and then attempted to continue down the walkway. Palomino was unable to place any weight on his left leg.

As Mark Correlejo, operator technician, approached the area in a pickup truck, he saw Palomino remove the idler roller from the belt. Correlejo got out of the pickup truck and went to the A1A conveyor belt. Palomino told Correlejo he heard a “pop” in his ankle and needed help. Correlejo helped Palomino down the walkway and transported him to a mine office. Robert Abalos, crushing and conveying supervisor, transported Palomino to the Morenci Medical Clinic.

Medical professionals at the clinic examined Palomino. He was diagnosed as having a spontaneous fracture of the left fibula and was released after his left leg was immobilized. Palomino returned to the clinic on December 21, 2002, when a cast was placed on his lower left leg.

As a result of the accident, Palomino was placed on lost-time work status. Nineteen days after the injury, on January 8, 2003, he was transported to a local hospital after complaining of epigastric pain and dyspnea. Upon arrival Palomino was in full cardiopulmonary arrest and could not be resuscitated. The immediate cause of death was pulmonary thromboemboli, due to deep venous thrombosis, due to a fracture of the lower left extremity.

INVESTIGATION OF THE ACCIDENT

On October 15, 2003, Robert Altamirano, safety manager for Phelps Dodge Morenci, Inc., contacted Benny Lara, supervisory mine safety and health inspector, and discussed the circumstances relating to the accident that resulted in Palomino's death. Altamirano also provided additional medical information the company had obtained pertaining to the accident. On October 27, 2003, MSHA began an investigation of the accident. A mine safety and health inspector conducted a physical inspection of the accident scene. He interviewed employees and also interviewed the attending physicians from the Morenci Clinic. MSHA conducted the investigation with the assistance of mine management and employees.

DISCUSSION

Location of the Accident

The accident occurred at the agglomerator drum area, on the walkway adjacent to the A1A conveyor belt, about 80 feet above the access stairway.

Equipment Involved

The A1A conveyor belt was 54-inches wide with 36-inch wide, expanded metal walkways provided on each side of the conveyor. The conveyor belt and walkways were at a 12-degree incline. Emergency stop cords were installed along the length of both walkways. A 42-inch high handrail with mid-rails and toe-boards was provided on the outside edge along the entire length of the walkways.

At the time of the accident, the walkway was clear and free of materials and debris with the exception of the idler roller that Palomino had removed from the belt. Small fragments of rock, 1-inch by 2 1/4-inch, were wedged in the expanded openings of the walking surface.

Personal Protective Equipment

The victim was wearing high-top, lace up, steel toe work boots that were in good condition.

Weather

The weather was fair and mild and not considered a factor in this accident.

Training and Experience

Palomino had received training in accordance with 30 CFR, Part 48. Palomino had 28 years mining experience, all at this mine. He had been a stacker operator for 1 1/2 years.

Professional Medical Evaluations and Information

On December 20, 2003, attending physicians at the Morenci Medical Clinic located in Morenci, Arizona, expressed opinions that the type of fracture and description of the accident raised a suspicion of doubt regarding the mechanism and timing of the injury. Additional tests to screen for bone disease were performed by medical professionals at Mt. Graham Community Hospital in Safford, Arizona, on December 23, 2002. Test results were normal and could not identify any bone disease.

An autopsy was performed on January 13, 2003. The autopsy report states Palomino died of a pulmonary thromboemboli, due to deep venous thrombosis, due to a fracture of the left lower extremity.

Company officials for Phelps Dodge Morenci, Inc., reviewed Palomino's autopsy report and medical records, but were not convinced the injury was job related. On June 18, 2003, they contracted with independent medical professionals to review Palomino's autopsy report, X-rays, and medical records. The medical experts concluded that Palomino's death was more likely than not caused, at least in part, by an on-the-job injury that initially seemed very minor. Shortly after reviewing the expert's opinions, the company reported the incident to the Mine Safety and Health Administration.

CONCLUSION

Palomino apparently received a fractured fibula while performing his normal job duties. Medical professionals could not determine the cause of the fracture.

Approved by:

Irvin T. Hooker
District Manager

Date: April 16, 2004

APPENDICES

A. Persons Participating in the Investigation
B. Persons Interviewed

APPENDIX A
Persons Participating in the Investigation

Phelps Dodge Morenci, Inc.

Robert Altamirano	manager safety and health
Stacy Kramer	safety superintendent
Vesta Roland	health and safety specialist

Mine Safety and Health Administration

Jerry Kissell	mine safety and health inspector

APPENDIX B
Persons Interviewed

Phelps Dodge Morenci, Inc.

Robert Altamirano	manager safety and health
Stacy Kramer	superintendent safety
Vesta Roland	health and safety specialist
Mark Correlejo	operator technician
Robert Abalos	supervisor
Pete Franco	crusher operator
Virginia Valles	crusher helper

Morenci Medical Clinic Staff

David Greenberg	medical doctor
Edwin Brown	physician assistant