MAI-2008-15

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
September 1, 2008

Geotemps Inc.
Contractor I.D. No. V3H

at
Freeport-McMoRan Morenci Inc.
Freeport-McMoRan Morenci Inc.
Morenci, Greenlee County, Arizona
Mine I.D. No. 02-00024

Investigator

David J. Small
Mine Safety and Health Inspector

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

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Opening victim fell through

OVERVIEW

Ramon A. Saldana, contractor consultant, age 67, was fatally injured on September 1, 2008, when he fell through an opening in an elevated travelway 28 feet to the ground. The opening was created by removing sections of grating to lower tools and equipment to the ground below.

The accident occurred because management policies and controls were inadequate and failed to ensure that the opening in the travelway was provided with railings, barriers, or covers when not in use.

GENERAL INFORMATION

Freeport-McMoRan Morenci Inc., a surface copper mine, owned and operated by Freeport-McMoRan Morenci Inc. was located in Morenci, Greenlee County, Arizona. The principal operating official was Hunter White, general manager. The mine employed 3,500 employees working two,11-hour shifts, 7 days a week.

Copper ore was drilled, blasted, and transported by trucks and conveyors to the mill for processing. The finished products were sold to commercial industries.

Geotemps Inc., an employment staffing company, was located in Reno, Nevada. The principal operating official was Carla Anderson, staffing manager. Geotemps Inc. was contracted by Freeport-McMoRan Morenci Inc. to provide one employee, Ramon A. Saldana, who normally worked one,8-hour shift, 5 days a week. Saldana provided consultant services to mine personnel regarding various mine projects. Freeport-McMoRan Morenci Inc. supervised and trained Saldana and provided personal protective equipment to him.

The last regular inspection at this operation was completed on August 24, 2008.

DESCRIPTION OF THE ACCIDENT

On September 1, 2008, Ramon A. Saldana (victim) started work at 6:00 a.m., his normal starting time. He met with Juan Herrera, miner; Ralph Valenzuela, miner; and Ronald Jurado, supervisor. They held a safety meeting to discuss an ongoing project, referred to as the BC belt conveyor repair project that began on August 25, 2008. The BC belt conveyor was located in the #6 bedding area building at the mill.

After the meeting, Herrera and Valenzuela went to the BC belt conveyor to complete the project. Valenzuela donned his fall protection, removed two sections of grating, and lowered tools and equipment to Herrera on the ground below.

After lowering the tools and equipment, Valenzuela went to the head pulley section of the BC belt conveyor and discussed the replacement of guards with Jurado. The floor grating was not replaced at this time. Herrera remained on the ground to put away the tools and equipment.

During the morning, Saldana was in the BC belt conveyor area several times to check on the progress of the job. He was last seen leaving the area about 9:45 a.m. Saldana apparently returned to the area near the opening. At 10:02 a.m., Herrera saw a glimpse of something hit the ground in front of him. He looked closer, saw Saldana lying on the ground, and yelled for help.

Jurado and Valenzuela went to the accident scene and then called the company dispatcher for help. Greenlee County emergency medical services arrived and the victim was pronounced dead by the emergency medical physician at 11:49 a.m. Death was attributed to blunt force trauma.

INVESTIGATION OF THE ACCIDENT

The Mine Safety and Health Administration (MSHA) was notified of the accident at 10:20 a.m., on September 1, 2008, by a telephone call from Paul D. Boman, health and safety manager, to MSHA's emergency call center. Brian Goepfert, staff assistant, was notified and 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 investigator traveled to the mine, conducted a physical inspection of the accident scene, interviewed employees, and reviewed conditions and work procedures relevant to the accident. MSHA conducted the investigation with the assistance of mine and contractor management and employees, and the State of Arizona Mine Inspector's Office.

DISCUSSION

Location of the Accident

The accident occurred near the BC belt conveyor located in the #6 bedding area building at the mill. This area was located 28 feet above the ground. Two sections of grating had been removed to lower tools and equipment to the ground, creating a 4-foot by 5-foot opening.

Fall Protection

During the BC belt conveyor project, full body harnesses, lanyards, and fall protection training were provided to all persons who were exposed to fall hazards including the victim.

Weather Conditions

The weather at the time of the accident was clear with a temperature of approximately 77 degrees Fahrenheit and calm winds. Weather was not considered to be a factor in the accident.

Training and Experience

Ramon A. Saldana, victim, had 46 years of mining experience, 43 years at this mine and 3 years as a contractor consultant. Saldana had received training in

accordance with 30 CFR, Part 48. His annual refresher training was not current and a non-contributory citation was issued.

Juan Herrera, miner, had 8 months of mining experience. He had received training in accordance with 30 CFR, Part 48.

Ronald Jurado, supervisor, had 11 years of mining experience and 1 year as a supervisor. He had received training in accordance with 30 CFR, Part 48.

Ralph Valenzuela, miner, had 5 years of mining experience. He had received training in accordance with 30 CFR, Part 48.

ROOT CAUSE ANALYSIS

A root cause analysis was conducted and the following root cause was identified:

ROOT CAUSE: Management policies and controls were inadequate and failed to ensure that persons traveling near openings in travelways were protected from falling.

CORRECTIVE ACTION: Management should establish policies and controls to ensure that persons can safely travel near openings in elevated travelways. Specifically railings, barriers, or covers should be provided to protect persons from falling.

CONCLUSION

The accident occurred because management policies and controls were inadequate and failed to ensure that the opening in the travelway was provided with railings, barriers, or covers when not in use.

ENFORCEMENT ACTIONS

Order No. 6309618 was issued on September 1, 2008, under the provisions of Section 103(k) of the Mine Act:

A fatal accident occurred at this operation on September 1, 2008. A miner was cleaning up material after a recent belt splice and working around a 4-foot by 5-foot opening. The victim fell 28 feet to the ground below. This order is issued to ensure the safety of all persons at this operation. It prohibits all activity at the #6 bedding and #1 bedding areas until MSHA has determined that it is safe to resume normal operations in the area. The mine operator shall obtain prior approval from an Authorized Representative for all actions to recover and/or restore operations to affected area.

This order was terminated on September 4, 2008. Conditions that contributed to the accident no longer exist.

Citation No. 6449725 was issued on September 22, 2008, under the provisions of Section 104(d)(1) of the Mine Act for a violation of the 30 CFR 56.11012:

A fatal accident occurred at this operation on September 1, 2008, when a contract consultant fell approximately 28 feet through a 4-foot by 5-foot opening in an elevated travelway. The opening was not provided with railings, barriers, or covers at the time of the accident. Failure to protect the opening around the travelway constituted more than ordinary negligence and was an unwarrantable failure to comply with a mandatory standard.

The citation was terminated on September 22, 2008. Management reinstalled the gratings which covered the opening. Employees were also retrained on fall hazards and the required use of fall protection.

Approved by, Date: October 30, 2008

Richard Laufenberg
District Manager

APPENDICES

APPENDIX A

Persons Participating in the Investigation:

Freeport-McMoRan Morenci Inc.

Paul D. Boman	health & safety manager
Lawrence J. Corte	senior counsel

Geotemps Inc.

Carla Anderson	staffing manager

State of Arizona Mine Inspector's Office

John C. Stanford	deputy mine inspector
Rex Gennicks	deputy mine inspector

Greenlee County EMS Services/Mt. Graham Regional Medical Center

Bart McCray	medical doctor

Mine Safety and Health Administration

David J. Small	mine safety and health inspector

APPENDIX B

Accident Investigation Data - Victim Information

Event Number: 1 0 9 1 1 1 1

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

Victim Information: 1

1. Name of Injured/Ill Employee:	2. Sex	3. Victim's Age	4. Degree of Injury:
Ramon A. Saldana	M	67	01 Fatal

5. Date(MM/DD/YY) and Time(24 Hr.) Of Death:	6. Date and Time Started:
a. Date: 09/01/2008 b.Time: 10:02	a. Date: 09/01/2008 b.Time: 6:00

7. Regular Job Title:	8. Work Activity when Injured:	9. Was this work activity part of regular job?
199 Consultant	042 Checking on belt splice progress	Yes X No

10. Experience	Years	Weeks	Days		Years	Weeks	Days		Years	Weeks	Days		Years	Weeks	Days
a. This Work Activity:	3	0	0	b. Regular Job Title:	3	0	0	c: This Mine:	46	0	0	d. Total Mining:	46	0	0

11. What Directly Inflicted Injury or Illness?	12. Nature of Injury or Illness:
117 Victim fell 28 feet to the ground below	370 Multiple injuries

13. Training Deficiencies:

Hazard: | New/Newly-Employed Experienced Miner: | Annual: X | Task:

14. Company of Employment: (If different from production operator)

Geotemps Inc.

Independent Contractor ID: (if applicable) V3H

15. On-site Emergency Medical Treatment:

Not Applicable: | First-Aid: | CPR: | EMT: X | Medical Professional: | None:

16. Part 50 Document Control Number: (form 7000-1)

17. Union Affiliation of Victim: 9999 None (No Union Affiliation)