

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

REPORT OF INVESTIGATION

**Surface Metal Mine
(Lead and Zinc)**

**Fatal Falling Material Accident
December 15, 2006**

**Teck Cominco Alaska Inc
Red Dog Mine
Kotzebue, Northwest Arctic County, Alaska
Mine ID No. 50-01545**

Investigator

**James E. Dejarnatt
Mine Safety and Health Inspector**

**Originating Office
Mine Safety and Health Administration
Western District
2060 Peabody Road, Suite 610
Vacaville, CA 95687
Arthur L. Ellis, District Manager**

OVERVIEW

Jeffrey Huber, geologist, age 51, was fatally injured on December 15, 2006, when he was struck by a large piece of frozen, conglomerated material that rolled from the top of a muckpile. The victim was examining the muckpile face to determine the location of the ore-waste contact point.

The accident occurred because management failed to establish procedures requiring muckpiles to be trimmed before persons performed any work at the muckpile faces.

GENERAL INFORMATION

Red Dog Mine, a surface lead and zinc mine, operated by Teck Cominco Alaska Inc., was located in Kotzebue, Norwest Arctic County, Alaska. The principal operating officials were David Thompson, president, and Doug Horswill, vice president. The mine was normally operated two 12 hour shifts a day, 7 days per week. Total employment was 360 persons.

Lead and zinc ore was drilled, blasted, and removed from a multiple bench pit. The ore was crushed and conveyed to the mill grinding and sulphide flotation circuit to produce zinc and lead concentrates. The concentrate was trucked to a port. The finished products were shipped and sold to commercial industries.

The last regular inspection at this operation was completed on November 2, 2006.

DESCRIPTION OF ACCIDENT

On the day of the accident, Jeffrey Huber (victim) began his normal shift at 6:00 a.m. About 7:10 a.m., he reported to the mine office for the daily staff meeting.

At approximately 8:30 a.m., Huber drove a pickup truck to the 750-28 level muckpile in the pit to examine the muckpile face and identify the ore-waste contact points. Before entering the muckpile area, he made radio contact with Josh Rutman, front-end loader operator, who backed away about 75 feet before he resumed removing material. Huber commenced his muckpile examinations and each time he entered the muckpile area, he first contacted Rutman on the radio.

This activity proceeded without incident until about 10:50 a.m. At that time, Rutman had moved his loader to another location while Huber again examined the face of the muckpile. Rutman looked to his left while backing out of the face and saw Huber pinned under frozen material. He immediately called for medical assistance. Mine personnel responded, treated the victim, and transported him to the site medical clinic where he was pronounced dead by the resident physician assistant. The cause of death was attributed to multiple trauma.

INVESTIGATION OF ACCIDENT

MSHA was notified of the accident at 11:22 a.m., on December 15, 2006, by a telephone call from John Knapp, general manager, to MSHA's emergency hotline. Rodney Gust, mine safety and health specialist, was notified and an investigation was started the same day. An order was issued to ensure the safety of the miners under the provisions of Section 103(k) of the Mine Act. MSHA's accident 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 management, employees, and the miners' representative.

DISCUSSION

Location

The accident occurred in the pit at the 750-28 level muckpile.

Muckpile Face

The muckpile was approximately 19 feet high and 150 feet wide. It was composed of frozen, conglomerated material that had been blasted on November 25th. The bench area was level and frozen. Light plants were provided for additional visibility. The material that struck the victim was about 6 ½ feet long x 6 ½ feet wide x 3 ½ feet thick and weighed approximately 4 tons.

Muckpile Examination Procedures

After each blast, a geologist would examine the top of the muck pile and position stakes to delineate the ore-waste contact point. The crew would muck the blasted rock until a stake was encountered, then the front-end loader operator would call for the geologist to examine the muckpile face to ensure ore was loaded rather than waste rock. The past practice was that the geologist would walk to the toe of the face and visually examine the material and inform the loader operator regarding the location of the ore.

Weather Conditions

The weather on the day of the accident was clear with a slight wind and a temperature of -4 degrees Fahrenheit. The temperature caused the blasted material to freeze together. This resulted in the formation of a large mass of conglomerated material that was positioned near the top of the face.

Training and Experience

Jeffrey Huber had 10 years and 10 months of total mining experience. He had worked 2 yrs and 10 months at this mine as a geologist and during this period his duties included examining muckpile face areas. 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. There were no procedures requiring muckpiles to be trimmed to prevent hazards to persons and ensure that miners could safely examine muckpiles while standing near the face. Management failed to identify the blasted chunks of frozen material near the top of the muck pile as a potential hazard.

Corrective Action: Management should establish formalized policies and procedures that require muckpiles to be trimmed to prevent hazards to persons and ensure that examinations of muckpiles can be conducted safely.

CONCLUSION

The accident occurred because the muckpile face was not trimmed to prevent hazards to persons required to work or travel in that area.

ENFORCEMENT ACTION

Order No. 6392146: was issued on December 15, 2006, under the provisions of Section 103(k) of the Mine Act:

A fatal accident occurred at this mine on December 15, 2006, when a miner (geologist) was taking samples of a muckpile between the ore and waste material. This order is issued to ensure the safety of all persons at this operation. It prohibits all activity at the 750-28 face level until MSHA has determined that it is safe to resume normal mining 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 the affected area.

This order was terminated on December 18, 2006 after the conditions that contributed to the accident no longer existed.

Citation No.6392148: was issued on February 12, 2007, under the provisions of Section 104(a) of the Mine Act for a violation of 30 CFR 56.9314:

On December 15, 2006, a geologist was fatally injured at this mine when he was struck by material that fell from the muckpile face. The victim was standing at the toe of the muckpile in the pit to determine the location of the ore-waste contact point. The muckpile face was not trimmed to prevent a hazard to persons in the area.

This citation was terminated on February 12, 2007. The mine operator established new procedures for sampling ore-waste contact zones. These procedures ensure that persons are not exposed to hazards from muckpile faces. All persons have been trained in this procedure.

Approved By:

Arthur L. Ellis
District Manager

Date: _____

Appendix A

Persons Participating in the Investigation

Teck Cominco Alaska Inc

Cecil Taylorsafety and loss control coordinator
Steve Rhodes.....reliability general foreman
Warren Drapermine general foreman
Robert Nelsonsafety and training Officer
Ray Martinminer's representative

Mine Safety and Health Administration

James E Dejarnattmine safety and health inspector