

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

Report of Investigation

Surface Nonmetal Mine
(Limestone)

Fatal Powered Haulage Accident

April 21, 2003

North Marion Quarry #388
Martin Marietta Aggregates
Marion, Marion County, Kansas
Mine ID No. 14-01506

Investigators

Dale D. Teeters
Mine Safety and Health Inspector

Walter C. Slomski
Mining Engineer

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

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OVERVIEW

Georgie Vogel, weigh master, age 58, was fatally injured on April 21, 2003, when a pickup truck, driven by the plant manager, struck and entered the building where she was working. The vehicle was traveling on a mine road adjacent to the building.

The accident occurred because a mine employee had a medical condition that caused him not to be fully cognizant of his actions at all times. Subsequently, he failed to maintain control of the vehicle he was operating.

GENERAL INFORMATION

North Marion Quarry #388, a surface limestone operation, owned and operated by Martin Marietta Aggregates, was located at the northeast city limits of Marion, Marion County, Kansas. The principal operating official was David Herb, plant manager. The mine normally operated one 10-hour production shift, 5 days a week, with a partial day for maintenance on Saturday. Total employment was 15 employees.

Three other plants were also located on the property; a wash plant, a portable crusher, and an asphalt plant, all owned and operated by Martin Marietta Aggregates. The plants operated independently and were managed by different company officials. One set of scales was used to weigh material produced and sold by all four plants.

Limestone was drilled and blasted from a single bench in the quarry. The blasted limestone was loaded into haul trucks with front-end loaders and transported to the crusher. The crushed rock was conveyed to the mill where it was sized and stockpiled. Finished products were sold for use in the construction industry.

The last regular inspection of this operation was completed on April 3, 2003.

DESCRIPTION OF THE ACCIDENT

On the day of the accident, Georgie Vogel (victim) started her shift at approximately 7:00 a.m., her normal starting time. She reported to the weigh room portion of the office building and began weighing trucks. Work progressed through the morning without incident. At 10:58 a.m., David Silhan and Don Berg, Marion County truck drivers, were inside the weigh room signing their weigh tickets. Silhan looked out the window and observed David Herb, plant manager, driving toward the office building in a pickup truck. The truck was traveling faster than usual. Herb did not slow down or change direction but instead continued in a straight line, heading toward the northwest corner of the office building. The truck crashed through the building wall and traveled into the weigh room. Vogel was pinned between her desk and a file cabinet by the truck.

Emergency personnel and others were dispatched to the scene. Vogel was treated at the scene and transported by helicopter to a hospital, where she was pronounced dead later that afternoon. Death was attributed to multiple blunt force trauma injuries.

Herb remained in the cab of his vehicle and received care from emergency personnel and Marion County Sheriff personnel. He was transported to a local hospital, checked and released.

INVESTIGATION OF THE ACCIDENT

MSHA was notified of the accident at 12:30 p.m. the same day, by a telephone call from David S. Hawley, safety/employee relations manager, to Jake DeHerrera, assistant district manager. An investigation was started that day. Orders were issued pursuant to 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 and equipment involved, interviewed persons, and reviewed conditions and work procedures relevant to the accident. MSHA conducted the investigation with the assistance of mine management and employees.

DISCUSSION

Location of the Accident

The accident occurred at the northwest corner of the site's office building. The building housed several offices including the weigh room for the scales. The weigh room was approximately 10 feet by 14 feet in size.

Weigh Room

Haul trucks, originating from four different areas on the site, crossed a common scale located approximately 100 feet north of the office building. Approximately 50 to 100 trucks were weighed each day. Each driver exited his/her vehicle, entered the weigh room, and signed and received a copy of the weigh ticket.

The area immediately in front of the weigh room, about 100 by 20 feet, was flat and kept clear of all vehicles. A large plate glass window provided the weigh master with an

excellent view of the scale and the area between the scale and the weigh room. All small vehicles were parked to the east of the window or on the other side of the building. Large, over-the-road haul trucks, were parked in designated areas when the drivers stopped to pick up their weigh tickets.

No vehicle skid marks were found at the accident scene.

Vehicle Inspection

The pickup truck involved in the accident was a 2001, Chevrolet Silverado 1500.

The vehicle was inspected by MSHA investigators, the Marion City Police Department, and the Marion County Sheriff Department. Everett Pankratz, a local General Motors technician, conducted diagnostic tests on the vehicle at the request of the Marion City Police Department. The mine operator contracted with Jacobson Forensic Engineering, Inc., to inspect the vehicle. Tests were conducted to retrieve data from the vehicle's sensing and diagnostic module using a crash data retrieval unit plugged into the on-board diagnostic port. No defects were found that affected the operator's ability to control the pickup truck prior to the accident.

Weather and Visibility

Weather on the day of the accident was reported as clear, warm, and windy with a temperature of 68 to 70 degrees.

Roadways

Mine roadways were well maintained with adequate grading and drainage. The roadways approaching the scale and office building were flat and wide providing good visibility.

Medical History

The investigation revealed that since 1995, Herb had been under a doctor's care requiring prescribed medications for seizures. On numerous occasions since that time, Herb had exhibited erratic and unsafe behavior. His co-workers were concerned for their safety and his. They informed upper management officials about many of the incidents that occurred during duty hours. Management officials had

directed Herb to seek medical attention; however, he failed to follow-up with medical professionals to ensure that he had obtained the proper diagnosis and treatment. Herb was permitted to continue performing his normal duties.

Training

Vogel had 15 years mining experience, all at this operation. Herb had 18 years mining experience, 8-1/2 years as a plant manager, all at the North Marion Quarry. He completed annual refresher training on December 10, 2002.

ROOT CAUSE ANALYSIS

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

Causal Factor: An employee with a prior history of impairment and who had two recent reported instances of non-responsiveness, nevertheless, permitted himself to continue operating a vehicle on the mine property without ensuring his medical ability to operate equipment safely. Upper company management also failed to ensure that the employee had the capacity to safely operate equipment. The employee lost control of his vehicle while traveling on a mine road and struck an office building killing the victim.

Corrective Action: Procedures should be implemented to ensure that persons who exhibit evidence of impairment are required to obtain a medical evaluation before they are permitted to operate equipment.

CONCLUSION

The accident occurred because a mine official had a medical condition that caused him not to be fully cognizant of his actions at all times. This behavior was reported by several persons to upper company management. However, the employee was permitted to continue his normal duties without having to obtain a medical evaluation before returning to work.

ENFORCEMENT ACTIONS

Order No. 6287565 was issued on April 21, 2003, under the provisions of Section 103(k) of the Mine Act:

A fatal accident occurred at this operation on April 21, 2003, when the plant manager drove his pickup truck through the north side of the scalehouse pinning the weigh master between a file cabinet and the pickup. She later died of her injuries. This order is issued to ensure the safety of all persons at this operation. It prohibits all activity at the affected area until MSHA had 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 April 22, 2003, after it was determined that this area of the mine could resume normal operations.

Order No. 6287566 was issued on April 24, 2003, under the provisions of Section 103(k) of the Mine Act:

A fatal accident occurred at this operation on April 21, 2003, when the plant manager drove his pickup truck through the north side of the scale house pinning the weigh master between a file cabinet and the pickup. She later died of her injuries. This order is issued to ensure the safety of all persons at this operation. It prohibits all activity pertaining to the pickup truck involved in the accident. 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 August 27, 2003. Conditions that contributed to the accident no longer exist and normal operations can resume.

Citation No. 6297777 was issued on October 21, 2003, under the provisions of Section 104(d)(1) of the Mine Act for violation of 30 CFR 56.9101:

A fatal accident occurred at this mine on April 21, 2003, when a company pickup truck operated by the plant manager struck the scale house fatally injuring the weigh master. The plant manager reportedly was suffering a seizure or blackout at the time of the accident and failed to control the truck he was operating. Since 1995, the plant manager had been under a doctor's care regarding prescribed medications for seizures. During a 5-month span prior to this accident, the plant manager had been involved in two motor vehicle incidents while taking medication and experiencing seizures. The mine operator had knowledge of these prior incidents and continued to permit the plant manager to drive his vehicle, endangering his life and the lives of others. Failure to take action to address the problem constitutes more than ordinary negligence and is an unwarrantable failure to comply with the cited mandatory safety standard.

This citation was terminated on January 14, 2004. The mine operator has implemented a policy requiring all employees to report to upper company management any conduct, behavior, or health problem of any person, including themselves, that might endanger the safety or health of any employee. Employees were trained on the reporting policy on December 29, 2003.

Approved by:

Date: January 20, 2004

Irvin T. Hooker
District Manager

APPENDICES

- A. Persons Participating in the Investigation
- B. Persons Interviewed

APPENDIX A

Persons Participating in the Investigation

Martin Marietta Aggregates

| | |
|-----------------|--------------------------------------|
| Lloyd Hanson | director safety & health |
| David S. Hawley | safety/ER manager-Kansas District |
| Donald M. Fagan | production manager |

Jacobson Forensic Engineering

| | |
|--------------------------|-----------|
| Olof H. Jacobson, MS, PE | president |
|--------------------------|-----------|

Marion County Sheriff's Office

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|------------|---------|
| Lee Becker | sheriff |
|------------|---------|

Marion Police Department

| | |
|--------------|-----------------|
| Michel Soyez | chief of police |
| Dean Keyes | lieutenant |

Irv Schroeder County Motors

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|------------------|---------------------------|
| Everett Pankratz | General Motors technician |
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Mine Safety and Health Administration

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|-------------------|-------------------------------------|
| Dale D. Teeters | mine safety and health inspector |
| Chrystal A. Dye | mine safety and health inspector |
| James W. Timmons | mine safety and health inspector |
| Walter C. Slomski | mining engineer |

APPENDIX B

Persons Interviewed

Martin Marietta Aggregates

| | |
|---------------------|-----------------------------|
| Barry L. Montgomery | resident equipment operator |
| Susan E. Buttry | office manager |
| John W. Tajchman | truck driver |
| Donald M. Fagan | production manager |
| Gary E. Hood | portable plant manager |
| Barry L. Mai | water truck driver |
| David D. Herb | plant manager |

Marion County

| | |
|-----------------|---------------------|
| David W. Silhan | county truck driver |
| Donald L. Berg | county truck driver |

Medical Officials

| | |
|----------------|--|
| Don W. Hodson | medical doctor Marion Family Physicians Marion, Kansas |
| Terry Morris | doctor of osteopathy Blue Stem Medical Center Eureka, Kansas |
| Deana L. Olson | administrative assistant Marion County ambulance |
| Karen Larson | registered nurse/paramedic |

Other Witnesses

| | |
|---------------------|--|
| Eugene "Pete" Fells | owner Eugene "Pete" Fells Construction |
| Shannon L. Morris | delivery truck driver Explosives Energies |