FAI-6878447-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Crushed and Broken Stone)

Fatal Machinery Accident
June 22, 2023

LB3 Enterprises, Inc (Z740)
Lakeside, California

at

Chula Vista Quarry
CalMat Co
Chula Vista, San Diego County, California
ID No. 04-04080

Accident Investigators

Kenneth Pettus
Mine Safety and Health Inspector

William Rugh
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Vacaville District
991 Nut Tree Road, Second Floor
Vacaville, CA 95687
Brad Breland, Acting District Manager

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OVERVIEW

On June 22, 2023, at 2:31 p.m., John Hatfield, a 60 year-old contractor bulldozer operator with 27 years of mining experience, died after the bulldozer he was operating backed over the edge of a highwall, and fell approximately 44 feet onto a pile of rocks on the pit floor.

The accident occurred because the contractor did not ensure the bulldozer operator wore a seat belt while operating the bulldozer.

GENERAL INFORMATION

CalMat Co owns and operates the Chula Vista mine, a surface crushed and broken stone mine located near Chula Vista, San Diego County, California. The mine employs 38 miners and operates one 12-hour shift, five days per week. The mine removes the topsoil then drills and blasts the stone. Front-end loaders and excavators load the material into haul trucks that transport the material to the crusher. The mine stores the crushed stone on the ground and sells it to customers. The mine operator contracts LB3 Enterprises, Inc (LB3) to perform mining in the pit. Hatfield was an employee of LB3.

The principal management official at the Chula Vista mine at the time of the accident was:

Steven Hallmark — Plant Manager

The principal management official for LB3 at the time of the accident was:

Ray Parga — Foreman

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection on May 10, 2023. The 2022 non-fatal days lost incident rate for the Chula Vista mine was zero compared to the national average of 1.70 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On June 22, 2023, at 7:00 a.m., Hatfield arrived at the mine and started his shift by attending a safety meeting in the main office at the plant. According to interviews, William Noyes, Pit Foreman for CalMat Co, assigned Hatfield and Lucas Heimpel, Equipment Operator for LB3, to get the 380 ramp area ready for the mine operator to drill and blast this area. The 380 ramp was 100 feet wide, and Hatfield operated a bulldozer to push material over the edge of the ramp by backing the bulldozer up around 20 feet, dropping the blade, and moving forward to push the material over the edge. Heimpel used the excavator to remove larger boulders from the 380 ramp.

According to interviews, at 1:00 p.m., Hatfield and Heimpel left the 380 ramp due to a planned blast and returned at 1:40 p.m. According to interviews, at 2:31 p.m., Heimpel noticed that Hatfield was backing toward the edge of the highwall on the 380 ramp, so Heimpel honked his horn, flashed his lights, and tried to wave to Hatfield to warn him of the drop off. Hatfield continued to drive backward toward the edge, looking forward, and never turned to acknowledge Heimpel. Heimpel saw Hatfield back over the edge of the highwall and disappear. Heimpel radioed Noyes and drove the excavator down off the ramp. Noyes called 911 at 2:34 p.m.

Todd Lopka, Multi-Skilled Miner for CalMat Co, was working on the floor of the pit about 80 yards away. When Lopka saw the bulldozer go over the edge of the highwall he immediately went to the accident site. According to interviews, Hatfield was not in the seat of the bulldozer. Jeremy Niedens, Multi-Skilled Miner for CalMat Co, was operating a front-end loader and saw the bulldozer fall over the edge but did not see it land.

The Chula Vista Police and Fire Departments arrived at the accident scene at 2:48 p.m. Matthew Garcia, Paramedic, pronounced Hatfield dead at 2:52 p.m.

INVESTIGATION OF THE ACCIDENT

On June 22, 2023, at 2:46 p.m., Daniel Reardon, Administrator for CalMat Co, called the Department of Labor National Contact Center (DOLNCC) to report a life-threatening injury at the Chula Vista mine. At 3:26 p.m., Ismael Soto, Safety Administrator/Project Manager for LB3, called to report the fatality. The DOLNCC contacted Leanne Russell, Supervisory Mine Safety and Health Inspector, the first time and Patrick Barney, Assistant District Manager, the second time. Russell contacted the mine operator at 3:14 p.m. and issued an order under the provisions of Section 103(j) of the Mine Act to ensure the safety of the miners and preservation of evidence. Barney notified James Fitch, Assistant District Manager. Fitch called Miles Frandsen, Field Office Supervisor who sent William Rugh, Mine Safety and Health Inspector, to the mine. At 3:34 p.m., Fitch sent Kenneth Pettus, Mine Safety and Health Inspector, to the mine and assigned him to lead the investigation.

At 3:52 p.m., Rugh arrived at the mine and modified the 103(j) order to a 103(k) order. Pettus arrived at the mine on June 23, 2023. MSHA's accident investigation team, along with CalOSHA Mining and Tunneling, conducted an examination of the accident scene; interviewed miners, mine management, contractors, and contractor management; and reviewed conditions and work practices relevant to the accident. See Appendix A for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred at the Northwest side of the 380 ramp, which used to serve as an access road into the pit (see Appendix B). The mine operator installed a new access road, allowing them to mine out the 380 ramp to recover the material.

Weather

At the time of the accident, the weather was clear, with a temperature of 70 degrees Fahrenheit. Investigators determined that the weather did not contribute to the accident.

Equipment Involved

LB3 leased the bulldozer involved in the accident, a Caterpillar Model D9T bulldozer with a blade on the front and a two-ripper system on the rear. The pre-operational inspection of the bulldozer did not identify any deficiencies. A Caterpillar technician examined the backup camera on the bulldozer. The backup camera functioned properly, and the data removed from the engine control module (ECM) showed no faults with the backup camera. The cab sustained damage at the rear portion where the manufacturer mounted the air conditioner on the bulldozer, and the rear window was located. Investigators observed that the rollover protection structure received little damage from the fall. Investigators found no defects that contributed to the accident.

Seat Belt

The seat belt functioned properly when tested. The mine operator and contractor had policies that required the use of seat belts on mobile equipment and trained Hatfield on that policy. Investigators were unable to determine whether Hatfield used a seat belt on a regular basis but learned through interviews that the mine operator nor any official from LB3 ever counseled him on not using a seat belt in the past. The ECM data recorded 26 seat belt faults in the last 182 hours of operation, indicating the seat belt was not being used. Rescuers found Hatfield out of the operator's seat and the seat belt was in the retracted position. Therefore, investigators determined that Hatfield was not wearing the seat belt at the time of the accident. The contractor did not ensure Hatfield wore a seat belt while operating the bulldozer, which contributed to the accident.

Mining Practice

The mine operator's mining practice was to remove all loose material from a bench or ramp, including berms, prior to drilling and blasting. According to the mine operator, this was standard procedure for this operation. There was a substantial berm at the entrance of the 380 ramp to

prohibit access to all wheeled mobile equipment. However, there were no berms on the edge of the 380 ramp, because the mine operator had them removed to clear the area for a new drill pad. The mine operator blocked access to the area where the bulldozer was working to prevent any vehicle traffic from entering.

Training and Experience

Hatfield had 27 years of experience operating bulldozers and 2 years of experience at this mine. Hatfield was employed by LB3 intermittently since July 2008. Hatfield completed his last annual refresher training on January 15, 2023. Investigators reviewed Hatfield's training and determined that all training conducted by the mine operator was in accordance with MSHA Part 46 training regulations.

Workplace Examinations

Noyes performed a workplace examination where the bulldozer was working on the day of the accident and no hazards were noted.

ROOT CAUSE ANALYSIS

The accident investigation team conducted an analysis to identify the underlying causes of the accident. The team identified the following root causes, and the mine operator and contractor implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The contractor did not ensure that the bulldozer operator wore a seat belt while operating the bulldozer.

   Corrective Action: The contractor retrained miners in the use of seat belts.

CONCLUSION

On June 22, 2023, at 2:31 p.m., John Hatfield, a 60 year-old contractor bulldozer operator with 27 years of mining experience, died after the bulldozer he was operating backed over the edge of a highwall, and fell approximately 44 feet onto a pile of rocks on the pit floor.

The accident occurred because the contractor did not ensure the bulldozer operator wore a seat belt while operating the bulldozer.

Approved By:

_____ _____

Brad Breland Date
Acting District Manager

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to CalMat Co.

   A fatal accident occurred on June 22, 2023, at 2:31 p.m. This order is being issued under the authority of the Federal Mine Safety and Health Act of 1977, under Section 103(k) to insure the safety of all persons at the mine, and requires the operator to obtain the approval of an authorized representative of MSHA of any plan to recover any person in the mine or to recover the mine or affected area. This order prohibits any activity in the affected area. The operator is reminded of the obligation to preserve all evidence that would aid in investigating the cause or causes of the accident in accordance with 30 CFR 50.12.

2. A 104(a) citation was issued to LB3 for a violation of 30 CFR 56.14130(g).

   A fatal accident occurred on June 22, 2023, when a Caterpillar D9T bulldozer backed over the edge of a highwall and fell 44 feet onto a pile of rocks on the pit floor. The bulldozer's engine control module (ECM) data showed that for the last 182 hours of operation, the seat belt was left unfastened 28 times. The ECM data showed this was a common occurrence and the bulldozer operator was found out of the bulldozer's seat after the accident. The contractor did not ensure the bulldozer operator wore a seat belt while operating the bulldozer.

APPENDIX A – Persons Participating in the Investigation

CalMat Co

John Atkins	Area Manager
Steven Hallmark	Chula Vista Plant Manager
Thomas Ayala	Safety and Health Representative
Randy Rowell	Equipment Operator
Todd Lopka	Multi-Skilled Miner
Jeremy Niedens	Multi-Skilled Miner
William Noyes	Pit Foreman
Daniel Reardon	Administrator

LB3 Enterprises, Inc

William Burer	Chief Financial Officer
Ismael Soto	Safety Administrator/Project Manager
Doug Lancaster	Superintendent
Daniel Hunsaker	Mine Foreman
Ray Parga	Foreman
Brandon Garcia	Step-up Foreman
Matthew Chavez	Shovel Operator
Christopher Ortiz	Production Operator
Lucas Heimpel	Equipment Operator

CalOSHA Mining and Tunneling

Charlie Wilson	Associate Safety Engineer for Mining and Tunneling

Mine Safety and Health Administration

Kenneth Pettus	Mine Safety and Health Inspector
William Rugh	Mine Safety and Health Inspector
Oscar Montano	Program Analyst, Educational Field, and Small Mine Services

APPENDIX B – Overview of the Accident Scene