

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Sand and Gravel)

Fatal Machinery Accident
March 5, 2021

Dave Clinard Truck Service Inc.
Otter Creek Sand & Gravel Inc.
Havana, Fulton County, Illinois
ID No. 11-01131

Accident Investigators

James A. Hines
Mine Safety and Health Inspector

Michael Deninger
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Central Region - Duluth District
515 West First Street, Room 323
Duluth, Minnesota 55802-1302
Christopher A. Hensler, District Manager

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OVERVIEW

On March 5, 2021, Roger (Dale) Branscum, a 63-year-old mine manager with over 43 years of mining experience, died when the excavator he was operating rolled over into a body of water.

The accident occurred because the mine operator did not: 1) provide berms or guardrails on the edge of the elevated roadway where a drop-off hazard existed; and 2) have written policies and procedures to assure that miners perform a workplace examination to identify and correct hazardous ground conditions prior to performing work on the elevated roadway.

GENERAL INFORMATION

Dave Clinard Truck Service Inc. is the parent company of Otter Creek Sand & Gravel Inc. (Otter Creek), a surface dredge operation located in Havana, Fulton County, Illinois. Otter Creek employs three miners and operates one eight-hour shift five days a week. The mine operates a 35-foot ladder chain cutter dredge (dredge), which cuts the sand deposit underwater and then pumps the sand to a processing plant for sizing. At the time of the accident, the dredge was not operating and the mine was only loading material for sale and conducting general maintenance and repairs.

The Principal Officer for Dave Clinard Truck Service Inc. at the time of the accident was:

David Ray Clinard

President

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on November 5, 2020. The 2020 non-fatal days lost (NFDL) incident rate for Otter Creek was zero, compared to the national average of 0.9 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On March 5, 2021, Branscum arrived at the mine site and informed John Baker, Yard Loader Operator, that he was going to town to pick up supplies. Branscum returned from town at approximately 10:00 a.m. and drove to the excavator. Branscum trammed the excavator around the pond to an area where he had previously worked to remove brush and perform general cleanup.

At 12:42 p.m., Baker went to pick up Branscum. Baker drove along the elevated roadway and did not find Branscum. Baker noticed a disturbed area along the pond's bank and saw the excavator underwater; however, he did not see Branscum. Baker went back to the scale house, notified Angie Haarman, Scale Person, that the excavator was in the water, and directed her to call 911 and then call Dave Clinard, President. Baker drove back to the accident scene to search for Branscum. Haarman called 911, and went outside to direct emergency responders to the accident scene.

Fulton County Sheriff's Department, Fulton County Fire and Rescue, Fulton County Medical Examiner, Hickory Kerton Fire and Rescue, Mason County Emergency Management Agency Dive Team, and Copperas Creek Fire and Police Department Dive Team responded to the accident scene. The Mason County Emergency Management Agency Dive Team located the excavator and secured the scene. The Copperas Creek Fire and Police Department Dive Team removed Branscum from the excavator and brought him to the surface. Dive team members were not able to determine if Branscum was wearing his seatbelt at the time of the accident. Steve Hines, Fulton County Coroner, pronounced Branscum dead at 3:00 p.m.

INVESTIGATION OF THE ACCIDENT

On March 5, 2021, at 1:12 p.m., David Ray Clinard called the Department of Labor National Contact Center (DOLNCC). The DOLNCC contacted Gerald Holeman, Assistant District Manager. Holeman dispatched Michael Deninger, Mine Safety and Health Inspector, to the mine site who arrived at 5:00 p.m. Deninger issued an order under the provisions of Section 103(k) of the Mine Act to assure the safety of the miners and preservation of evidence. Holeman also dispatched James A. Hines, Mine Safety and Health Inspector to the mine.

On March 6, 2021, at 7:00 a.m., Hines and Deninger arrived at the mine site to conduct a physical examination of the accident scene, interview miners and other relevant personnel, and review conditions and work procedures 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 in the northeastern portion of the mine site, which is no longer mined, on an elevated roadway that circles the perimeter of the mine's dredge pond (see Appendix B). The mine does not use the elevated roadway during the normal mining cycle. The mine operator occasionally uses the elevated roadway to access the perimeter of the pond.

Weather

At the time of the accident, the weather was sunny with a light breeze and a high temperature of approximately 50 degrees Fahrenheit. Investigators determined that the weather was not a factor in the accident.

Equipment Involved

The equipment involved in the accident was a John Deere 225C track mounted excavator (see Appendix C). Investigators determined that the excavator was inoperable when recovered from the pond.

Elevated Roadway Conditions

Erosion and weathering had severely undercut the elevated roadway (see Appendix D). The undercut bank along the elevated roadway contributed to the fatal accident. Additionally, the mine operator did not provide berms or guardrails on the edge of the elevated roadway where a drop off hazard existed.

Examinations

The mine operator recorded the last workplace examination on November 4, 2020. Otter Creek laid off the miner/competent person who normally conducted workplace examinations in the fall of 2020. The mine continued to load customer trucks and perform general maintenance and repair while the dredge was not operating. The victim conducted maintenance work on the elevated roadway days prior to the accident; however, investigators found no records of any workplace examinations that may have identified hazardous ground conditions.

Training and Experience

Roger Branscum had approximately 43 years of mining experience, nearly 33 years as the mine manager at Otter Creek. Branscum had been operating the John Deere excavator for seven years. After reviewing the mine operator's training records, investigators determined that Branscum's annual refresher and task training requirements were current. Branscum received training in accordance with MSHA Part 46 training regulations.

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 implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The mine operator did not provide berms or guardrails on the elevated roadway where a drop off hazard existed.

Corrective Action: The mine operator has installed earthen berm barriers at both entrances to the pond to prevent vehicle access to the elevated roadway along the pond's perimeter from the mine site. The mine operator will develop and provide MSHA with a plan that will assure the safety of drivers and vehicles on the elevated roadway before any vehicle is allowed to travel on the elevated roadway, and will train miners in that plan.

2. Root Cause: The mine operator did not have policies and procedures in place to assure that miners conduct a workplace examination to identify and correct hazardous ground conditions before work commenced along the elevated roadway. The mine operator allowed miners to perform work and travel in the area despite the existence of conditions that adversely affected safety.

Corrective Action: The mine operator developed written policies and procedures to assure work place examinations are conducted in accordance with 56.18002. The company has trained all management and miners in those policies and procedures.

CONCLUSION

On March 5, 2021, Roger (Dale) Branscum, a 63-year-old mine manager with over 43 years of mining experience, died when the excavator he was operating rolled over into a body of water.

The accident occurred because the mine operator did not: 1) provide berms or guardrails on the edge of the elevated roadway where a drop-off hazard existed; and 2) have written policies and procedures to assure that miners perform a workplace examination to identify and correct hazardous ground conditions prior to performing work on the elevated roadway.

Approved By:

Christopher A. Hensler
District Manager

Date

ENFORCEMENT ACTIONS

1. 103(k) Order No. 944577 was issued to Dave Clinard Truck Service Inc., on March 3, 2021.

A fatal accident occurred at this mine on March 5, 2021 when an excavator which a miner was operating slid down an elevated roadway and went into the lake the mine was dredging. This order is issued to assure the safety of all miners working on the entire mine site until MSHA has determined it is safe to resume normal mining operations at the mine site. The mine operator shall obtain prior approval from an authorized representative for all actions to recover and/or restore operations on the mine site.

2. A 104(a) Citation was issued to Dave Clinard Truck Service Inc., for a violation of 30 CFR § 56.9300(a).

A fatal accident occurred at the mine on March 5, 2021, when a miner operating a John Deere 225C track mounted excavator over-traveled the edge of an elevated roadway, causing the right excavator track to drop and the excavator to roll over into the adjacent dredge pond. Investigators found sections of the elevated roadway to be undercut, creating a portion of unsupported road, and the roadway edge failed. The miner sustained fatal injuries when the excavator rolled into the pond. The mine operator did not provide berms or guard rails on the edge of the elevated roadway where a drop-off hazard existed.

3. A 104(a) Citation was issued to Dave Clinard Truck Service Inc., for a violation of 30 CFR § 56.18002(a).

A fatal accident occurred at the mine on March 5, 2021, when a miner operating an excavator went over the edge of an elevated roadway. Investigators found sections of the elevated roadway were undercut. When the excavator drove over a section of the road that was undercut the excavator track dropped causing the excavator to roll down the bank and into the dredge pond. At the time of the accident, the miner was traveling on the elevated roadway. On days prior to accident, the miner had been clearing brush along this elevated roadway on the pond's perimeter. The mine operator had not conducted a workplace examination prior to the miner performing work in the area.

APPENDIX A – PERSONS PARTICIPATING IN THE INVESTIGATION

Dave Clinard Truck Service Inc.

David Ray Clinard	President
John Baker	Yard Loader Operator
Angie Haarman	Scale Person

Copperas Creek Fire and Police Department Dive Team

Kenneth Phipps	Chief
Andrew Ridenour	Diver

Mason County Emergency Management Agency Dive Team

Joe Ragel	Diver
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Fulton County Coroner's Office

Steve Hines	Coroner
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Mine Safety and Health Administration

Michael Deninger	Mine Safety and Health Inspector
James A. Hines	Mine Safety and Health Inspector

APPENDIX B – AERIAL VIEW OF MINE SITE



APPENDIX C – JOHN DEERE 225C LC RTS EXCAVATOR



APPENDIX D – HAZARDOUS GROUND CONDITION

