UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface (Sand and Gravel)

Fatal Machinery Accident January 30, 2025

Ellinger Sand & Gravel Ellinger Sand & Gravel Fayetteville, Fayette County, Texas ID No. 41-04891

Accident Investigators

O'Neal Robertson Mine Safety and Health Specialist

Jason Hoermann Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Dallas District
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William O'Dell, District Manager

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OVERVIEW

On January 30, 2025, at approximately 11:25 a.m., Reynaldo Barrientos, a 47-year-old leadman and plant operator with nine years of mining experience, died after he became entangled in a log washer.

The accident occurred because the mine operator did not: 1) remove the log washer from service when defects affecting safety were known, and 2) de-energize or block the log washer against hazardous motion while work was being performed on the log washer.

GENERAL INFORMATION

Ellinger Sand & Gravel owns and operates the Ellinger Sand & Gravel mine, a surface sand and gravel mine located in Fayetteville, Fayette County, Texas. The mine employs five miners and operates one ten-hour shift, six days per week. Excavators extract sand and gravel from the pit. Haul trucks transport the material to the wash plant where a front-end loader feeds material into the feeder. Belt conveyors transport the material to screens, a log washer, sand screws, and then onto stockpiles where it is sold to the public and the construction industry.

The principal management official at the Ellinger Sand and Gravel mine at the time of the accident was:

Ceasar Cruz Plant Manager

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on January 15, 2025. The 2024 non-fatal days lost incident rate for the Ellinger Sand and Gravel mine was zero, compared to the national average of 0.97 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On January 30, 2025, at approximately 6:00 a.m., Barrientos arrived at the mine and sent Marco Soto, Excavator Operator, and Pablo Nunez and Jamie Sanchez, Haul Truck Operators, to haul material from the pit. Barrientos proceeded to perform work around the wash plant.

At approximately 10:40 a.m., Barrientos asked Ernesto Victorino, Equipment Operator, to help him start the wash plant. Barrientos went to start the diesel generator while Victorino went to the wash plant control room to attempt to start the wash plant. As they attempted to start the wash plant, the diesel generator shut down causing the wash plant to stop. After multiple attempts, Barrientos and Victorino successfully started the generator, and all the stationary equipment in the wash plant began running, except for the log washer. Although the log washer was energized with 480 volts causing its electric motor to rotate, the paddle shafts were not rotating.

At approximately 11:00 a.m., Barrientos asked Victorino to help manually rotate the log washer paddles using the 2700 Link Belt Excavator and a chain. Barrientos climbed the stairs to enter the log washer to hook up the chain. Victorino suggested to Barrientos to stop the generator and to shut down the wash plant, and Barrientos responded that it would be ok, but did not shut the plant down. Barrientos stepped onto the sidewall of the log washer, then stepped down onto the paddle shaft, and looped a ½-inch chain to a paddle on the east paddle shaft. The other end of the chain was attached to the excavator bucket, so the paddle shaft could be rotated when the bucket was raised. Barrientos climbed out of the log washer and stood on top of its sidewall and directed Victorino to lift and pull the paddle shaft to start the log washer.

Victorino raised the boom and swung to the south, which obscured his view of Barrientos. Victorino heard Barrientos scream and lowered the excavator boom. Victorino jumped off the excavator and ran and stopped the generator, because the log washer had started. When he returned to the log washer, he found Barrientos at the bottom of the log washer entangled in the paddles.

At approximately 11:25 a.m., Victorino called 911, and then called Delores Trejo, Safety Coordinator, and Irma Candillo, Assistant Safety Coordinator, to inform them of the accident. Candillo called 911 again at 11:29 a.m. Joe Gonzales, Deputy for the Fayette County Sheriff's Office, arrived at 11:42 a.m. Gonzales went over to the log washer and checked on Barrientos' condition. Gonzales called and requested that Jamie Moreau, Justice of the Peace Precinct 2,

come to the mine. Moreau pronounced Barrientos deceased at the time of the call to the sheriff's office at 11:29 a.m.

INVESTIGATION OF THE ACCIDENT

On January 30, 2025, at 12:10 p.m., Candillo called the Department of Labor National Contact Center (DOLNCC) to report the fatality. The DOLNCC contacted Brett Barrick, Acting District Manager, who then notified Brandon Olivier, Supervisory Mine Safety and Health Inspector. Olivier sent O'Neal Robertson, Mine Safety and Health Specialist, to the mine as the lead investigator. Jason Hoermann, Mine Safety and Health Inspector, was also sent to the mine site to assist with the investigation.

At 2:50 p.m., Robertson arrived at the mine and issued an order under the provisions of Section 103(k) of the Mine Act to ensure the safety of the miners and the preservation of evidence. The MSHA accident investigation team conducted an examination of the accident scene, interviewed miners and mine management, and reviewed 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 at the log washer in the plant (see Appendices B and C).

Weather

The weather at the time of the accident was overcast with a temperature of 61 degrees Fahrenheit. Light misty rain and winds were from the northwest at five to ten miles per hour. Investigators were unable to determine if the weather contributed to the accident.

Equipment Involved

The log washer involved in the accident is an Eagle Sol-Clay Log Washer. The manufacturer's manual contained a warning statement on page seven, which reads, "WARNING TO PREVENT INJURY: TURN OFF AND LOCK THE POWER TO THIS MACHINE BEFORE DOING ANY SERVICE WORK. EACH MAN WORKING ON ANY MACHINE SHOULD PLACE HIS OWN PADLOCK ON THE DISCONNECT SWITCH AND REMOVE ONLY WHEN HE IS DONE WITH HIS SERVICE OPERATION."

Investigators learned the two paddle shaft bearings had completely failed, allowing the shafts to rotate inside of the bearing housing. This condition caused misalignment, allowing the paddle shafts to bind against one another, preventing them from rotating. Additionally, the keyway on the drive pulley for the unit was stripped out and would turn on the drive shaft when started. The mine operator made several failed attempts to weld a makeshift collar onto the shaft to stop the shaft from slipping in the drive pulley. The mine operator was aware of the mechanical defects and the unsafe work practices used to start the log washer.

The mine operator did not take the log washer out of service, tag, or use another effective method of marking the defective items to prohibit further use until the defects were corrected. Investigators determined that this contributed to the accident.

Investigators tested the log washer electrical start controls and found no defects that contributed to the accident.

Examinations

Barrientos conducted a workplace examination at the beginning of the shift that included the log washer and did not document any hazards. Barrientos filled in and signed the workplace examination record.

Investigators reviewed the workplace examination record and determined that the workplace examinations did not contribute to the accident.

Training and Experience

Barrientos had over nine years of mining experience, including over four years of experience at this mine. Barrientos completed new miner training on November 18, 2020, and received annual refresher training on November 7, 2024. Investigators determined Barrientos received all 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. <u>Root Cause</u>: The mine operator did not remove the log washer from service when defects affecting safety were known.
 - <u>Corrective Action</u>: The mine operator trained management and miners to recognize and identify defects on equipment, machinery, and tools that affect safety and take prompt corrective actions which includes immediately removing them from service. If the mine resumes production, the mine operator will submit a plan to MSHA to either repair or replace the log washer before operating the plant.
- 2. <u>Root Cause:</u> The mine operator did not de-energize or block the log washer against hazardous motion while performing repairs on the log washer.
 - <u>Corrective Action:</u> The mine operator developed and implemented written procedures for de-energizing and blocking against motion while performing work. The mine operator trained management and all miners in the new procedures.

CONCLUSION

On January 30, 2025, at approximately 11:25 a.m., Reynaldo Barrientos, a 47-year-old leadman and plant operator with nine years of mining experience, died after he became entangled in a log washer.

The accident occurred because the mine operator did not: 1) remove the log washer from service when defects affecting safety were known, and 2) de-energize or block the log washer against hazardous motion while work was being performed on the log washer.

Approved By:		
William O'Dell	Date	
District Manager		

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Ellinger Sand & Gravel.

A fatal accident occurred on January 30, 2025, at approximately 11:25 a.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(d)(2) order was issued to Ellinger Sand & Gravel for a violation of 30 CFR 56.14100(c).

A fatal accident occurred on January 30, 2025, at approximately 11:25 a.m., when a miner became entangled in the paddles of a log washer located at the wash plant. The mine operator was aware of the mechanical defects that required manual assistance for the log washer to start. The log washer was not taken out of service, tagged, or other effective method of marking the defective items to prohibit further use until the defects were corrected. The mine operator engaged in aggravated conduct constituting more than ordinary negligence because mine management allowed the log washer to continue to operate without repairing known defects. This is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(2) order was issued to Ellinger Sand & Gravel for a violation of 30 CFR 56.14105.

A fatal accident occurred on January 30, 2025, at approximately 11:25 a.m., when a miner was entangled in the paddles of a log washer located at the wash plant. The mine operator did not ensure the log washer was blocked against hazardous motion before the miner began manually assisting it's start up. The mine operator was aware that the log washer had not been blocked against hazardous motion before start up began. The mine operator engaged in aggravated conduct constituting more than ordinary negligence because mine management allowed the miner to work on equipment without it being blocked against hazardous motion. This is an unwarrantable failure to comply with a mandatory standard.

APPENDIX A – Persons Participating in the Investigation

Ellinger Sand & Gravel

Delores Trejo Safety Coordinator
Irma Candillo Assistant Safety Coordinator
Ceasar Cruz Plant Manager
Ernesto Victorino Equipment Operator
Marco Soto Excavator Operator
Pablo Nunez Haul Truck Operator
Jamie Sanchez Haul Truck Operator

Mine Safety and Health Administration

O'Neal Robertson Mine Safety and Health Specialist
Jason Hoermann Mine Safety and Health Inspector

APPENDIX B – Eagle Sol-Clay Log Washer



APPENDIX C – Aerial View of Plant

