FAI-6882771-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface Mine
(Sand)

Fatal Slip/Fall Accident
September 1, 2020

Arepet Industries
Arepet Industries, LLC
Von Ormy, Bexar County, Texas
ID No. 41-05471

Accident Investigators

Robert Dreyer
Mine Safety and Health Specialist

Thomas Balch
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Central Region - Dallas District
1100 Commerce St. Rm 462
Dallas, Texas 75242
William O'Dell, District Manager

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OVERVIEW

On September 1, 2020, at approximately 7:52 p.m., Darrell W. Johnson, a 54-year-old Helper with over two years of mining experience, died when he fell from the top of a dry bulk trailer. Mr. Johnson fell while climbing from the top of a dry bulk trailer to a load-out platform. Johnson was wearing a fall protection harness, but the harness was not secured to an anchor.

This accident occurred because the mine operator: 1) did not conduct a workplace exam; 2) did not provide safe access from the load-out platform; and 3) did not ensure the proper use of fall protection when workers were exposed to fall hazards.

GENERAL INFORMATION

Arepet Industries, LLC owns and operates the Arepet Industries mine (Arepet) in Von Ormy, Texas. The mine operates two, twelve-hour shifts, seven days per week, and employs twenty miners. The mine imports sand from another mine, dries, and further screens it to sell as fracking sand to the oil and gas industry. Miners use front-end loaders to supply the plant, hoppers and move material. Miners descend from a load-out platform onto the top of customer dry bulk trailers to open and close the trailer hatches during the loading process.

The principal officers at the time of the accident were:

Cesar F. Saenz.....Owner
Ruben Garza.....Owner

The Mine Safety and Health Administration (MSHA) conducted the last regular inspection at this mine on October 30, 2019. Because of the COVID-19 pandemic, the mine shut down from March 2020 to the end of August 2020. The first day of work after the shutdown was September 1, 2020, the day of the fatal accident. The non-fatal days lost (NFDL) incident rate for Arepet during 2019 was 0, compared to the national average of 1.22 for mines of this type.

DESCRIPTION OF ACCIDENT

On September 1, 2020, Johnson arrived on the mine site and his shift began at 7:00 p.m. Johnson and Paul Villarreal, Helper, arrived at the load-out work area at 7:02 p.m., where Johnson put on a fall protection harness. Johnson told Villarreal the harness was too big and asked him for assistance selecting a different fall protection harness. They went to a nearby supply area where Villarreal fitted Johnson with a different harness.

From 7:11 p.m. to 7:44 p.m., Johnson worked on top of customers' dry bulk trailers in load-out lanes designated as Lane 1 and Lane 2. While atop the trailers, he attached his fall protection harness and lanyard to an anchor point. At 7:48 p.m., Johnson accessed the top of a dry bulk trailer in Lane 2, but did not attach the lanyard from his fall protection harness to an anchor point. The vertical sliding ladder miners usually used to access the top of the dry bulk trailers in Lane 2 had fallen during the day shift, and there was no means of safe access for Johnson to climb down to or back up from the top of the bulk trailer. He was able to lower himself down to the top of the trailer to load it. Johnson made several attempts to pull himself back up to the load-out platform but was unable to do so. In attempting to climb up, he fell from the top of the dry bulk trailer to the ground at approximately 7:52 p.m.

Valerie Attmo, Scale Attendant, witnessed Johnson's fall on a video surveillance monitor while she was on the phone with Shelby Gomez, Office Manager. Attmo immediately notified Gomez of the fall and then called 911. Customer truck drivers waiting to enter the load-out left their trucks and went to the accident site. Villarreal, who was working nearby, heard calls for help from the drivers, and arrived at 7:53 p.m. David Lopez, Assistant Plant Manager, arrived and began chest compressions at 8:00 p.m. The San Antonio Fire Department arrived at 8:03 p.m., and took control of the scene. Douglas Ryan, Medical Examiner, arrived on the scene at 8:30 p.m., and pronounced Johnson's death at 8:51 p.m.

INVESTIGATION OF ACCIDENT

On September 1, 2020, at 10:01 p.m., Samuel Lopez, Plant Manager, called the Department of Labor National Contact Center (DOLNCC). The DOLNCC contacted Brett Barrick, Assistant District Manager, to report the accident. Barrick contacted Homer Pricer, Supervisory Mine Safety and Health Inspector, who dispatched David Tijerina, Mine Safety and Health Inspector, to the mine site. Tijerina arrived on-site at 10:55 p.m., and issued an order under section 103(k) of the Mine Act to ensure the safety of the miners.

On September 2, 2020, Robert Dreyer, Mine Safety and Health Specialist, and Thomas Balch, Mine Safety and Health Inspector, arrived to conduct a fatal accident investigation. On September 3, 2020, Nick Gutierrez, Assistant District Manager, arrived to assist in the

investigation. MSHA's accident investigation team conducted a physical examination of the accident scene and interviewed miners and over-the-road truck drivers. See Appendix A for a list of persons who participated in the investigation.

DISCUSSION

Location of Accident

The accident occurred in Lane 2 of the load-out lanes. See Appendix B for an aerial view of the mine site with the approximate location of the accident.

Weather

The weather at the time of the accident was mostly clear, with temperatures in the mid 90-degree range. Investigators determined that weather was likely not a factor in the accident.

Equipment Involved

The miner fell from the top of a customer's 2020 Southern Welding Pneumatic Tanker Trailer. The trailer was not a factor in the accident.

Fall Protection

Johnson had donned a fall protection harness at the start of his shift. Video surveillance showed Johnson securing his lanyard to an anchor point earlier in his shift, but he had not secured the lanyard at the time of the accident while he was working on the trailer in Lane 2. MSHA investigators inspected the fall protection harness and lanyard and did not observe any damage.

Investigators determined that multiple people, including management, had not used fall protection on the day of the accident while performing work atop the dry bulk trailers. Investigators learned during interviews that management at Arepet Industries, LLC thought Arepet was under Occupational Safety and Health Administration (OSHA) jurisdiction when they began operating in the fall of 2010. In October 2019, while inspecting another mine owned by Arepet Industries, LLC, MSHA learned about Arepet and informed them they were under MSHA jurisdiction. Investigators also learned during interviews that before MSHA began inspecting Arepet, other falls occurred in the work area where the fatal accident occurred.

Safe Access

In December 2019, the mine operator changed the load-out chute from a free-hanging rubber-boot style chute to a telescoping chute controlled by a scale attendant. With the installation of this new chute, the drawbridge previously used to access trucks in Lane 2 presented clearance obstructions. Therefore, the mine operator had it removed. A mine contractor designed and installed a vertical sliding ladder to allow access between the load-out platform and the top of the trailers. However, truck activity repeatedly damaged the ladders and the mine operator fabricated and installed numerous replacement ladders (see Appendix C).

When installing replacement ladders, the mine operator omitted two key safety features. First, replacement ladders did not include a hole for the insertion of a safety pin to ensure the ladders remained in the up position while not being used. Secondly, replacement ladders were not

equipped with a stop to prevent the ladders from sliding off the guides and free falling to the surface below, creating a struck-by hazard as well as a fall hazard.

On September 1, 2020, at approximately 12:10 p.m., a miner on the day shift reported that the sliding ladder in Lane 2 had fallen. The absence of this ladder created an approximate 33-inch vertical separation between the tops of the dry bulk trailers and the load-out platform. Without the ladder, the miners could not safely descend to the dry bulk trailer nor ascend to the load-out platform. The absence of the ladder also created an unprotected opening 19 inches wide between the railings and approximately 17 feet above the concrete surface (see Appendix D). Plant Manager Samuel Lopez directed the day shift miners to use a portable ladder for access. However, the miners had no way to secure this ladder to the trucks or to the load-out platform. When Johnson arrived at his work area for the evening shift, he was not told to use the unsecured portable ladder in Lane 2. Johnson proceeded to ascend and descend the approximately 33-inch vertical distance between the top of a dry bulk trailer and the load-out platform by lowering himself down to the top of a dry bulk trailer but, because there was no ladder, he was unsuccessful in pulling himself back up without a safe means of access.

Training and Experience

Johnson completed his new miner training in October 2019. The mine operator states that Johnson received task training covering the revised work procedures after the new chute installation in December 2019, however, no record of this training was available for review.

Workplace Examinations

Prior to beginning work, a competent person designated by the operator had not examined the working place for conditions that might adversely affect the safety or health of the miners on either shift on the day of the accident. A day shift miner working in the area reported to the mine operator that a ladder used to access customer trucks had fallen from the load-out platform in Lane 2. Without the ladder, there was no safe way to access the top of the dry bulk trailer. The ladder's fall created an unprotected opening approximately 17 feet above the ground. Both situations posed imminent dangers to the miners, but the mine operator did not withdraw the miners from the area. The mine operator did not take appropriate corrective action or notify the night shift miners of the unsafe conditions, nor record unsafe conditions.

ROOT CAUSE ANALYSIS

The accident investigation team conducted a root cause 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 ensure that a competent person conducted an examination of the working places to identify conditions that may adversely affect the safety or health of the miners, prior to commencement of operations. The Plant Manager did not withdraw all persons from the area after being notified that a condition existed that may present an imminent danger to miners. The operator did not notify the night shift miners tasked with working in the affected area of the hazards, nor record unsafe conditions.

Corrective Action: The mine operator instituted a procedure that requires: 1) before miners begin work, a competent person shall examine each working place for conditions that may adversely affect safety or health; 2) the operator shall promptly notify miners of any conditions found which may affect safety or health and promptly initiate action to correct such conditions; 3) the operator shall withdraw all persons from an area in which an imminent danger exists; and 4) the operator shall make a record of these examinations and maintain the records for at least one year. The mine operator trained all miners on this procedure.

2. Root Cause: Mine management did not provide and maintain safe access from the load-out platform.

   Corrective Action: The mine operator has removed the drawbridge in lane 1, as well as the ladder access ways from Lane 1 and Lane 2. These three openings were sealed off with hand and mid-rails. Designated safe access racks were installed in another area of the mine to provide safe access. The operator has provided training in accordance with 30 CFR Part 46 to both the miners and over the road truck drivers.

3. Root Cause: Mine management did not have written procedures in place to ensure the proper use of fall protection when workers were exposed to fall hazards.

   Corrective Action: The mine operator has developed and implemented a Standard Operating Procedure for the selection, use, maintenance, and training of fall protection equipment. All persons working where a danger of fall exists have received hands-on training, video training, completed a written competency test, and demonstrated safe and proper selection and use of fall protection gear.

CONCLUSION

On September 1, 2020, at approximately 7:52 p.m., Darrell W. Johnson, a 54-year-old Helper with over two years of mining experience, died when he fell from the top of a dry bulk trailer. Mr. Johnson fell while climbing from the top of a dry bulk trailer to a load-out platform. Johnson was wearing a fall protection harness, but the harness was not secured to an anchor.

This accident occurred because the mine operator: 1) did not conduct a workplace exam; 2) did not provide safe access from the load-out platform; and 3) did not ensure the proper use of fall protection when workers were exposed to fall hazards.

Approved by: _____ Date: _____

William D. O'Dell
Dallas District Manager

ENFORCEMENT ACTIONS

1. 103(k) Order No. 9511307 was issued to Arepet Industries, LLC, Arepet Industries, ID No. 41-05471 on September 1, 2020.

   A fatal accident occurred at this operation on September 1, 2020, when a miner fell off a customer truck while attempting to close the hatches. This order is issued to assure the safety of all persons at this operation. It prohibits all activity at the load-out platform and the #1 and #2 scales 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.

2. A 104(d)(1) Citation was issued to Arepet Industries, LLC for a violation of 30 CFR 56.11001.

   A fatal accident occurred at this mine site on September 1, 2020, while a miner was attempting to transition from one workplace to the next. A miner working in the area on the previous shift had reported to the plant manager that a ladder used to access customer trucks had fallen from the elevated area in load-out Lane 2. The absence of this ladder created a 33-inch vertical separation between the tops of the dry bulk trailers and the load-out platform without a method to safely traverse the distance. With some difficulty, a night shift miner was able to lower himself down to the dry bulk trailer but, after multiple unsuccessful attempts to pull himself back up to the load-out platform, the miner fell from the trailer to the concrete surface below. This was an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) Order was issued to Arepet Industries, LLC for a violation of 30 CFR 56.18002.

   The competent persons designated by the operator had not performed a work place exam of the load-out platform prior to work commencing on neither the day shift, nor night shift of September 1, 2020. A miner working in the area on the previous shift reported to the mine operator that a ladder used to access customer trucks had fallen from the elevated area in load-out Lane 2. The absence of this ladder created imminent danger conditions and miners were not withdrawn from the area. The mine operator did not take appropriate corrective action, did not notify the night shift miners of this unsafe condition, and did not record hazards. A fatal accident occurred at this mine site on September 1, 2020, when a miner fell off a dry bulk trailer in load-out Lane 2 while working in this area. This was an unwarrantable failure to comply with a mandatory standard.

4. A 104(d)(1) Order was issued to Arepet Industries, LLC for a violation of 30 CFR 56.15005.

   A fatal accident occurred at this mine site on September 1, 2020, while a miner was working atop a dry bulk trailer with a danger of falling. The miner was wearing a safety belt, but the

line was not secured to an anchor. Mine management worked, in the presence of miners, in areas where fall hazards existed without fall protection. Mine management should have been on heightened alert because of the history of falls in this work area. This was an unwarrantable failure to comply with a mandatory standard.

Appendix A - Persons Participating in the Investigation

Arepet Industries, LLC

Nik A. Mimari..... Attorney at Law

Hannah M. Dominguez..... Attorney at Law

Cesar F. Saenz.....Owner

Samuel Lopez..... Plant Manager

David Lopez..... Assistant Plant Manager

Shelby Gomez..... Office Manager

Jose Mendez..... Safety Coordinator

Valerie Attmo..... Scale Attendant

Paul Villarreal .....Helper

Kevin Shields .....Helper

Mark Schnieder..... Groundskeeper

Contract Haulers

George Tedford.....Over-the-Road Truck Driver

Juan Cano.....Over-the-Road Truck Driver

Carlos Trevino .....Over-the-Road Truck Driver

MSHA

Robert Dreyer……..…Mine Safety and Health Specialist

Thomas Balch……..Mine Safety and Health Inspector

Nick Gutierrez……...Assistant District Manger

David Tijerina……..…Mine Safety and Health Inspector

Appendix B - Aerial View of the Mine Site

Appendix C - Replacement Sliding Ladder

Appendix D - Lanes 1 and 2