UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface (Construction Sand & Gravel)

Fatal Powered Haulage Accident November 17, 2021

East Coast Mines Ltd
East Coast Mines Ltd
East Quogue, Suffolk County, New York
ID No. 30-00865

Accident Investigators

Brian Righi Mine Safety and Health Inspector

Mathew Mattison
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Warrendale District
178 Thorn Hill Road, Suite 100
Warrendale, PA 15086
Peter Montali, District Manager

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OVERVIEW

On November 17, 2021, at 3:10 p.m., Luigi Cicillini, an 18 year-old customer truck driver, without a commercial truck driver license, was electrocuted when he tried to re-enter the truck's cab while the trailer's tarping mechanism was in contact with an energized overhead high-voltage power line.

The accident occurred because the mine operator did not: 1) warn customer truck drivers of overhead high-voltage power lines along the haul road, and 2) provide adequate site-specific hazard awareness training.

GENERAL INFORMATION

East Coast Mines Ltd owns and operates the East Coast Mines Ltd mine, a surface construction sand and gravel mine located in East Quogue, Suffolk County, New York. East Coast Mines Ltd employs eight miners and operates one eight-hour shift, five days per week. The surface mine excavates material with a front-end loader and transports it by haul truck to an onsite processing facility where it is screened and washed before being stockpiled for sale.

The principal management officials at the East Coast Mines Ltd mine at the time of the accident were:

John Tintle Aidan Bolan President Safety Director The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection on April 26, 2021. The 2020 non-fatal days lost incident rate for East Coast Mines Ltd was zero, compared to the national average of 0.90 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On November 17, 2021, Cicillini traveled to the mine, picked up a load of processed material and proceeded to the scale. At 3:07 p.m., Cicillini left the scale and began travelling down the mine access road (mine road) to exit the mine. While traveling down the mine road, Cicillini activated the automatic tarping mechanism on his trailer to cover his load. Cicillini's truck and trailer veered to the left side of the mine road as the tarp was deploying. The automatic tarping mechanism contacted one of the three 7,000-volt overhead power lines during activation. The overhead high-voltage power line was located on the left side of the roadway.

John Nardi, Truck Driver for Benimax Inc, was travelling the mine road directly behind Cicillini as they exited the mine. Nardi called Cicillini, over the citizen band (CB) radio, to warn Cicillini that he was veering towards the overhead high -voltage power lines but did not receive a response from Cicillini. Nardi's dash camera recorded the accident, which was provided to MSHA.

According to interviews and the dash camera video footage, after the tarping mechanism contacted one of the three energized overhead high-voltage power lines, Cicillini droved forward approximately 30 feet, stopped, and backed his truck and trailer up nearly parallel to the high-voltage lines. With the tarping mechanism still in contact with one of the three energized overhead high-voltage power lines, Cicillini exited the truck. As Cicillini stepped off the truck, he contacted the ground, received an electrical shock, and was thrown away from the truck. Cicillini stood up, attempted to re-enter the truck's cab, and was fatally shocked when he contacted the truck.

Mary Gorman, Weighmaster, heard the call for help over the CB radio in the scale house and called 911 at 3:10 p.m. Officers from the Southampton Town Police Department arrived at the accident scene at 3:13 p.m. and East Quogue Emergency Medical Services (EMS) arrived at 3:26 p.m., performed cardiopulmonary resuscitation on scene and transported Cicillini to Peconic Bay Medical Center where Amy Rapkiewicz, Medical Doctor, pronounced him dead at 4:16 p.m.

INVESTIGATION OF THE ACCIDENT

On November 17, 2021, at 3:10 p.m., John Tintle, President, called the Department of Labor National Contact Center (DOLNCC). The DOLNCC contacted Kevin Abel, Assistant District Manager. Abel contacted Timothy Lindsay, Mine Safety and Health Inspector, and sent him to the mine. Lindsay arrived on-site at 4:20 p.m. and 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. Abel contacted Brian Righi, Mine Safety and Health Inspector, and assigned him to travel to the mine and conduct the accident investigation as the lead investigator. Mathew Mattison, Mine Safety and Health Inspector, was assigned to assist Righi as part of the accident investigation team.

On November 18, 2021, at 8:00 a.m., Righi and Mattison arrived at the mine. MSHA's accident investigation team conducted an examination of the accident scene; interviewed miners, mine management, customer truck drivers, and first responders; 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 mine road is a single lane dirt road approximately 3,500 feet long extending from Lewis Road to the pit and scale area (see Appendix B). Overhead high-voltage power lines, which supply electrical power to the mine, are installed along the length of the mine road on the east side of the roadway. The mine road was in good repair. The accident occurred on the east side of the mine road approximately 630 feet north of Lewis Road at pole number 3 under the overhead high-voltage power lines, which measured 25.5 feet above ground level. The mine operator did not post signs warning truck drivers of the overhead high-voltage power lines.

Weather

The weather at the time of the accident was 60 degrees Fahrenheit with clear skies. Investigators determined that weather did not contribute to the accident.

Equipment Involved

The equipment involved in the accident was a Kenworth W900 truck which towed an aluminum end-dump trailer (see Appendix C). The maximum height of the truck and trailer was 13 feet. Due to the damage caused by the power line, investigators were unable to start the truck, but were able to conduct a visual examination. The tarping mechanism was stuck in the open position and could not be tested.

Tarping Procedures

With the tarping mechanism open, the total height of the customer truck extended beyond the height of the overhead high-voltage power lines. The mine operator did not have a tarping procedure requiring trucks to tarp their loads before exiting the mine and entering the mine road, which would have prevented contact with the overhead high-voltage power lines. Investigators determined that this contributed to the accident.

Training and Experience

Cicillini had approximately two years of experience operating over the road trucks. Cicillini had no prior documented experience at this or any other mine. Cicillini did not possess a CDL license. The mine operator did not provide site-specific hazard awareness training to sufficiently inform and instruct on the hazards Cicillini would be exposed to while at the mine. The site-specific hazard awareness training did not address the policy for tarping of the loaded trucks leaving the mine. Investigators determined that inadequate site-specific hazard awareness training contributed to the accident.

Based on interviews, Cicillini did not drive the truck involved in the accident to perform deliveries as part of his regular duties. Cicillini was a mechanic who maintained equipment for his family's trucking company, Action Concrete. The act of deploying a tarp while travelling down the mine road is not a normal work practice for experienced truck drivers.

Workplace Examinations

The mine road is not included in the daily workplace examination. Tintle travels the mine road daily and if a hazard is observed or reported, the issue is addressed as needed.

ROOT CAUSE ANALYSIS

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

- 1. <u>Root Cause</u>: The mine operator did not prevent operation of equipment within ten feet of the energized overhead high-voltage power lines.
 - <u>Corrective Action</u>: The mine operator posted signs warning truck drivers of overhead high-voltage power lines along the mine road.
- 2. <u>Root Cause</u>: The mine operator did not provide adequate site-specific hazard awareness training.

<u>Corrective Action:</u> The mine operator installed site-specific hazard awareness training signage that include a policy for tarping loaded trucks leaving the mine.

CONCLUSION

On November 17, 2021, at 3:10 p.m., Luigi Cicillini, an 18 year-old customer truck driver, without a commercial truck driver license, was electrocuted when he tried to re-enter the truck's cab while the trailer's tarping mechanism was in contact with an energized overhead high-voltage power line.

The accident occurred because the mine operator did not: 1) warn customer truck drivers of overhead high-voltage power lines along the haul road, and 2) provide adequate site-specific hazard awareness training.

Approved By:	
Peter Montali	Date
District Manager	

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to East Coast Mines Ltd.

A fatal accident occurred on November 17, 2021, at approximately 3:10 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 the investigating the cause or causes of the accident in accordance with 30 CFR 50.12.

2. A 104(a) citation was issued to East Coast Mines Ltd for a violation of 30 CFR 56.9100(b).

On November 17, 2021, a fatal accident occurred at this mine when a customer truck driver was electrocuted after the tarp assembly on the dump trailer contacted an energized overhead high-voltage powerline. Signs or signals which provide warnings of hazards including overhead power lines, narrow roadway conditions and the need to tarp loads prior to entering the roadway were not posted along the mine road. Approximately 3,000 feet of three phase open air high voltage line was present along one side of the road. As a result of the narrow roadway, trucks entering the mine will pull into one of 19 turnouts under the high voltage powerlines, and wait for oncoming traffic, exiting the mine, to pass. This condition exposed the customer trucks to contacting the overhead high voltage lines in the event a component, such as a tarp or dump box, is raised.

APPENDIX A – Persons Participating in the Investigation

East Coast Mines Ltd

John Tintle President
Mary Gorman Weighmaster

Benimax Inc

John Nardi Truck Driver

Southampton Town Police Department

Robert Stabile Jr. Detective

Mine Safety and Health Administration

Timothy Lindsay Mine Safety and Health Inspector
Mathew Mattison Mine Safety and Health Inspector
Brian Righi Mine Safety and Health Inspector

APPENDIX B – Aerial View of the Accident Location



APPENDIX C – Photograph of the Equipment Involved

