UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface (Crushed & Broken Stone Mining, N.E.C.)

Fatal Slip or Fall of Person Accident September 20, 2024

I-75 Quarry Blue Water Industries Heiskell, Knox County, Tennessee ID No. 40-01247

Accident Investigators

David Smith
Mine Safety and Health Inspector

Ryan O'Boyle Supervisory Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Barbourville District
3837 U.S. Hwy 25E
Barbourville, Kentucky 40906
Samuel Creasy, District Manager

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OVERVIEW

On September 20, 2024, at approximately 3:00 p.m., Perry Cobb, a 68 year-old front-end loader (loader) operator with 34 years of mining experience, died after he was standing on the right front tire performing maintenance on the loader's headlight and fell 72 inches to the ground.

The accident occurred because the mine operator did not provide and maintain safe means of access to the working place where the miner was performing maintenance.

GENERAL INFORMATION

Martin Marietta Materials Inc is the parent company of Blue Water Industries, who owns and operates the I-75 Quarry. This crushed and broken stone mine is located in Heiskell, Knox County, Tennessee. I-75 Quarry employs 12 miners and operates one ten-hour shift per day, five days per week. The mine extracts stone from the multiple bench quarry by drilling and blasting. Loaders and excavators load the stone onto haul trucks that transport the material to a dumping point at the primary plant. From the primary plant, belt conveyors transport the stone to the secondary plant, where the material is crushed, and sized before it is stockpiled for sale and distribution. The mine operator sells the finished products to the construction industry.

The principal management officials at the I-75 Quarry at the time of the accident were:

Daniel Marschke Christopher Taylor Plant Manager Foreman The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on June 6, 2024. The 2023 non-fatal days lost incident rate for the I-75 Quarry was zero, compared to the national average of 1.12 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On September 20, 2024, at 2:53 p.m., company video surveillance shows Cobb operating, then parking, the Caterpillar 980K loader at the #7's Loadout Area, south of the C-16 belt conveyor (see Appendix A). According to interviews, at 3:07 p.m., Harlan Cox, Driver for SA Recycling, observed Cobb lying on the ground and tried to get Cobb to respond to him. Cox received no response and there was no indication that Cobb was breathing. Cox called 911 via cell phone and proceeded to the office to notify the mine operator.

Upon arrival at the office, Cox notified Leigh Anne Fletcher, Sales Coordinator. Fletcher then contacted Chris Taylor, Foreman, and informed him that Cobb had fallen off his loader and that Fletcher was unsure of the location. Taylor radioed truck drivers to look for the loader and Dustin Duncan, Truck Driver, replied that Cobb was at the #7's Loadout Area. After notifying Taylor, Duncan checked for a pulse but did not find one. Upon arrival on the scene, Taylor began cardiopulmonary resuscitation (CPR) and continued until American Medical Response Medical Services arrived and took over CPR. According to interviews, the medical responders ceased resuscitation efforts, and the Knox County Forensic Center was notified to respond to the mine. Matthew Sullivan, Investigator for Knox County Regional Forensics Center, pronounced Cobb dead at 4:20 p.m.

INVESTIGATION OF THE ACCIDENT

On September 20, 2024, at 3:17 p.m., Robert Muncy, Safety Manager, called the Department of Labor National Contact Center (DOLNCC) to report a possible fatality. The DOLNCC notified Stephanie Broughton, Office Assistant. The DOLNCC email notified Samuel Creasy, District Manager. Creasy notified James Proffitt, Assistant District Manager. Proffitt sent Ryan O'Boyle, Supervisory Mine Safety and Health Inspector, to the mine. O'Boyle called David Smith, Mine Safety and Health Inspector, and sent him to the mine. Proffitt later assigned Smith as the lead accident investigator.

At 5:00 p.m., O'Boyle 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 preservation of evidence. Smith arrived at the mine at 5:15 p.m. The MSHA accident investigation team conducted an examination of the accident scene, interviewed the vendor driver, miners, and mine management, and reviewed conditions and work practices relevant to the accident. See Appendix B for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred at the #7's Loadout Area south of the C-16 belt conveyor belt (see Appendices C and D). The area was dry, with ground conditions being smooth and compacted with an approximate one to two percent grade. Investigators observed no hazards, obstacles, or obstructions in the area.

Weather

Weather conditions at the time of the accident were partly cloudy and 88 degrees Fahrenheit. Investigators determined that weather did not contribute to the accident.

Equipment Involved

The mine operator owned the Caterpillar 980K loader (see Appendix E) involved in the accident. It was manufactured in 2014. According to interviews, Joseph Rutherford, Plant Operator, and Brian Delk, Plant Maintenance, both stated that Cobb had come into the shop area at the start of the shift and asked where replacement bulbs for the lights on the Caterpillar 980K loader were located. Rutherford and Delk located the bulbs and offered to replace the bulb for Cobb, but he refused and said he would take care of it later. This was the only indication of any issues with the loader.

Investigators performed a functionality test and determined the brakes, steering, safety controls, and sounding devices were all operating properly. Investigators found no equipment defects. All but one screw on the right front headlight had been loosened.

Safe Access

Investigators found footprints on the loader's boom and handprints on the windshield that indicated Cobb had crossed from the left fender to the right fender across the loader's boom, then began performing maintenance on the right front headlamp in while standing on the right front tire, 72 inches off the ground. The mine operator did not provide and maintain safe means of access for Cobb to the working place where maintenance was being performed. Investigators determined that this contributed to the accident.

Examinations

The mine operator did not perform a workplace examination for the #7's Loadout Area. Investigators reviewed past workplace examination records of the accident area, and the last examination dated for the area was performed on September 3, 2024. However, investigators determined that the lack of a workplace examination did not contribute to the accident.

Cobb conducted a pre-operational inspection of the loader before placing it into operation the morning of the accident and did not note any defects. No issue with the headlight was documented on the pre-operational inspection for the day of the accident. Investigators determined the light was not completely out, it was only dim. Investigators reviewed past pre-operational inspection records, and no defects were noted.

Training and Experience

Cobb had over 34 years of mining experience, all as a loader operator at the I-75 Quarry. The mine operator provided Cobb with task training for equipment maintenance on October 28, 2013, and for the operation of the Caterpillar 980K loader on May 15, 2014. Investigators determined Cobb 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.

<u>Root Cause</u>: The mine operator did not provide and maintain safe means of access to the working place where maintenance was being performed.

<u>Corrective Action</u>: The mine operator conducted additional training with all employees on safe work practices from elevated areas based on policy already in place.

CONCLUSION

On September 20, 2024, at approximately 3:00 p.m., Perry Cobb, a 68 year-old loader operator with 34 years of mining experience, died after he was standing on the right front tire performing maintenance on the loader's headlight and fell 72 inches to the ground.

The accident occurred because the mine operator did not provide and maintain safe means of access to the working place where the miner was performing maintenance.

Approved By:	
Samuel Creasy	Date
District Manager	

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Blue Water Industries.

A fatal accident occurred on September 20, 2024, at approximately 3:00 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 Blue Water Industries for a violation of 30 CFR 56.11001.

On September 20, 2024, a front-end loader (loader) operator, died after he was standing on the right front tire performing maintenance on the loader's headlight and fell 72 inches to the ground. The mine operator did not provide and maintain safe means of access to the working place where the miner was performing maintenance.

APPENDIX A – Aerial View of I-75 Quarry



APPENDIX B – Persons Participating in the Investigation

Martin Marietta Materials Inc

Michael Hunt
Ronnie Constable
William Doran
Walcom Cox
Vice President of Safety and Health
East Division of Safety Director
Ogletree and Deakins Outside Legal
Assistant General Counsel

Blue Water Industries

Jeff Ferrell District Vice President Robert Muncy Safety Manager Steve Bennett District Production Manager Brad Kroeger Area Production Manager Daniel Marschke Plant Manager Chad Cain Forks of River Plant Manager Christopher Taylor Foreman Tony Myers **Equipment Operator Dustin Duncan** Truck Driver Joseph Rutherford Plant Operator Brian Delk Plant Maintenance Leigh Anne Fletcher Sales Coordinator

SA Recycling

Harlan Cox Driver

Mine Safety and Health Administration

Samuel Creasy
James Proffitt
Assistant District Manager
Ryan O'Boyle
Supervisory Mine Safety and Health Inspector
David Smith
Mine Safety and Health Inspector

APPENDIX C – Sketch of Accident Location





