

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Granite)

Fatal Machinery Accident
June 17, 2022

Terra Excavating, LLC (C3757)
Augusta, Georgia

Subcontracted by

Bradley T. Wiley (B1859)
Augusta, Georgia

at

Jackson Quarry
Vulcan Construction Materials LLC
Jefferson, Jackson County, Georgia
ID No. 09-01264

Accident Investigators

Jarvis Westery
Supervisory Mine Safety and Health Inspector

Scottie Sizemore
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Birmingham District
1030 London Drive, Suite 400
Birmingham, AL 35211
Mary Jo Bishop, District Manager

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OVERVIEW

On June 17, 2022, at approximately 1:10 p.m., Brian Thigpen, a 16 year-old equipment operator with three weeks of mining experience, was involved in a fatal accident when the padfoot compactor (compactor) he was operating slid down a four-foot-high bank and overturned onto its side.

The accident occurred because the subcontractor did not: 1) provide new miner training to miners before the miners started working at the mine; 2) conduct workplace examinations; 3) assure that the equipment operator maintained control of the compactor; and 4) assure miners wore seat belts while operating mobile equipment. The accident also occurred because the mine operator and contractor did not provide site-specific hazard awareness training to miners before the miners started working at the mine.

GENERAL INFORMATION

Vulcan Construction Materials LLC (Vulcan) owns and operates the Jackson Quarry. This mine is a surface granite operation located in Jefferson, Jackson County, Georgia. At the time of the accident, the mine was under development with site preparation being done by contractors. A rock crusher, screening plant, and other equipment were present at the mine but not installed.

The principal management officials at the Jackson Quarry at the time of the accident were:

Gregory Duckett
William Lawson

Safety and Health Manager
Greenfield Project Manager

Bradley T. Wiley (Wiley) is a contractor located in Augusta, Richmond County, Georgia that performs set-up work, site clearing, and other projects. Vulcan contracted Wiley to do set-up work and site clearing for this property. Wiley started on this project in mid-February 2022.

The principal management official for Wiley at the time of the accident was:

Bradley Wiley

Owner

Terra Excavating, LLC (Terra) is a subcontractor located in Augusta, Richmond County, Georgia, that performs site work, including roadbuilding and ground preparation for building and installation of equipment. Wiley subcontracted this work to Terra on April 14, 2022.

The principal management official for Terra at the time of the accident was:

Tonya Yost-Hodges

Owner

The Mine Safety and Health Administration (MSHA) had not completed a regular inspection at this mine as the operator had not provided notification of commencement of operations and therefore MSHA was not aware that work had begun at the mine. The 2021 national average non-fatal days lost (NFDL) incident rate for mines of this type was 1.19.

DESCRIPTION OF THE ACCIDENT

On June 17, 2022, Thigpen and crew members Raymond Prickett, Equipment Operator for Terra, and Johnathan Byrd, Equipment Operator for Terra, arrived at the Jackson Quarry at 6:40 a.m. Prickett met with Thigpen and Byrd to discuss workplans and safety before starting the shift.

After the meeting, the crew serviced and fueled the equipment and proceeded to do sitework by building up, grading, and compacting the building foundation or “pad” for the future installation of the crushing and screening plants. This phase of construction included an excavator to load earthen material onto an articulating haul truck, which delivered the material and dumped it for the bulldozer to spread. The compactor then followed and compacted the material. At approximately 1:00 p.m., Prickett radioed Thigpen to tell him that he (Prickett) was sloping the elevated building pad on the south side but was not finished. Prickett told Thigpen to concentrate on compacting the middle of the building pad being constructed.

At 1:06 p.m., Jose Rodriguez, Mechanic for Tractor and Equipment Co., arrived at the mine to do a pre-delivery inspection and to prepare the crushing and screening equipment that had been delivered. Rodriguez traveled to the shop area to begin his tasks. Around the same time, Byrd entered his haul truck and looked in the direction behind the truck and saw that the compactor

was overturned and lying on its side. Based on interviews and evaluation of the ground conditions and tire tracks, investigators determined that Thigpen trammed the compactor in reverse and the left tire dropped off the edge of the elevated building pad, causing the compactor to overturn.

Upon seeing the compactor on its side, Byrd called Thigpen on the radio asking, “Are you alright, are you alright?” Hearing Byrd’s radio call, Prickett drove his bulldozer to the accident scene to see what was happening. Rodriguez also saw the activity and traveled to the accident scene.

Realizing Thigpen was trapped beneath the canopy roof of the compactor, Byrd dismounted the haul truck and ran to the excavator to take it to the accident scene. Byrd and Prickett exchanged positions since Prickett was a more experienced excavator operator. Prickett used the excavator bucket to lift the compactor, allowing Rodriguez and Byrd to remove Thigpen from under the compactor canopy.

At 1:11 p.m., while Byrd and Prickett worked to remove Thigpen, Rodriguez called 911. At 1:20 p.m., Jackson County Emergency Medical Services (EMS) arrived at the site. After evaluating Thigpen’s condition, EMS notified the coroner at 1:25 p.m. Dean Stringer, Coroner, arrived and pronounced Thigpen dead at 1:30 p.m.

INVESTIGATION OF THE ACCIDENT

On June 17, 2022, at 2:05 p.m., Gregory Duckett, Safety and Health Manager for Vulcan, called the Department of Labor National Contact Center (DOLNCC). The DOLNCC contacted Brian Thompson, Assistant District Manager. Thompson contacted and sent Jarvis Westery, Supervisory Mine Safety and Health Inspector, and Scottie Sizemore, Mine Safety and Health Inspector, to the mine. Thompson also sent James Fields, Mine Safety and Health Inspector, to the mine as the first MSHA inspector on site. At 7:30 p.m., Fields 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.

Westery arrived at the mine at 8:45 p.m. and Sizemore arrived at 9:30 p.m. to begin the investigation. MSHA’s accident investigation team conducted an examination of the accident scene, interviewed miners, management officials, and contractors, examined conditions, and reviewed 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 elevated building pad that the subcontractors were constructing for the future installation of crushing and screening equipment (see Appendix B). The material being compacted was approximately four feet higher than the surrounding ground level. The building pad was approximately 343 feet long by 50 feet wide.

Equipment Involved

The equipment involved in the accident was a Caterpillar CP44B Padfoot Compactor (see Appendix C). This compactor was relatively new with only 48 operating hours on the hour meter. The rear of the machine had rubber tires and was equipped with an open cab, roll bar, and canopy. Caterpillar dealer, Yancy Bros. Co., provided regular maintenance with the lease of the compactor at this mine. MSHA investigators, with the assistance of Yancy Bros. Co., conducted a diagnostic test on the compactor and found no defects on the compactor that contributed to the accident.

Seat Belts

Investigators examined and tested the seat belt and determined that it functioned as designed. Upon close inspection, the seat belt buckle, the webbing, and buckle insert did not exhibit signs of wear. Terra did not have any procedures requiring the use of seat belts. Investigators determined Thigpen was not wearing a seat belt at the time of the accident, which contributed to the severity of the accident.

Weather

The weather on the day of the accident was clear with a high of 95 degrees Fahrenheit. Investigators determined that weather did not contribute to the accident.

Training and Experience

Thigpen had been working at the mine for approximately three weeks. Thigpen did not receive training as required by MSHA Part 46 training regulations, including new miner training and site-specific hazard awareness training. According to interviews, Terra was aware of MSHA Part 46 training regulations, but did not provide any training to miners.

Under MSHA Part 46 training regulations, new miner training would have provided Thigpen with instructions in mining methods and hazard recognition, and an introduction to the mine's specific rules and procedures for reporting hazards. Investigators determined that not receiving new miner training contributed to the accident.

Wiley did not assure miners were properly trained. Wiley also did not provide information to the subcontractor regarding site-specific mine hazards and their obligation to comply with MSHA regulations.

Vulcan did not assure miners were properly trained. Vulcan also did not provide information to the contractor and their subcontractor regarding site-specific mine hazards and their obligation to comply with MSHA regulations. Vulcan's existing site-specific hazard awareness training includes provisions for mobile equipment safety and wearing seat belts. This training was not provided to employees of Terra.

Examinations

Terra was not conducting workplace examinations at this mine and there were no records of any examinations having been conducted. The four-foot drop-off adjacent to the elevated building pad being compacted would have been identified by a workplace examination, and the equipment operator would have been aware of the hazard presented by operating near the drop-

off. Investigators determined that not conducting workplace examinations contributed to the accident.

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 subcontractor did not provide new miner training before the miners started working at the mine.

Corrective Action: The mine operator has removed Wiley and Terra from this mine and all Vulcan mining properties. The mine operator developed and implemented a written procedure to verify that contractors and subcontractors have received all MSHA-required training.

2. Root Cause: The subcontractor did not conduct workplace examinations.

Corrective Action: The mine operator has removed Wiley and Terra from this mine and all Vulcan mining properties. The mine operator developed and implemented a written procedure to provide information to all contractors and subcontractors of their obligations to comply with MSHA regulations, including the requirement for workplace examinations.

3. Root Cause: The subcontractor did not assure the equipment operator maintained control of the compactor.

Corrective Action: The mine operator removed Wiley and Terra from this mine and all Vulcan mining properties. The mine operator developed and implemented a written procedure to conduct a pre-job meeting using a checklist that assures contractors and subcontractors are aware of their obligation to maintain control of mobile equipment.

4. Root Cause: The subcontractor did not assure miners wore seat belts while operating mobile equipment.

Corrective Action: The mine operator removed Wiley and Terra from this mine and all Vulcan mining properties. The mine operator developed and implemented a written procedure to conduct a pre-job meeting using a checklist that assures contractors and subcontractors wear seat belts while operating mobile equipment.

5. Root Cause: The mine operator and contractor did not provide site-specific hazard awareness training to miners before the miners started working at the mine.

Corrective Action: The mine operator has removed Wiley from this mine and all Vulcan mining properties. The mine operator developed and implemented a written procedure to provide information to subcontractors regarding their obligation to comply with MSHA

regulations and verify all MSHA-required training prior to working on the mine site. The contractor developed a written procedure to provide information to subcontractors regarding their obligation to comply with MSHA regulations and verify new miner, task, and site-specific hazard awareness training. The contractor will implement the procedure before performing or subcontracting work at any mine.

CONCLUSION

On June 17, 2022, at approximately 1:10 p.m., Brian Thigpen, a 16 year-old equipment operator with three weeks of mining experience, was involved in a fatal accident when the padfoot compactor (compactor) he was operating slid down a four-foot-high bank and overturned onto its side.

The accident occurred because the subcontractor did not: 1) provide new miner training to miners before the miners started working at the mine; 2) conduct workplace examinations; 3) assure that the equipment operator maintained control of the compactor; and 4) assure miners wore seat belts while operating mobile equipment. The accident also occurred because the mine operator and contractor did not provide site-specific hazard awareness training to miners before the miners started working at the mine.

Approved By:

Mary Jo Bishop
District Manager

Date

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Vulcan Construction Materials LLC.

A fatal accident occurred at this operation on June 17, 2022, at approximately 1:10 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. 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)(1) citation was issued to Terra Excavating, LLC for a violation 30 CFR 56.14130(g).

A fatal accident occurred at this operation on June 17, 2022, when a Caterpillar CP44B padfoot compactor overturned, pinning the equipment operator under the canopy of the compactor. The equipment operator trammed the Caterpillar CP44B padfoot compactor in reverse and the left tire dropped off the edge of the elevated building pad. The subcontractor did not assure that the equipment operator wore a seat belt while operating the compactor. The subcontractor engaged in aggravated conduct constituting more than ordinary negligence by not having any procedures requiring the use of seat belts. This violation is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) order was issued to Terra Excavating, LLC for a violation of 30 CFR 46.5(a).

A fatal accident occurred at this operation on June 17, 2022, when a Caterpillar CP44B padfoot compactor overturned, pinning the equipment operator under the canopy of the compactor. The equipment operator trammed the Caterpillar CP44B padfoot compactor in reverse and the left tire dropped off the edge of the elevated building pad. The subcontractor did not provide new miner training to the equipment operator, and there were no records for new miner training requirements. The subcontractor was aware of MSHA Part 46 training regulations but engaged in aggravated conduct constituting more than ordinary negligence by not providing new miner training to miners. This violation is an unwarrantable failure to comply with a mandatory standard.

4. A 104(d)(1) order was issued to Terra Excavating, LLC for a violation 30 CFR 56.9101.

A fatal accident occurred at this operation on June 17, 2022, when a Caterpillar CP44B padfoot compactor overturned, pinning the equipment operator under the canopy of the compactor. The equipment operator trammed the Caterpillar CP44B padfoot compactor in reverse and the left tire dropped off the edge of the elevated building pad. The subcontractor did not assure that the equipment operator maintained control of the compactor while compacting an elevated building pad at the mine. The subcontractor engaged in aggravated conduct constituting more than ordinary negligence by not assuring that the inexperienced

equipment operator knew how to maintain control of the compactor. This violation is an unwarrantable failure to comply with a mandatory standard.

5. A 104(d)(1) order was issued to Terra Excavating, LLC for a violation 30 CFR 56.18002(a).

A fatal accident occurred at this operation on June 17, 2022, when a Caterpillar CP44B padfoot compactor overturned, pinning the equipment operator under the canopy of the compactor. The equipment operator trammed the Caterpillar CP44B padfoot compactor in reverse and the left tire dropped off the edge of the elevated building pad. The subcontractor did not conduct workplace examinations of the working areas of the mine to identify hazards. The subcontractor engaged in aggravated conduct constituting more than ordinary negligence by not having procedures for conducting workplace examinations. This violation is an unwarrantable failure to comply with a mandatory standard.

6. A 104(d)(1) citation was issued to Bradley T. Wiley for a violation 30 CFR 46.12(a)(2).

A fatal accident occurred at this operation on June 17, 2022, when a Caterpillar CP44B padfoot compactor overturned, pinning the equipment operator under the canopy of the compactor. The equipment operator trammed the Caterpillar CP44B padfoot compactor in reverse and the left tire dropped off the edge of the elevated building pad. The contractor did not provide site-specific hazard awareness training to miners. The contractor engaged in aggravated conduct constituting more than ordinary negligence by not informing the subcontractor of their obligations to comply with the MSHA regulations. This violation is an unwarrantable failure to comply with a mandatory standard.

7. A 104(d)(1) citation was issued to Vulcan Construction Materials LLC for a violation 30 CFR 46.12(a)(2).

A fatal accident occurred at this operation on June 17, 2022, when a Caterpillar CP44B padfoot compactor overturned, pinning the equipment operator under the canopy of the compactor. The equipment operator trammed the Caterpillar CP44B padfoot compactor in reverse and the left tire dropped off the edge of the elevated building pad. The mine operator did not inform Terra Excavating, LLC, an independent contractor which employed a person at the mine, about the site-specific hazards of the mine. The mine operator further did not inform Terra of its obligations to comply with the MSHA regulations. At the time of the accident, the mine operator's existing site-specific hazard awareness training program included provisions for mobile equipment safety and wearing seat belts. This training was not provided to employees of Terra Excavating, LLC. By not communicating such information to Terra Excavating, LLC, the mine operator engaged in aggravated conduct constituting more than ordinary negligence. This violation is an unwarrantable failure to comply with a mandatory standard.

APPENDIX A – Persons Participating in the Investigation

Vulcan Construction Materials LLC

Gregory Duckett
William Lawson
Jeremy Evans
Jasyln Johnson

Safety and Health Manager
Greenfield Project Manager
Safety and Health
Attorney

Bradley T. Wiley

Bradley Wiley
Micah Dickie

Owner
Attorney

Terra Excavating LLC

Tonya Yost-Hodges
Johnathan Byrd
Raymond Prickett
Wayne Yost

Owner
Equipment Operator
Equipment Operator
Equipment Operator

Tractor and Equipment Co.

Jose Rodriguez

Mechanic

Yancy Bros. Co.

Randall Shirley

Safety Specialist

Mine Safety and Health Administration

Jarvis Westery
Scottie Sizemore

Supervisory Mine Safety and Health Inspector
Mine Safety and Health Inspector

APPENDIX B – Aerial View of Accident Scene



APPENDIX C – Padfoot Compactor

