

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Crushed, Broken Limestone)

Fatal Powered Haulage Accident
November 5, 2024

Cactus
DelHur Industries, Inc.
McCamey, Crane County, Texas
ID No. 41-05396

Accident Investigators

Homer Pricer Jr.
Supervisory Mine Safety and Health Inspector

Clifton Brayfield
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Dallas District
1100 Commerce Street, Room 462
Dallas, TX 75242-0499
Brett Barrick, Acting District Manager

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OVERVIEW

On November 5, 2024, at approximately 1:00 p.m., Troy Tarr, a 32-year-old haul truck operator with nine weeks and two days of experience, died when the ground at the dump point failed, causing the haul truck to roll over multiple times and come to rest at the base of the primary crusher stockpile.

The accident occurred because the mine operator did not: 1) ensure the dump point could support the load of the haul truck, 2) conduct an adequate examination that would ensure the haul truck operator dumped material a safe distance back from the edge of the unstable dump point, and 3) ensure that the haul truck operator wore a seat belt.

GENERAL INFORMATION

Del Hur Industries Inc., owns and operates the Cactus mine. The mine is a surface crushed and broken limestone mine located in McCamey, Crane County, Texas. The mine employs eight miners and operates one ten-hour shift, five days per week intermittently. The mine operator drills and blasts limestone on the top of the plateau. Front-end loaders dump the limestone into haul trucks which transport the limestone to a stockpile. Front-end loaders take limestone from the foot of the stockpile and load it into a crushing plant for sizing. Once sized, the limestone is loaded into customer trucks for commerce.

The principal management official at the Cactus mine at the time of the accident was:

Christopher Dodge

Area Manager

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on July 18, 2024. The 2023 non-fatal days lost incident rate for the Catus mine was zero, compared to the national average of 1.24 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On November 5, 2024, at 6:30 a.m., Tarr started his shift by conducting a pre-operational inspection of his haul truck. At 7:00 a.m., Adam Minjarez, Leadman, assigned Tarr to proceed to his designated work area to haul blasted rock from the top of the plateau to a designated dump point. Tarr continued to haul and dump material from 7:30 a.m. to 1:00 p.m. While performing this task, Tarr would have to call Marcos Shields, Front-end Loader Operator, who was located at the bottom of the dump stockpile with a handheld radio to ensure that Shields was in the clear and it was ok to dump.

At approximately 1:00 p.m., Tarr was dumping material when Shields saw the dump point begin to fail. Shields notified Tarr on the radio telling him to pull forward due to the ground conditions. Tarr attempted to pull forward; however, the dump point had already failed, causing the haul truck to begin to slide backwards. Witnesses told investigators that the truck didn't come straight down. The truck's descent paused about 30 feet from the top of the dump point before turning to its left and rolled down the face of the stockpile and came to rest upside down at the base of the stockpile. Shields rushed to the area to see Tarr lying outside of the haul truck. An unidentified person called 911. At 1:09 p.m., Minjarez notified Dodge, who was off mine property for lunch. Dodge returned to the mine property. At 1:25 p.m., City Ambulance Service arrived and began assessing Tarr. Emergency Medical Services personnel determined to wait for Martha Silva, Justice of the Peace Precinct 3, Upton County, to arrive. Silva arrived at the scene at 2:25 p.m. and pronounced Tarr deceased.

INVESTIGATION OF THE ACCIDENT

On November 5, 2024, at 1:15 p.m., Eddie Smay, Safety Manager, contacted the Department of Labor National Contact Center (DOLNCC). The DOLNCC contacted Neal Davis, Supervisory Mine Safety and Health Inspector. Davis contacted Brett Barrick, Assistant District Manager. Barrick contacted Darwin Bratcher and Homer Pricer Jr., Supervisory Mine Safety and Health Inspectors, and sent them to the mine. Barrick assigned Pricer as lead accident investigator. Barrick assigned Clifton Brayfield, Mine Safety and Health Inspector, to assist Pricer.

At 1:41 p.m., Bratcher arrived at the mine site 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. MSHA's accident investigation team conducted an examination of the accident scene; interviewed miners, mine management, and other relevant personnel; and reviewed conditions and work practices 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 primary dump point above the primary crusher (see Appendices B and C). The ground failed beneath the haul truck causing it to overturn multiple times down the approximately one-hundred foot of the face of the stockpile, coming to rest at the base.

Weather

The weather at the time of the accident was 68 degrees Fahrenheit with mostly clear skies. Investigators determined that the weather did not contribute to the accident.

Equipment Involved

The haul truck involved in the accident was a Terex 350 Pay Hauler. Investigators examined the haul truck and found no defects that contributed to the accident.

Dump Point Practices and Conditions

Before limestone is dumped, the haul truck operator contacts the front-end loader operator on company supplied two-way radios asking for an “all clear” signal to dump. The haul truck begins to dump the load over the berm from the dump point. Gravity causes the material to slough down the slope approximately 100 feet to the bottom of the stockpile. A front-end loader moves the limestone from the base of the stockpile and places it into the primary crushing plant for sizing. In interviews, Dodge estimated that Tarr dumped approximately 40 to 50 loads from the dump point that day before the accident occurred. Shields was loading material from the base of the stockpile. It is estimated that he fed the primary crusher with approximately 100 bucket loads.

Investigators determined the top of the dump point had extended approximately 80 feet beyond the solid rock of the plateau due to continuous dumping of unconsolidated material. The front-end loader loading from the base of the stockpile undermined the integrity of the slope. These two factors created obvious and extensive hazardous conditions at the dump point. The haul truck should have dumped the material a safe distance back, and a bulldozer should have pushed the material over the edge of the dump point. A bulldozer was available for use at the top of the dump point but was not used on the day of the accident. The weight of the loaded haul truck on the unconsolidated material caused the dump point to fail. The mine operator did not ensure the dump point could support the weight of the loaded haul truck, which contributed to the accident.

Seat Belt

Investigators determined that Tarr was not wearing his seat belt at the time of the accident due to being found lying outside of the haul truck. The seat belt functioned correctly when tested. Investigators determined that not wearing a seat belt contributed to the severity of the accident.

Training and Experience

Tarr had nine weeks and two days of mining experience, all at this mine as a haul truck operator. Investigators determined Tarr received all training in accordance with MSHA Part 46 training regulations.

Examinations

Dodge and Minjarez visibly inspected ground conditions at the dump point before worked commenced and did not identify any deficiencies during the examination. Investigators determined that the examination was not adequate because of the obvious and extensive hazardous conditions created by the unconsolidated material and loading from the base of the stockpile. Dodge told investigators that he knew Tarr should have dumped material a safe distance back from the edge. The mine operator did not conduct an adequate examination that would ensure the haul truck operator dumped material a safe distance back from the edge of the unstable dump point, which contributed to the accident.

Tarr conducted a pre-operational inspection of the Terex 350 haul truck and did not identify any safety issues. Investigators determined this inspection was adequate and did not contribute to the accident.

ROOT CAUSE ANALYSIS

The accident investigation team conducted an analysis to identify the underlying causes of the accident. The accident investigators 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 the dump point could support the weight of the loaded haul truck.

Corrective Action: The existing dumping point has been eliminated. It has been replaced by a dumping location that does not require dumping from the top of the pile.

2. Root Cause: The mine operator did not conduct an adequate examination that would ensure the haul truck operator dumped material a safe distance back from the edge of the unstable dump point.

Corrective Action: A new dumping location has been established which does not require dumping from the top of a pile. Therefore, the edge of a dumping point is eliminated.

3. Root Cause: The mine operator did not ensure that the haul truck operator wore a seat belt.

Corrective Action: The mandatory use of seat belts has been added to the hazard training for all miners.

CONCLUSION

On November 5, 2024, at approximately 1:00 p.m., Troy Tarr, a 32-year-old haul truck operator with nine weeks and two days of experience, died when the ground at the dump point failed, causing the haul truck to roll over multiple times, coming to rest at the base of the primary crusher stockpile.

The accident occurred because the mine operator did not: 1) ensure the dump point could support the weight of the loaded haul truck, 2) conduct an adequate examination that would ensure the haul truck operator dumped material a safe distance back from the edge of the unstable dump point, and 3) ensure that the haul truck operator wore a seat belt.

Approved By:

Brett Barrick
Acting District Manager

Date

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to DelHur Industries, Inc.

A fatal accident occurred on November 5, 2024, at approximately 1:00 p.m. This order is being issued under the authority of the Federal Mine and Safety Act of 1977, under section 103(k) to insure the safety of all persons at the mine and requires the operator to obtain 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)(1) order was issued to DelHur Industries, Inc. for a violation of 30 CFR 56.9303

A fatal accident occurred on November 5, 2024, when the ground collapsed beneath a haul truck causing it to overturn multiple times down the approximately 100-foot face of the stockpile, coming to rest at the base. The mine operator did not design or construct a dump point that could support the Terex 350 haul truck as it dumped. The mine operator's practice of loading the primary crusher involved digging out the toe of the stockpile where haul trucks dumped above. This practice caused loose, unconsolidated material to slough away from the side and top of the stockpile, creating instability in the stockpile's bank and slope. This practice had been allowed to develop and deteriorate. The mine operator engaged in aggravated conduct constituting more than ordinary negligence because mine management had been in the area numerous times prior to the accident and did not correct the hazard. The area superintendent had driven through the area earlier in the shift and made no effort to ensure bank or slope stability. This violation is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) order was issued to DelHur Industries Inc. for a violation of 30 CFR 56.9304

A fatal accident occurred on November 5, 2024, when the ground collapsed beneath a haul truck, causing it to overturn multiple times down the approximately 100-foot face of the stockpile, coming to rest at the base. The top of the dump point had extended approximately 80 feet beyond the solid rock of the plateau due to continuous dumping of unconsolidated material, and there was evidence that the ground would fail to support the haul truck. The mine operator did not conduct an adequate examination that would ensure miners dumped material a safe distance back from the edge of the unstable area. The mine operator engaged in aggravated conduct constituting more than ordinary negligence because mine management had been in the area numerous times prior to the accident while the haul truck dumped over the edge. Additionally, a front-end loader dug material out of the stockpile's toe, under cutting the dump point and creating additional instability. The area superintendent who had completed an examination of the dump point made no effort to ensure that haul trucks dumped a safe distance back from the edge of the unstable area. This violation is an unwarrantable failure to comply with a mandatory standard.

4. A 104(a) citation was issued to DelHur Industries, Inc. for a violation of 30 CFR 56.14131(a)

A fatal accident occurred on November 5, 2024, when the ground collapsed beneath a haul truck causing it to overturn multiple times down the approximately 100-foot face of the stockpile, coming to rest at the base. The mine operator did not ensure the mobile equipment operator wore the required seat belt.

APPENDIX A – Persons Participating in the Investigation

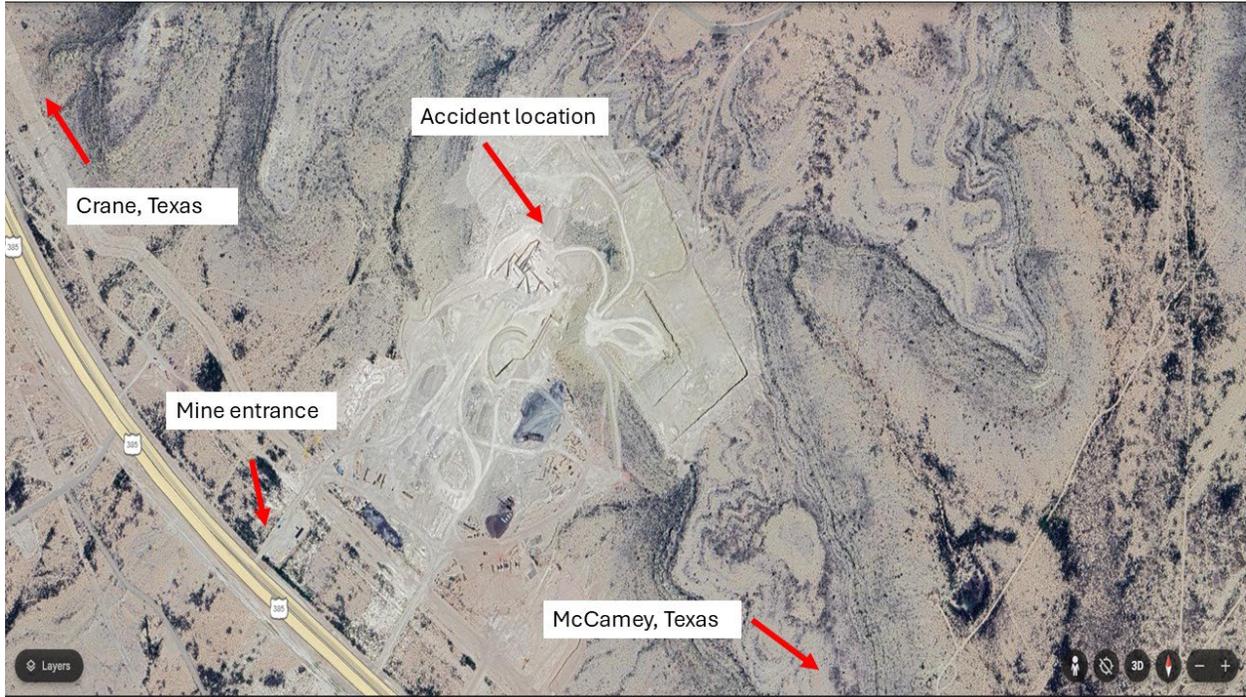
DelHur Industries, Inc.

| | |
|-------------------|---------------------------|
| Christopher Dodge | Area Manager |
| Eddie Smay | Safety Manager |
| Mason Smith | Safety Director |
| Guadalupe Rivera | Haul Truck Operator |
| Mason Fowler | Front-end Loader Operator |
| Marcos Shields | Front-end Loader Operator |
| Adam Minjarez | Leadman |

Mine Safety and Health Administration

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|-------------------|--|
| Darwin Bratcher | Supervisory Mine Safety and Health Inspector |
| Homer Pricer Jr. | Supervisory Mine Safety and Health Inspector |
| Clifton Brayfield | Mine Safety and Health Inspector |

APPENDIX B – Map of Mine



APPENDIX C – Accident Location

