

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Crushed and Broken Limestone)

Fatal Slip or Fall of Person Accident
August 22, 2024

Crisp Industries, LLC (Z3F)
Bridgeport, Texas

at

East Quarry
APAC-Central, Inc
Tulsa, Tulsa County, Oklahoma
ID No. 34-00050

Accident Investigators

Thomas Kelly
Supervisory Mine Safety and Health Inspector

Belinda Youngblood
Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Dallas District
1100 Commerce Street, Room 462
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William O'Dell, District Manager

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OVERVIEW

On August 22, 2024, at approximately 3:45 p.m., Joel Diaz-Estrada (Estrada), a 32-year-old contract miner for Crisp Industries LLC (Crisp) with approximately two years of mining experience, was fatally injured when he fell through an opening in a walkway platform. Estrada died from his injuries on September 6, 2024.

The accident occurred because the contractor did not: 1) conduct workplace examinations, and 2) ensure the miner properly wore a safety belt line where there was a danger of falling.

GENERAL INFORMATION

APAC-Central, Inc. (APAC) owns and operates the East Quarry mine, a surface limestone mine located in Tulsa, Tulsa County, Oklahoma. The mine employs 33 miners and operates one 12-hour shift per day, five days per week. The mine operator drills and blasts limestone in an open pit and transports the material by haul truck to on-site processing facilities, where the material is crushed, washed, and sized before it is stockpiled for sale and distribution.

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

William Huckaby
Tyler Leithauser
Katherine Carter

Operations Manager
Superintendent
Safety Representative

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

Kendell North

Supervisor

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on April 1, 2024. The 2023 non-fatal days lost incident rate for East Quarry is 1.76, compared to the national average of 1.12 for mines of this type.

DESCRIPTION OF THE ACCIDENT

According to interviews, on August 22, 2024, Estrada arrived on-site at approximately 6:45 a.m. with Daniel Delgadillo, Welder for Crisp. Estrada assembled with the Crisp crew and had their morning Job Safety Analysis (JSA) meeting at the contractor job trailer at 7:00 a.m. After the JSA meeting, Estrada proceeded with the Crisp crew to the 36th Street Primary Plant structure, and Kendell North, Supervisor for Crisp, assigned him tasks to assist with the assembly of the P1 belt conveyor on ground level. Estrada assisted with welding leg supports and installation of bracing and bolts as part of that assembly.

At approximately 11:30 a.m., Estrada went to the third-level feeder platform to assist Ernest Rodriguez, Field Technician for Crisp, in the removal of the old motor mount and base plate to make room for the middle spring basin on the new Deister feeder (feeder). Estrada and Rodriguez had to clean the area around the base plate and mounts to enable the removal of the motor mount and base plate and supports. Estrada and Rodriguez finished removing the motor mount and base plate at approximately 12:30 p.m., creating an approximate 36-inch by 46-inch opening in the walkway on the third-level feeder platform. Estrada assisted Rodriguez in rigging up the old motor mount and base plate to the crane to lower it to the ground. Shortly after they completed the motor mount removal, the crane raised the middle spring basin to the feeder platform and Estrada assisted Rodriguez in securing the middle basin to the platform structure.

At approximately 3:00 p.m., North operated the Tadano GR-1200XL Crane, and Shannon Bean, Crane Operator for Crisp, operated the Link Belt 8075 Crane to lift the new feeder into place from ground level (see Appendix A). Delgadillo progressed to the top of the steps of the third-level feeder platform once the feeder had cleared the second-level hopper structure to begin signaling the crane operators as they lowered the feeder onto the spring basins. Estrada was on the east side of the third-level platform and Rodriguez was on the south side of the platform as the crane lowered the feeder. Once the feeder was low enough on the south side, Estrada and Rodriguez moved toward the south side of the feeder and started tapping (seating) the springs into the basin saddles on the feeder. Once the springs were positioned on the south side, Estrada and Rodriguez moved to the middle spring basin area. Rodriguez was between the chute and the middle basin framework and Estrada was on the south side of the middle basin framework near

the opening in the platform. As the crane continued to lower the feeder, Estrada and Rodriguez began seating the springs in the middle section while Delgadillo signaled the crane operators. While seating the middle springs, Rodriguez asked Estrada to come to his side to assist, and Estrada responded, “Ok, in a minute.” Rodriguez stated he heard one more tap and then someone yelled, “Someone fell.”

Delgadillo noticed a dust cloud on the ground level and thought that one of the springs had popped loose and fallen to the ground. Delgadillo realized someone had fallen when he looked back and saw a yellow vest. Estrada had stepped into the opening created by the motor mount removal earlier in the day while he was seating the middle springs and fell approximately 21 feet to the ground below. Rodriguez went to Estrada to render first aid.

According to interviews, North called Dennis Rame, Electrician for APAC, to let him know someone had fallen and to call for help. Rame was in the main office at the time of the call and told Kaitlynn Henson, Administrative Assistant for APAC, to call 911. Henson called 911 at 3:47 p.m. Rame and Tyler Leithauser, Superintendent for APAC, went to the plant, and William Huckaby, Operations Manager for APAC, went to the intersection of 129th and 36th Streets to meet the Emergency Medical Services (EMS) crew. At 3:56 p.m., EMS arrived and started treating Estrada for blunt-force trauma injuries. At 4:11 p.m., EMS took Estrada by ambulance to Ascension St. Johns Hospital in Tulsa, Oklahoma. On September 6, 2024, at 11:14 a.m., Logan Scott-Kirchen, MD, pronounced Estrada dead from his injuries.

INVESTIGATION OF THE ACCIDENT

On August 22, 2024, at 3:59 p.m., Katherine Carter, Safety Representative for APAC, called the Department of Labor National Contact Center (DOLNCC) to report the accident. The DOLNCC contacted Brandon Olivier, Mine Safety and Health Specialist. Olivier contacted Brett Barrick, Assistant District Manager, who assigned Thomas Kelly, Supervisory Mine Safety and Health Inspector, as the lead investigator, and Belinda Youngblood, Mine Safety and Health Inspector, to assist.

On August 23, 2024, at 8:20 a.m., Kelly 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. Kelly secured the area and gathered preliminary information. On August 26, 2024, at 10:00 a.m., Youngblood arrived at the mine and assisted with the investigation. In conjunction with the Oklahoma Department of Mines, MSHA’s accident investigation team conducted an examination of the accident scene; interviewed miners, mine management, contractors, contractor management, and other relevant personnel; reviewed surveillance video; 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 newly erected 36th Street Primary Plant on the third-level feeder platform (see Appendix C).

Weather

The weather at the time of the accident was fair, 79 degrees Fahrenheit, with light winds blowing seven to ten miles per hour. The investigators determined the weather did not contribute to the accident.

Equipment Involved

The 36th Street Primary Plant was the old primary plant that was disassembled from the north side of the mine and was being reassembled at the new location on 36th Street (see Appendix D). The reassembled plant structure and equipment were still in the construction and installation stages at the time of the accident. Removal of the old motor mount and base plate left an approximately 36-inch by 46-inch opening in the walkway on the third-level feeder platform. North was aware of the opening and that the contract miners were working in the area. According to interviews, North had ordered material the morning of the accident in anticipation of making repairs to the walkway. There were multiple openings in the walkway platforms and several areas where handrails were not in place.

Fall Protection

At the time of the accident, Estrada was wearing a Guardian fall protection harness with two six-foot lanyards attached. Estrada was not tied off, although there were locations available to secure the lanyards. Additionally, there were beam tie-off straps in the job trailer located approximately 300 yards across the street available for use. Investigators did not find any defects with Estrada's harness or the lanyards. Investigators determined that the miner not properly wearing a safety belt line contributed to the accident.

Examinations

The contractor did not conduct a workplace examination before work began in the area that day. Investigators determined that the contractor was using JSAs to analyze potential hazards and did not conduct workplace examinations of work areas. Investigators found that the mine operator had not reviewed the contractor's processes for workplace examinations. The contractor had been on site working on various projects for the mine operator for over a year prior to the accident.

Training and Experience

Estrada had approximately two years of mining experience. Estrada received eight hours of annual refresher training on April 12, 2024, which included training on fall protection. Estrada did not receive site-specific hazard awareness training from the mine operator upon his arrival at the mine on Sunday August 11, 2024, but investigators determined that this lack of training did not contribute to the accident. Estrada received all other training in accordance with MSHA Part 46 training regulations.

Rodriguez and North received eight hours of annual refresher training on May 1, 2024, which included training on fall protection.

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 and contractor implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The contractor did not conduct workplace examinations.

Corrective Action: The contractor conducted task training on workplace examinations with all competent persons conducting the examinations.

2. Root Cause: The contractor did not ensure the miner properly wore a safety belt and line where there was a danger of falling.

Corrective Action: The contractor developed and implemented a new written fall protection procedure and trained all their employees on this new written procedure.

CONCLUSION

On August 22, 2024, at approximately 3:45 p.m., Joel Diaz-Estrada (Estrada), a 32-year-old contract miner for Crisp with approximately two years of mining experience, was fatally injured when he fell through an opening in a walkway platform. Estrada died from his injuries on September 6, 2024.

The accident occurred because the contractor did not: 1) conduct workplace examinations, and 2) ensure the miner properly wore a safety belt line where there was a danger of falling.

Approved By:

William O'Dell
District Manager

Date

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to APAC-Central, Inc.

A fatal accident occurred on August 22, 2024, at approximately 3:45 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.

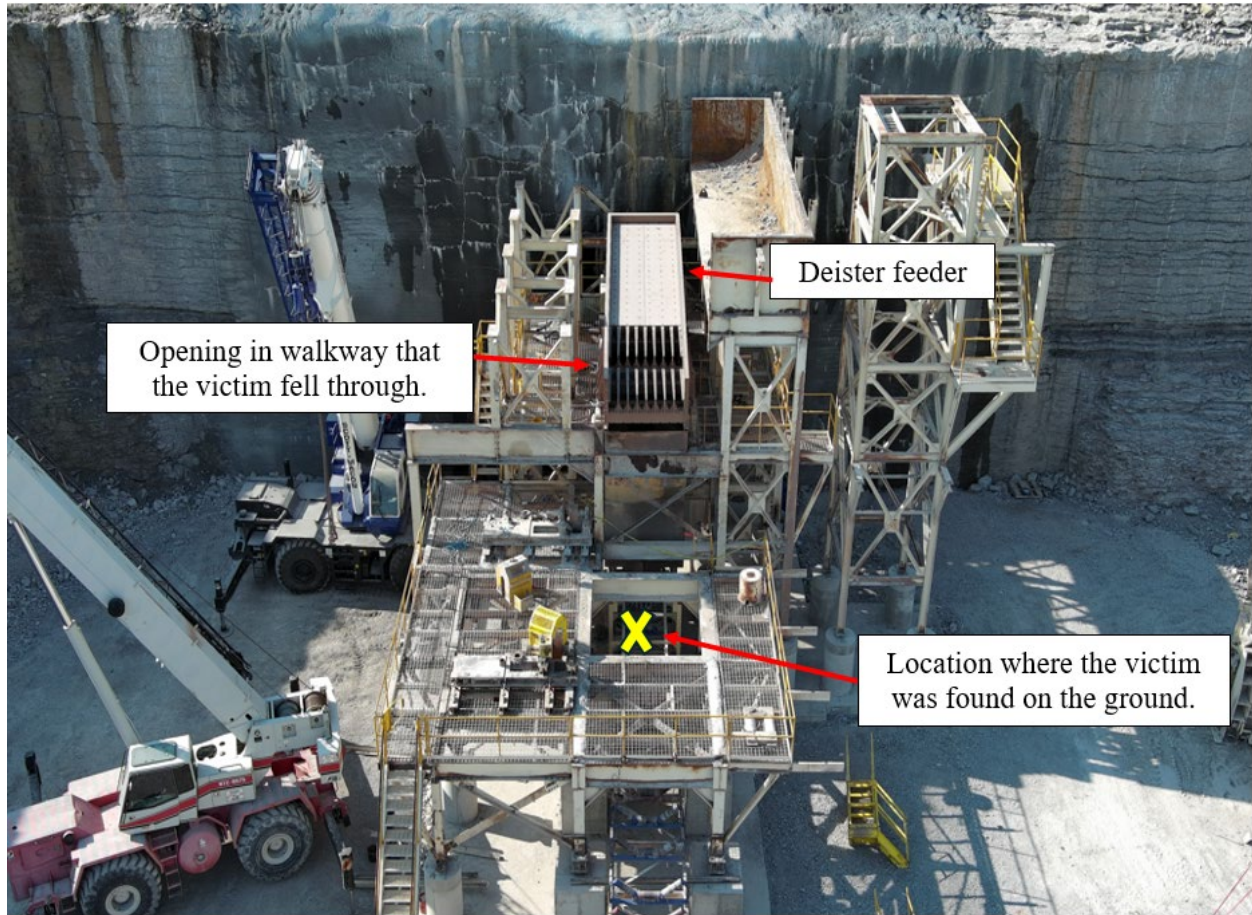
2. A 104(d)(1) citation was issued to Crisp Industries, LLC for violation of 30 CFR 56.18002(a).

On August 22, 2024, a fatal accident occurred at the 36th Street Primary Plant while lowering a Deister feeder into place. A contract miner stepped into the opening in the floor, falling approximately 21 feet to the ground below. The contract miner died on September 6, 2024. The contractor did not conduct workplace examinations prior to work beginning in the area. There were multiple open and obvious hazardous conditions that were not corrected, nor were there adequate steps taken to prevent exposures to the conditions. Contract miners were exposed to these conditions for multiple days while erecting the plant. The contractor had been at the mine for over a year and did not ensure workplace examinations were being conducted. The contractor engaged in aggravated conduct constituting more than ordinary negligence in that the supervisor was aware of hazardous conditions and took no action to correct the conditions. This violation is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) order was issued to Crisp Industries, LLC for violation of 30 CFR 56.15005.

On August 22, 2024, a fatal accident occurred at the 36th Street Primary plant while lowering a Deister feeder into place. A contract miner stepped into the opening in the floor, falling approximately 21 feet to the ground below. The contract miner died on September 6, 2024. The contractor did not ensure the contract miner properly utilized a safety belt and line where there was a danger of falling. There were multiple openings in the walkway platforms and several areas where handrails were not in place. The contractor engaged in aggravated conduct constituting more than ordinary negligence in that the supervisor was aware of openings in walkways and missing handrails in the working areas and did not ensure contract miner used fall protection properly where there was a danger of falling. This violation is an unwarrantable failure to comply with a mandatory standard.

APPENDIX A – 36th Street Primary Plant



APPENDIX B – Persons Participating in the Investigation

APAC-Central, Inc

William Huckaby	Operations Manager
Tyler Leithauser	Superintendent
Katherine Carter	Safety Representative
Chad Engle	Safety Manager
Dennis Rame	Electrician
Kaitlynn Henson	Administrative Assistant

Crisp Industries, LLC

Kendell North	Supervisor
Ernest Rodriguez	Field Technician
Daniel Delgadillo	Welder
Domenik Anzaldua	Laborer / Helper
Roberto Costabella	Laborer / Helper
Gustavo Acuna	Laborer / Helper
Shannon Bean	Crane Operator

Oklahoma Department of Mines

Matt Moss	Inspector
Bob Butler	Inspector

Mine Safety and Health Administration

Belinda Youngblood	Mine Safety and Health Inspector
Thomas Kelly	Supervisory Mine Safety and Health Inspector

APPENDIX C – Aerial View of Accident Location



APPENDIX D – Aerial View of East Quarry

