FAI-6943854-1

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface
(Crushed and Broken Stone)

Fatal Machinery Accident
December 14, 2023

B.E.S.T. Electric, Inc. (C0262)
South Jordan, Utah

at

Staker & Parson Companies
Beck Street
Salt Lake City, Salt Lake County, Utah
ID No. 42-01452

Accident Investigators

Lee Hughes
Acting Assistant District Manager

Mark Phillips
Supervisory Mine Safety and Health Inspector

Originating Office
Mine Safety and Health Administration
Denver District
1 Denver Federal Center
Denver, CO 80225
Kevin Abel, Acting District Manager

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OVERVIEW

On December 14, 2023, at approximately 2:40 p.m., Jay Swaffar, a 56 year-old B.E.S.T Electric shop assistant with no mining experience, died when an all-terrain telehandler, being used to pull electrical cable, tipped over and struck him.

The accident occurred because B.E.S.T. Electric did not: 1) ensure proper task training was provided to the miner operating the telehandler, 2) ensure the telehandler operator maintained control of the equipment, and 3) ensure the telehandler was not being used beyond the design capacity intended by the manufacturer where such use may create a hazard to persons.

GENERAL INFORMATION

CRH Americas Materials, Inc., is the parent company of Staker & Parson Companies, which operates the Beck Street mine. This mine is a surface crushed and broken stone mine located in Salt Lake City, Salt Lake County, Utah. Beck Street employs 41 miners and operates two 10-hour shifts, five days per week. The mine operator drills, blasts, crushes, processes, and stockpiles the material for sale to the construction industry. B.E.S.T. Electric, Inc., is an electrical services contractor and employed five miners at Beck Street. B.E.S.T. Electric, Inc.,

was contracted to install a new motor control center (MCC) and had been on-site since December 2, 2023.

The operator's principal management officials at the Beck Street mine at the time of the accident were:

Brad Ferrell	Operations Manager
Erik Jeppesen	Superintendent
Carl Quick	Assistant Superintendent

The principal management officials at the Beck Street mine for B.E.S.T. Electric at the time of the accident were:

Mitchell Beckstrom	Owner
Robert O'Steen	General Manager

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on September 21, 2023. The 2022 nonfatal days lost incident rate for the Beck Street mine was 1.88, compared to the national average of 1.0 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On December 14, 2023, at 7:00 a.m., the B.E.S.T. Electric employees began their shifts. Swaffar began his shift at the B.E.S.T. Electric shop, ten miles off site of the mine, performing his regular shop duties. The following B.E.S.T. employees began work at the mine, working on the Motor Control Center (MCC): Thomas Manning, Foreman Electrician; Cannon Manning, Electrician; Joshua Wood, Electrician; Donnevin Glaser, Electrician; and Randy O'Steen, Electrician. O'Steen and C. Manning were tasked with hanging and re-routing cables. Wood was tasked with building cable trays, while T. Manning and Glaser were going to start disconnecting old cables and pulling them out of the existing switchgear.

At approximately 7:00 a.m., Beck Street miners Jace Blood, Shift Foreman; Tyler Foy, Crusher Operator; and Cody Roberson, Maintenance, resumed work on the cone crusher, adjacent to the MCC project, utilizing the Caterpillar TL 1255D telehandler (telehandler). After lunch, they finished using the telehandler and Foy parked it.

The B.E.S.T. Electric crew went to lunch from 12:00 p.m. to 1:00 p.m. At approximately 1:30 p.m., T. Manning asked Blood if they were done with the telehandler, and if B.E.S.T Electric could use it. Blood responded, "Yes." T. Manning used the telehandler to pull approximately three runs of cable from the old MCC by extending and raising the telehandler boom.

At approximately 1:45 p.m. Swaffar left the shop to deliver parts to the B.E.S.T. crew at the mine. Swaffar arrived and parked 16 feet behind the telehandler. He got out of the truck and walked around the back side of a van adjacent to the telehandler, just as the B.E.S.T. crew was making the final cable pull. Swaffer did not check in and had not yet contacted any miners.

At approximately 2:20 p.m., T. Manning began the last cable pull, which was also the longest. When the cable couldn't be pulled completely out with the boom fully extended, T. Manning raised the front stabilizers and repositioned the telehandler to the machine's right to try and gain more pull.

The right front tire of the telehandler traveled up a dirt pile approximately 15 inches high, causing the extended boom to tilt to the left. The telehandler toppled to its left side, striking Swaffar, and resulting in immediate fatal injuries. C. Manning, Wood, Glaser, O'Steen, Blood, Foy, and Roberson, ran over to the cab of the telehandler to check on T. Manning. After ensuring T. Manning was uninjured, he was freed from the cab of the telehandler. After T. Manning was freed from the cab, Blood walked around the B.E.S.T. Electric van that was parked between the cab and the telehandler's fork assembly and saw Swaffar. Foy called 911 at 2:23 p.m. The Salt Lake City Fire Department arrived at the accident site and James Williams, Paramedic, and Justin Anderson, Paramedic, determined that Swaffar died at 2:40 p.m.

INVESTIGATION OF THE ACCIDENT

On December 14, 2023, at 2:51 p.m., Brad Ferrell, Sr., Safety Consultant, called the Department of Labor National Contact Center (DOLNCC) to report a fatal accident. The DOLNCC contacted Peter Del Duca, Acting District Manager, informing him of the accident. Del Duca sent Steven Polgar, Supervisory Mine Safety and Health Inspector, to the mine to secure the accident scene. At approximately 3:45 p.m., Polgar arrived at the mine and issued an order under the provisions of Section 103(k) of the Mine Act to assure the safety of the miners and preserve evidence. Del Duca sent Lee Hughes, Acting Assistant District Manager, and Mark Phillips, Supervisory Mine Safety and Health Specialist, to the mine to investigate the accident.

On December 15, 2023, Hughes and Phillips arrived at the mine site. MSHA's accident investigation team conducted an examination of the accident scene, interviewed miners and mine management, 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 accident occurred at the MCC switchgear of the primary crusher (see Appendix B). There was a hill to the right of the telehandler with the toe of the pile just a couple of feet away from the right front tire. The ground was damp and uneven.

Weather

The weather at the time of the accident was clear and cool, 43 degrees Fahrenheit, with a four-mile-an-hour breeze out of the north. Investigators determined that the weather did not contribute to the accident.

Equipment Involved

The equipment involved in the accident was a Caterpillar TL1255D telehandler with a fork assembly attached. A telehandler is an all-terrain forklift which has a boom that allows it to

deliver material at elevated heights. It is equipped with front stabilizers which are lowered to the ground to stabilize the telehandler while the boom is raised in the air. Investigators determined T. Manning was operating the telehandler outside the design capacity intended by the manufacturer. The telehandler was moved with the boom extended to its full length, at a 67-degree angle, with the stabilizers raised while under a load from the cables being pulled. Investigators observed warning stickers inside the cab as well as the manufacturer's manual and capacity chart that listed these as hazards and warned not to operate the telehandler in the condition in which it was found (see Appendix C). Investigators determined from the manufacturer's load charts that regardless of the attachment on the telehandler, there was no acceptable load with the boom fully extended, at a 67-degree angle with the stabilizers raised. Investigators determined these factors contributed to the accident.

Examinations

Workplace examinations were not conducted by either the mine operator or the contractor. A preoperational inspection was not conducted on the telehandler before it was put into service by either the mine employees or the contractor employees. Investigators determined that these factors did not contribute to the accident.

Training and Experience

Swaffar had no mining experience. Swaffar, T. Manning, C. Manning, Glaser, O'Steen, and Wood did not receive site-specific hazard awareness training before entering the mine. Investigators determined this did not contribute to the accident. T. Manning did not have task training to operate the telehandler. Investigators determined that the lack of task training 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 B.E.S.T. Electric implemented the corresponding corrective actions to prevent a recurrence.

1. Root Cause: The contractor did not ensure proper task training was provided to the contract miner operating the telehandler.

   Corrective Action: The contractor has task-trained their employees on the proper operation of the telehandler. Employees have also been trained to not operate a piece of equipment they have not been trained on.

2. Root Cause: The contractor did not ensure the equipment operator maintained control of the telehandler.

   Corrective Action: The contractor has implemented an SOP and trained their employees on the provisions in the SOP and on the importance of maintaining control of equipment. The SOP includes understanding traffic control plans at the mine they are working at, prohibited use of cell phones while operating mobile equipment, haul roads being designed and

maintained to allow safe usage, and not using equipment before being fully trained on how to operate it safely.

3. Root Cause: The contractor did not ensure the telehandler was not being used beyond the design capacity intended by the manufacturer where such use may create a hazard to persons.

   Corrective Action: The contractor has implemented an SOP and trained their employees on the importance of following the manufacturer's design capacities. This includes operators of equipment being fully trained in the operation and safe use of the equipment according to the manufacturer manuals.

CONCLUSION

On December 14, 2023, at approximately 2:40 p.m., Jay Swaffar, a 56 year-old B.E.S.T Electric shop assistant with no mining experience, died when an all-terrain telehandler, being used to pull electrical cable, tipped over and struck him.

The accident occurred because B.E.S.T. Electric did not: 1) ensure proper task training was provided to the miner operating the telehandler, 2) ensure the telehandler operator maintained control of the equipment, and 3) ensure the telehandler was not being used beyond the design capacity intended by the manufacturer where such use may create a hazard to persons.

Approved By:

_____ _____

Kevin Abel Date
Acting District Manager

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Beck Street Mine

   A fatal accident occurred on December 14, 2023, at approximately 2:28 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) order was issued to B.E.S.T. Electric for a violation of 30 CFR 46.7(a).

   On December 14, 2023, a shop assistant was fatally injured when a Caterpillar 1255D telehandler tipped over, striking him with the fork assembly. The B.E.S.T. Electric foreman had not been tasked trained on the health and safety aspects of the task, including the safe work procedures. The foreman operated the telehandler on wet, uneven ground, and attempted to move the telehandler with the boom fully extended and at a 67-degree angle, while under a load. The Federal Mine Safety and Health Act of 1977 states that an untrained miner is a hazard to himself and others. This violation is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) order was issued to B.E.S.T. Electric for a violation of 30 CFR 56.9101.

   On December 14, 2023, a shop assistant was fatally injured when a Caterpillar 1255D telehandler tipped over, striking him with the fork assembly. The contract foreman failed to maintain control of the telehandler while pulling de-energized power cables from the crusher MCC switchgear. The contract foreman operating the telehandler was attempting to pull three de-energized power cables out of a switchgear. The cables were attached to the end of the boom, which was fully extended and at an approximate 67-degree angle above the horizontal. The contract foreman raised the stabilizers and drove forward to the right, causing the front right tire to climb a small bank. This caused the telehandler to tip to the left and fall onto its left side. The B.E.S.T. Electric contractor engaged in aggravated conduct constituting more than ordinary negligence in that their Foreman failed to leave the stabilizers down and not move the telehandler while the boom was in its current position. This violation is an unwarrantable failure to comply with a mandatory standard.

4. A 104(d)(1) order was issued to B.E.S.T. Electric for a violation of 30 CFR 56.14205.

   On December 14, 2023, a shop assistant was fatally injured when a Caterpillar 1255D telehandler tipped over, striking him with the fork assembly. The contract foreman operating the telehandler was attempting to pull three de-energized power cables out of a switchgear. The cables were attached to the end of the boom, which was fully extended and at an approximate 67-degree angle above the horizontal. The contract foreman raised the stabilizers and drove forward to the right, causing the front right tire to climb a small bank.

This caused the telehandler to tip to the left and fall onto its left side. The capacity charts in the cab state the equipment is not to be moved with the boom raised in this position with a load. The B.E.S.T. Electric contractor engaged in aggravated conduct constituting more than ordinary negligence in that their foreman operated the telehandler beyond the manufacturer's design capacity. This violation is an unwarrantable failure to comply with a mandatory standard.

APPENDIX A – Persons Participating in the Investigation

Beck Street Mine

Brad Ferrell	Operations Manager
Erik Jeppesen	Superintendent
Carl Quick	Assistant Superintendent
Matt Irish	Quarry Foreman
Jace Blood	Shift Foreman
Carlos Edmunds	Safety Specialist
Tyler Foy	Crusher Operator

B.E.S.T. Electric

Mitchell Beckstrom	Owner
Robert O'Steen	General Manager
Thomas Manning	Foreman Electrician
Donnevin Glaser	Electrician
Cannon Manning	Electrician
Randy O'Steen	Electrician
Joshua Wood	Electrician

Mine Safety and Health Administration

Lee Hughes	Acting Assistant District Manager
Mark Phillips	Supervisory Mine Safety and Health Specialist

APPENDIX B- MCC Switchgear where cables were being pulled.

APPENDIX C - Capacity chart obtained from the telehandler.