

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface  
(Construction Sand & Gravel)

Fatal Drowning Accident  
September 9, 2022

Barry Industrial Sand, Inc.  
Barry Industrial Sand, Inc.  
Vidor, Orange County, Texas  
ID No. 41-02392

Accident Investigators

Steven Oates  
Supervisory Mine Safety and Health Specialist

Gregory Sensibaugh  
Mine Safety and Health Inspector

Originating Office  
Mine Safety and Health Administration  
Dallas District  
1100 Commerce Street, Room 462  
Dallas, Texas 75242  
William O'Dell, District Manager

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## OVERVIEW

On September 9, 2022, at approximately 11:00 a.m., Elisha McMahon, a 62 year-old lead man with approximately 30 years of mining experience, drowned when he fell from the rear walkway of the dredge he was operating into the water.

The accident occurred because the mine operator did not ensure that the miner wore a life jacket where there was danger of falling into water.

## GENERAL INFORMATION

Barry Industrial Sand, Inc. owns and operates the Barry Industrial Sand, Inc. (Barry) mine located in Vidor, Orange County, Texas. The mine operates a single dredge on an approximately 75-acre lake. The mine employs three miners and operates one eight-hour shift, five days per week. The mine operator dredges the sand and gravel from a lake and then pumps the material to a screening plant, where it is screened and placed into stockpiles. The finished product is sold to the construction industry.

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

Thomas Barry

Mine Owner

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on August 8, 2022. The 2021 non-fatal days lost injury incidence rate for the Barry mine was zero compared to the national average of 1.46 for mines of this type.

## DESCRIPTION OF THE ACCIDENT

On September 9, 2022, at approximately 7:30 a.m., McMahon arrived at the mine's screening plant and loaded fuel into the diesel transfer tank located on the transfer boat (boat). McMahon drove a pickup truck, with the attached boat trailer, approximately one-quarter mile to the boat ramp of the lake where the dredge was located. Based on surveillance camera video, at 8:14 a.m., McMahon backed the boat trailer into the lake. McMahon then donned a life jacket and backed the boat off the boat trailer and secured the boat to the observation point adjacent to the boat ramp. McMahon then pulled the boat trailer out of the water. At 8:20 a.m., McMahon parked the pickup truck and untied the transfer boat from the observation point. McMahon boarded the transfer boat and traveled in the direction of the dredge. At 8:33 a.m., McMahon returned to the observation point from the dredge, disembarked, and moved out of the surveillance camera view. At 8:54 a.m., McMahon arrived back at the observation point. McMahon boarded the transfer boat and traveled in the direction of the dredge. Based on interviews, investigators believe that when McMahon arrived at the dredge, he took off his life jacket and never put it on again.

At 11:00 a.m., James Smith, Maintenance Worker for Boom Town R.V. Park, observed the dredge listing (leaning) to one side in the water (see Appendix A). Smith saw McMahon hastily coming down the control room stairs with fishing poles and other items and placing them into the boat. Smith stated that he did not see McMahon after that and could not hear the dredge motors running. Smith spoke with Justin Evans, Maintenance Worker for Boom Town R.V. Park, and they discussed the listing dredge and how they were no longer able to see McMahon. Evans and Smith retrieved two kayaks from Boom Town R.V. Park and traveled out to the dredge to check on McMahon. Evans arrived at the boat that was located approximately 25 feet east of the back of the dredge and did not see McMahon. Smith arrived at the dredge while Evans was checking the boat. Smith visually searched the dredge and did not see McMahon. Smith entered the water to try to locate McMahon and was unsuccessful. Evans traveled to the dredge and boarded it. Evans observed a cell phone, a pen, and over-the-counter medication on the back walkway of the dredge (see Appendix B). Evans walked around the dredge and did not find McMahon.

Smith and Evans went back to shore and told Shelly Merchant, Office Manager for Boom Town R.V. Park, that they could not locate McMahon. Also present for this discussion was Ramanda Dennison and Donna May, residents at Boom Town R.V. Park. According to interviews, May contacted Barry at approximately 11:45 a.m. At 1:58 p.m., Dennison called 911. At 2:36 p.m., Beaumont Fire Department arrived to search for McMahon using their boat and dive team. At 5:51 p.m., Beaumont Fire Department recovered McMahon approximately ten feet from the rear of the dredge in approximately 20 feet of water (see Appendix C). Rodney Price, Justice of the Peace Precinct 4, pronounced McMahon dead at 6:26 p.m.

## INVESTIGATION OF THE ACCIDENT

On September 10, 2022, at 4:51 p.m., Barry called the Department of Labor National Contact Center (DOLNCC) to report a fatal accident. The DOLNCC contacted Wesley Hackworth, Supervisory Mine Safety and Health Inspector, who notified Brett Barrick, Assistant District Manager. Barrick contacted and sent Michael Tefertiller, Supervisory Mine Safety and Health

Inspector, to the mine. Barrick also contacted and sent Steven Oates, Supervisory Mine Safety and Health Specialist, to the mine and assigned him as the lead accident investigator.

On September 11, 2022, at 8:14 a.m., Tefertiller 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. Oates arrived at the mine at 11:09 a.m. Tefertiller contacted Gregory Sensibaugh, Mine Safety and Health Inspector, and sent him to the mine to assist in the investigation. MSHA's accident investigation team conducted an examination of the accident scene, interviewed mine management, miners, and residents of Boom Town R.V. Park, and reviewed conditions and work practices relevant to the accident. See Appendix D for a list of persons who participated in the investigation.

## DISCUSSION

### Location of Accident

The accident occurred on Lake Tristan, a private lake at Boom Town R.V. Park. The dredge was located approximately 300 feet from the south shore. The water depth at the location of the dredge was approximately 20 to 30 feet. The distance from the dredge to the screening operation was approximately 2,600 feet. The distance to the boat ramp from the dredge was 231 feet (see Appendix E).

### Weather

The weather on the day of the accident was 86 degrees Fahrenheit and partly sunny, and the water in the lake was calm. Investigators determined that weather did not contribute to the accident.

### Equipment Involved

The dredge involved in the accident was a shop-made dredge that the mine operator purchased in 1996. The dredge had two diesel motors used to power the high pressure and suction lines. The high-pressure line is six inches in diameter and is used to loosen material on the lakebed. The suction line is ten inches in diameter and used to recover and transport the loosened material to the screening plant.

The dredge's original pontoons measured 53 feet by three feet. In 2009, the mine operator added two additional pontoons, which each measured 32 feet by two feet. These additional pontoons, equipped with Styrofoam, were placed on the front of the dredge and on the inside of the original pontoons. During this time, the dredge was also modified with the addition of two A-frame gin poles to assist with the dredge's lines (see Appendix F). An anchor was used to hold the dredge in place. The anchor is attached to the dredge by an anchor rope. The anchor rope is approximately 30 feet in length and made of nylon.

When the investigators arrived on the scene, the dredge was capsized. This was due to the mine operator's efforts to move the dredge to shore on September 10, 2022, prior to Barry contacting the DOLNCC. Based on interviews, investigators believe the listing of the dredge was caused by underwater material that fell on the dredge's lines during dredging activity.

A Weldcraft flatbottom boat was used to access the dredge. The boat was 18 feet in length, 6 feet wide, and equipped with a 75-horsepower outboard motor. On the day of the accident, fire department personnel found the motor on the boat not running, the boat fuel tank empty, the motor gear selector in neutral, and the ignition key in the 'on' position. They also found the anchor rope hooked around the outboard motor lower unit. Investigators concluded McMahon was attempting to remove the anchor rope from around the outboard motor when he fell from the rear walkway of the dredge into the water.

#### Examinations

According to interviews, the mine operator assigned McMahon to conduct the workplace examination of the dredge. Investigators were unable to find a record of the workplace examination because the records were stored on the dredge and the dredge capsized during recovery efforts. Therefore, investigators were unable to determine if McMahon conducted a workplace examination.

#### Training and Experience

McMahon had approximately 30 years of mining experience, all working for Barry Industrial Sand, Inc. Investigators reviewed the training records and found that McMahon received all training in accordance with MSHA Part 46 training regulations, including the use of a life jacket where there is a danger of falling into water. Investigators found a life jacket in the boat and determined through video surveillance that McMahon had been wearing the life jacket earlier in the day. At the time of the accident McMahon was not wearing a life jacket. Investigators determined this 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 cause, and the mine operator implemented the corresponding corrective action to prevent a recurrence.

Root Cause: The mine operator did not ensure that the miner wore a life jacket where there was danger of falling into water.

Corrective Action: The mine operator halted mining operations and submitted a notice of closure of mining operations in writing to MSHA.

## CONCLUSION

On September 9, 2022, at approximately 11:00 a.m., Elisha McMahon, a 62 year-old dredge operator with approximately 30 years of mining experience, drowned when he fell from the rear walkway of the dredge he was operating into the water.

The accident occurred because the mine operator did not assure that the miner wore a life jacket where there was danger of falling into water.

Approved By:

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William O'Dell  
District Manager

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Date

## ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Barry Industrial Sand Inc.

A fatal accident occurred on September 9, 2022, at approximately 11:00 a.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 Barry Industrial Sand, Inc for a violation of 30 CFR 56.15020

On September 9, 2022, a dredge operator, who was not wearing a personal flotation device, drowned when he fell from the rear walkway of the dredge he had been operating into the water.



APPENDIX A – Photo of Dredge Listing to the Right



APPENDIX B – Personal Items Found on the Back of the Dredge



APPENDIX C – Aerial View of the Anchor Rope Attached to the Transfer Boat and Dredge



APPENDIX D – Persons Participating in the Investigation

Barry Industrial Sand, Inc.

Thomas Barry  
Cleo Vargas

Mine Owner  
Plant/Loader Operator

Boom Town R.V. Park

Shelly Merchant  
Justin Evans  
James Smith  
Ramanda Dennison  
Donna May

Office Manager  
Maintenance Worker  
Maintenance Worker  
Resident  
Resident

Mine Safety and Health Administration

Steven Oates  
Michael Tefertiller  
Gregory Sensibaugh

Supervisory Mine Safety and Health Specialist  
Supervisory Mine Safety and Health Inspector  
Mine Safety and Health Inspector

APPENDIX E – Aerial View



APPENDIX F – Gin Poles Used in the Dredge's A-Frame

