

**UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION
Metal and Nonmetal Mine Safety and Health**

REPORT OF INVESTIGATION

**Dredge Non Metal Mine
(Sand)**

**Fatal Powered Haulage
April 12, 2018**

**Rye Dredge & Plant
Trinity Materials, Inc.
Cleveland, Texas
Mine ID No. 41-02547**

Accident Investigators

**Homer Allen Pricer Jr.
Mine Safety and Health Supervisor**

**Armando Moreno Jr.
Mine Safety and Health Inspector**

**Murray Jackson
Mine Safety and Health Inspector**

Originating Office

**Mine Safety and Health Administration
South Central District
1100 Commerce Street RM 462
Dallas, TX 75242
Michael A. Davis, District Manager**

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OVERVIEW

Manuel G. Rodriguez, a 59 year old customer truck driver, received fatal injuries on April 12, 2018, when he fell from his truck and was run over by the truck's rear wheels. Mr. Rodriguez was attempting to scan a card that identifies customer trucks entering the facility to load material. Investigators believe Mr. Rodriguez approached the Apex Express Radio Frequency Identification Card Reader (RFID) but positioned the vehicle too far away from the RFID to scan the card from inside the truck. Investigators conclude Mr. Rodriguez removed his seatbelt, opened the driver's side door, and leaned out of the cab with his right foot on the clutch pedal and the truck in gear. The truck moved forward, causing him to fall out.

The accident occurred because the victim did not properly secure the truck by setting the parking brake and putting the vehicle in park before opening the door and leaning out of the truck.

GENERAL INFORMATION

Trinity Materials, Inc. owns and operates the Rye Dredge & Plant (Rye), a sand dredge mine facility. The facility is located in Cleveland, Liberty County, Texas. Reid Essl, president, is the principal operations official. The facility operates six days a week on one ten-hour shift and employs six miners.

The mine uses a large suction dredge to extract sand and gravel from below the deposit. A pipeline transports material to a wet screening plant that separates the material into four stockpiles. Heavy equipment loads the finished material into over-the-road trucks and transports it to off-site locations for use in construction.

The Mine Safety and Health Administration (MSHA) completed its last regular inspection of the operation on January 7, 2018.

DESCRIPTION OF ACCIDENT

On April 12, 2018, at 8:30 a.m., customer truck driver Manuel G. Rodriguez arrived at the Rye Dredge & Plant to pick up a load of sand. Rodriguez traveled to the mine operator's RFID and attempted to scan his card. The RFID directs the driver where to go on the site to get material, or instructs the driver to go to the scales to obtain an empty truck weight. The driver must place the card within two inches of the RFID. A green light on the RFID indicates the scanner read the card. To avoid striking the driver's side mirror against the scanner, it appears Rodriguez stopped his truck too far away to reach the RFID from inside of the cab. Investigators believe Rodriguez unbuckled his seat belt and opened the driver's side door while pressing the clutch pedal with his right foot. Investigators believe Rodriguez leaned out of the truck with the truck in gear and his right foot slipped off the clutch, causing the truck to move forward. The sudden forward motion threw Rodriguez from the truck, and the truck's rear wheels ran over him.

Angela Worrell, scale house attendant, heard a loud noise, looked through the scale house window and saw a truck on the side of the road near the RFID. Worrell went to the scale house door and saw someone under the belly dump portion of the truck. Worrell called for help on a hand-held radio and then travelled to the accident scene. Bryan Payne, customer truck driver, was sitting in his truck on the scales and saw Worrell running to Rodriguez's truck. Payne exited his truck and noticed the victim's truck was still running and in gear with no one in the cab. Payne put Rodriguez's truck gear in the "park" position. David Parks, loader operator, heard Worrell's radio transmission and travelled to the scene. According to Parks's interview, Rodriguez had no pulse. Parks began cardiopulmonary resuscitation, but Rodriguez did not respond. Robert Jones, dredge operator, arrived to relieve Parks with chest compressions while Parks prepared the emergency defibrillator. Liberty County Emergency Medical Services and the sheriff's department arrived at the accident scene at 8:58 a.m., and county responders attended the victim. Cody Parrish, Liberty County justice of the peace, pronounced Rodriguez dead at the scene. The cause of death was later determined to be "blunt force injuries."

INVESTIGATION OF ACCIDENT

John Worrell, plant manager, called the Department of Labor National Contact Center (DOLNCC) at 8:40 a.m. on April 12, 2018, and notified MSHA of the accident. DOLNCC notified William O'dell, assistant district manager in MSHA's South Central District. MSHA issued an order under provisions of Section 103(k) of the Mine Act to ensure the safety of the miners, and the agency started the investigation.

MSHA's accident investigation team travelled to the mine, conducted a physical examination of the accident, conducted eighteen interviews with mine employees and customer truck drivers, and reviewed documents and work procedures relevant to the accident. MSHA conducted the investigation with the assistance of mine management, miners, customer truck drivers, and owners of the truck involved in the accident.

DISCUSSION

Location of the Accident

The accident occurred at the customer RFID, which is located on the road adjacent to the scale house, on the south side of the primary sand plant. The victim stopped the truck as it faced north on relatively dry, level and stable sand.

Weather

The weather service reported the weather at the time of the accident as clear, with calm winds and a temperature of 52 degrees Fahrenheit. Investigators did not consider weather to be a factor in the accident.

Truck/Trailer Information

The accident involved a 2007 Freightliner tractor with a belly dump semi-trailer. The tractor and trailer combination is commonly used on public highways in this region.

Training and Experience

Manuel G. Rodriguez had 20 years of experience driving an over-the-road tractor trailer truck combination. For the last two years, Rodriguez picked up material at this mine site and transported it to end users. Trinity Materials provided driving policy and procedure training to customer truck drivers, and the training included traffic controls at the mine site and personal safety. Trinity Materials required customer truck drivers to report to the office/scale house or point of contact prior to starting work.

Apex Express RFID Card Reader

RFID cards are used to identify trucks when entering or leaving the site. The software allows the mine operator to track the sale of materials.

ROOT CAUSE ANALYSIS

Investigators conducted a root cause analysis and identified a root cause.

Root Cause: The accident occurred because the victim did not properly secure the truck by setting the park brake and taking the vehicle out of gear before opening the door and leaning out of the cab.

Corrective Action: The mine operator has discontinued the use of the RFID system and in the future will be using handheld and CB radios for communications with customer truck drivers. Site specific training now includes instructions to visitors advising them to set park brakes and place equipment in the park position prior to leaving the operator's cab.

CONCLUSION

While attempting to scan a customer card on the operator's RFID, Manuel G. Rodriguez fell from the cab of his truck and the rear wheels ran over him. The accident occurred because the victim did not properly secure the truck from movement.

Approved: _____ Date: _____
Michael A. Davis
District Manager

Appendix A
Persons Participating in the Investigation
(Persons interviewed are indicated by a * next to their name)

Trinity Materials, INC.

Tye Parker	Lead-man
*John Worrell	Plant Manager
*Arturo Munoz	Safety Director
*Angela Worrell	Scale Operator/Office Assistant
Michael Stripe	Vice President Safety
Justin Allen	Associate General Counsel
*David Parks	Loader operator
*Robert Jones	Dredge operator

Customer Truck Drivers

- *Corliss Matters
- *Lvoian Harmon
- *Robert Brittain
- *Joe Fontenot
- *Mark Hollerback
- *David Odom
- *Cavazos Gomez
- *James Miller
- *David Bickerton
- *Evilo Hernandez
- *Rene Gill
- *Bo Potter
- *Bryan Payne

Mine Safety and Health Administration

Homer Allen Pricer Jr.	Supervisory Mine Safety and Health Inspector
Armando Moreno Jr.	Mine Safety and Health Inspector
Murray Jackson	Mine Safety and Health Inspector

Appendix B Victim Information

Accident Investigation Data - Victim Information

U.S. Department of Labor
Mine Safety and Health Administration



Event Number:

6	8	0	2	2	2	2
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Victim Information: 1																															
1. Name of Injured/Ill Employee: <i>Manuel G. Rodriguez</i>				2. Sex <i>M</i>		3. Victim's Age <i>59</i>			4. Degree of Injury: <i>01 Fatal</i>																						
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 04/12/2018 b. Time: 8:58</i>								6. Date and Time Started: <i>a. Date: 04/12/2018 b. Time: 6:30</i>																							
7. Regular Job Title: <i>176 Independent over the road trucker</i>						8. Work Activity when Injured: <i>098 Scanning card at card reader checkin</i>						9. Was this work activity part of regular job? <table style="width: 100%; border: none;"><tr><td style="text-align: center;">Yes</td><td style="text-align: center;"><input checked="" type="checkbox"/></td><td style="text-align: center;">No</td><td style="text-align: center;"><input type="checkbox"/></td></tr></table>				Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>												
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>																												
10. Experience		Years		Weeks		Days		b. Regular		Years		Weeks		Days		c. This		Years		Weeks		Days		d. Total		Years		Weeks		Days	
a. This								Job Title:								Mine:								Mining:							
Work Activity:		<i>20</i>		<i>0</i>		<i>0</i>				<i>20</i>		<i>0</i>		<i>0</i>				<i>2</i>		<i>0</i>		<i>0</i>				<i>2</i>		<i>0</i>		<i>0</i>	
11. What Directly Inflicted Injury or Illness? <i>110 Truck tires</i>										12. Nature of Injury or Illness: <i>170 Run over by his over the road truck</i>																					
13. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed <input type="checkbox"/> Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>																															
14. Company of Employment: (If different from production operator) <i>M Rodriguez Trucking LLC</i> Independent Contractor ID: (if applicable)																															
15. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input checked="" type="checkbox"/> CPR: <input checked="" type="checkbox"/> EMT: <input checked="" type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>																															
16. Part 50 Document Control Number: (form 7000-1)										17. Union Affiliation of Victim: <i>9999 None (No Union Affiliation)</i>																					