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

# REPORT OF INVESTIGATION

Surface Nonmetal Mine (Fuller's Earth)

Powered Haulage Accident October 20, 2010

Oil-Dri Corporation of Georgia Simpson Mine Ochlocknee, Thomas County, Georgia Mine I.D. 09-00114

# **Investigators**

Donald L. Ratliff Supervisory Mine Safety and Health Inspector

> Michael A. LaRue Mine Safety and Health Inspector

> Brett A. Calzaretta Mine Safety and Health Specialist

Originating Office
Mine Safety and Health Administration
Southeastern District
135 Gemini Circle, Suite 212 Birmingham, Alabama 35209
Michael A. Davis, District Manager



#### **OVERVIEW**

Kenneth D. Herman, an over-the-road truck driver, age 63, died on October 21, 2010. Herman had backed his trailer into one of the loading dock bays at a loading dock at a warehouse to get his truck loaded. He exited the truck to discuss the loading procedures with a forklift operator who was standing in the warehouse. At this time, a spotter truck was backing a partially loaded 53-foot long box trailer into the bay where Herman was standing. Herman was pinned between the trailer and wall of the loading dock.

The accident occurred because management policies, procedures, and controls were inadequate and did not protect persons at the loading dock. The bays at the loading dock were not sufficiently illuminated. The loading docks were not monitored to ensure that foot traffic was adequately controlled. Site-specific hazard training was not effectively provided to the truck drivers. Consequently, they were not made aware of specific mine hazards.

#### GENERAL INFORMATION

Oil-Dri Corporation (Oil-Dri Corp.) of Georgia, a surface and open pit operation, owned and operated by Oil-Dri Corp. of Georgia, is located in Ochlocknee, Thomas County, Georgia. The principal operating official is Daniel Jaffee, chief executive officer. The mine operates three 8-hour shifts, seven days per week. Total employment is 300 persons.

Fuller's Earth (clay) is removed from the open pit using an excavator. The material is loaded into 10-ton trucks and transported to the plant. The material is crushed, dried in a rotary kiln, processed in a roller mill, and sized. The final product is sold for commercial use.

Kenneth Herman was a self-employed over-the-road truck driver. Herman operated from his home located in Clarion County, Pennsylvania. For six years, he had picked up loads of material at Oil-Dri Corp. for customer delivery.

The last regular inspection at this operation was completed on August 5, 2010.

#### DESCRIPTION OF ACCIDENT

On the day of the accident, Kenneth D. Herman arrived at Oil-Dri Corp. with an empty trailer. At 9:47 p.m., Herman stopped at the scalehouse to have his truck and trailer weighed and to pick up a bill of lading. Herman drove to Building #3 and received a partial load of material. He then drove the truck to Building #10 and was directed to Building #11 to get the truck completely loaded.

When Herman arrived at Building #11, two of the five docking bays, bays #1 and #5, were not available because trailers were parked in them. Herman then backed his truck and partially loaded trailer into bay #2. Herman exited his truck, spoke briefly on his cell phone, and then walked to bay #3 to speak with Eurvin Fisher, forklift operator, to get his trailer loaded.

Fisher had picked up the bill of lading to complete loading Herman's truck. Before Herman arrived, Fisher had stacked 13 pallets of material in front of bay #3. Fisher was standing in the warehouse behind bay #2 and Herman's trailer as he spoke to Herman about loading the trailer.

Anthony Broadnax, forklift operator, had been working with Fisher during the shift. As Broadnax drove by, he could see Herman standing on the ground at bay #3. Broadnax was loading the trailer in bay #5.

During this shift, Tom Wood, truck driver, moved trailers to various locations to get them loaded. He then moved the loaded trailers to staging areas for future pick ups. About 10 p.m., Wood brought a partially loaded trailer to the loading dock at Building # 11. Wood made three attempts to move the trailer into bay #3. About 10:17 p.m., Wood backed the trailer against the loading dock wall and the trailer struck Herman. Fisher did not see the trailer approaching because his line of sight was blocked by the stacked pallets. Fisher saw that Herman was injured and told Wood to move the trailer forward.

Broadnax heard Fisher shouting, went to bay #3, and then went into the warehouse to call for Emergency Medical Services (EMS). While in route to make the call, he met Mark Heard, team leader/supervisor, who had already called EMS and Andrea Diaz, warehouse supervisor. Michael Warren, a supervisor from another portion of the warehouse, heard the call for help and went to assist the victim.

EMS arrived at 10:23 p.m. Herman was transported to a local hospital and then transferred to another hospital where he died on October 21, 2010, at 9:34 a.m. The cause of death was attributed to blunt force trauma.

#### INVESTIGATION OF ACCIDENT

The Mine Safety and Health Administration (MSHA) was notified of the accident at 10:45 a.m. on October 21, 2010, by a telephone call from Larry Evans, corporate health and safety manager, to Samuel K. Pierce, acting assistant district manager. An investigation was started the same day. Oil-Dri Corp. was cited for late reporting of the accident. An order was issued under the provisions of Section 103(j) of the Mine Act to ensure the safety of the miners. This order was later modified to Section 103(k) of the Mine Act when the first Authorized Representative arrived at the mine.

MSHA's accident investigation team traveled to the mine, conducted a physical inspection of the accident scene, interviewed employees, and reviewed documents and work procedures relevant to the accident. MSHA conducted the investigation with the assistance of mine management and employees, Thomas County Sherriff's Office, EMS, and Fire/Rescue Station 8.

#### **DISCUSSION**

#### Location

The accident occurred at a loading dock at the north end of Building #11. This building is a warehouse used to store pallets of material before they were loaded into truck trailers for shipment to customers.

#### **Loading Dock**

The loading dock has five open loading bays where forklifts loaded the trailers. The bays are numbered from right to left, facing the warehouse. The openings are 8 ½ feet wide by 9 feet high with a 4-foot spacing between each bay. Two bumper blocks are mounted against the outside wall for the trailers to back against. The openings are equipped with overhead sliding doors which were not operational. There is a 4-foot drop from the floor of the warehouse to the ground where the trailers were parked.

The outside area of the loading dock is approximately 60 feet wide and paved. The area was flat, and sloped slightly toward the building. This area was illuminated by three lights located on the north end of the building. One light was mounted on the left side of bay #5, one light was mounted approximately 15 feet to the right of bay #1, and the other light was mounted approximately 63 feet to the right of bay #1. The three lights ranged from 14 ½ to 17 ½ feet high. The light mounted 15 feet to the right of bay #1 was approximately 17 ½ feet high and, was the

only light that functioned. This light was partially blocked by the approximately 13 feet high trailer parked in bay #1. Less than one foot candle of illumination was being projected onto the loading dock from the one operational light.

The inside of the loading dock is restricted to mine employees only.

# Weather

The weather at the time of the accident was clear sky with a temperature of 65 degrees Fahrenheit. Weather was not considered to be a factor in the accident.

# **Equipment**

The spotter/yard truck involved in the accident was a 1996 Otta tractor pulling a 53-foot long Wabash dry van trailer. The spotter truck was equipped with a functional back-up alarm. The Wabash trailer was equipped with functional lights. The line of site for the operator of the spotter truck was obstructed by the Wabash trailer. The operator used the two side mirrors mounted on the Otta yard truck to back the trailer into Bay #3. No defects were found on the spotter/yard truck or trailer.

#### **Truck Driver Training**

The mine operator had a written site-specific hazard training plan but this plan was not fully implemented or monitored. Signs were posted at the entrance gates of the mine which only gave the drivers a few seconds to read when they entered the mine from the public highway. The site-specific rules "TRANSPORTATION DRIVER HAZARD TRAINING PROGRAM" were written on the back of the bill of lading; however, investigators determined that the truck drivers were not advised of these rules.

# **Training and Experience**

Kenneth D. Herman, victim, had 41 years of experience driving trucks and had been picking up loads at this operation for 6 years. He had not received site-specific hazard awareness training.

The forklift operators had received all training in accordance with 30 CFR Part 46. Anthony Broadnax had one year of experience and Eurvin Fisher had 17 years of experience.

#### ROOT CAUSE ANALYSIS

A root cause analysis was conducted and the following root causes were identified.

**Root Cause:** Management policies, procedures, and controls were inadequate and failed to ensure that sufficient illumination was being provided at the loading dock.

<u>Corrective Action:</u> Management established procedures to have workplace examinations conducted of the outside areas of the buildings to ensure proper illumination is provided and maintained.

**Root Cause:** Management failed to ensure that the written site-specific hazard training plan for over the road truck drivers was being followed. Over the road truck drivers were not aware of the specific hazards and rules at the mine.

<u>Corrective Action:</u> Management established procedures to monitor and properly implement the site-specific hazard training plan for over the road truck drivers. These procedures will ensure that all persons are protected.

#### **CONCLUSION**

The accident occurred because mine management policies, procedures, and controls were inadequate and did not protect persons at the loading dock. The bays at the loading dock were not sufficiently illuminated. Site-specific hazard training to the truck drivers was not effectively provided to the truck drivers. The truck drivers were not made aware of specific mine hazards. The loading docks were not monitored to ensure that foot traffic was adequately controlled.

#### **ENFORCEMENT ACTION**

## Issued to Oil-Dri Corporation of Georgia

Order No. 8548552 was issued on October 21, 2010, under the provisions of Section 103(j) of the Mine Act:

An accident occurred at this operation on October 20, 2010, at approximately 10:20 p.m. This order is being issued, under Section 103 (j) of the Federal Mine Safety and Health Act of 1977, to prevent the destruction of any evidence which would assist in investigating the cause or causes of the accident. It prohibits all activity at bay 1 thru 5 of the No. 11 Bldg, until MSHA has determined that it is safe to resume normal mining operations in this area. This order was initially issued orally to the mine operator at 10:45 a.m. and has now been reduced to writing.

The order was terminated on December 1, 2010. Conditions that contributed to the accident no longer exist.

Order No. 6086780 was issued on January 4, 2011, under the provisions of Section 104(d)(1) of the Mine Act for a violation of 30 CFR 56.17001:

A fatal accident occurred at this operation at 10:17 p.m. on October 20, 2010, when an over-the-road truck driver was crushed between an empty 53-foot long box trailer and a Building 11 loading dock wall. The empty trailer was being backed into position at the inadequately illuminated loading dock by a yard truck. The victim was standing at the loading dock bay and was communicating with a forklift operator, who was inside the warehouse, when the box trailer backed into him. Management was aware of the insufficient illumination problems at the loading dock but continued to allow truck drivers to be exposed. Management engaged in aggravated conduct constituting more than ordinary negligence by not providing sufficient illumination at the loading dock. This is an unwarrantable failure to comply with a mandatory standard.

The order was terminated on January 4, 2011. Four (4) new lights were installed outside the loading dock bays which increased the foot candles from less that 1 to over 28 foot candles.

Order No. 6086781 was issued on January 4, 2011, under the provisions of Section 104(d)(1) of the Mine Act for a violation of 30 CFR 46.11(b)(4):

A fatal accident occurred at this operation at 10:17 p.m. on October 20, 2010, when an over-the-road truck driver was crushed between an empty 53-foot long box trailer and a Building 11 loading dock wall. The empty trailer was being backed into position at the inadequately illuminated loading dock by a yard truck. The victim was standing at the loading dock bay and was communicating with a forklift operator, who was inside the warehouse, when the box trailer backed into him. Site-specific training requiring drivers to remain in their trucks was not being monitored or properly implemented. Site-specific safety procedures were written on the back of the bill of lading and posted on the entrance gates, but the truck drivers were not aware of the written site specific safety procedure or restrictions. Management engaged in aggravated conduct constituting more than ordinary negligence by failing to monitor and enforce the site specific training, which exposed persons to numerous hazards. This is an unwarrantable failure to comply with a mandatory standard.

The order was terminated on January 4, 2011. A written policy was established requiring "commercial-over-the-road" drivers to remain inside their trucks at all times while at the loading docks. Forklift drivers have been instructed not to load any trucks if the drivers are out of their vehicles. Special safety rules for "commercial-over-the-road" drivers were established requiring that drivers read the rules and sign them when entering the mine.

Approved:	Date:	
Michael A. Davis		
Southeast District Manager		

# **APPENDICES**

- A. Persons Participating in the InvestigationB. Sketch of Accident Area, Building 11, Loading DockC. Aerial View of Mill Portion the Mine
- D. Victim Data Sheet

#### APPENDIX A

# **Persons Participating in the Investigation**

# Oil-Dri Corporation of Georgia

Craig Paisley Regional Manager

Larry Evans Corp. Safety and Health Manager
Dewey McCabe South Plant Operations Manager

Guy Watson Warehouse Manager
Bobby Battle Safety Manager
Andres Diaz Warehouse Supervisor
Mark Heard Warehouse Leadman

Tom F. WoodTruck DriverAnthony BroadnaxForklift OperatorEurvin FisherForklift Operator

# **Thomas County Sheriff Office**

Chris Daniels Deputy Sheriff

# **Thomas County Fire/Rescue, Station 8**

Harry Rowe Fire Fighter
Brent Holland Fire Fighter/EMT

# **Thomas County EMS**

Tim Coram Captain
Lee Clanton Paramedic

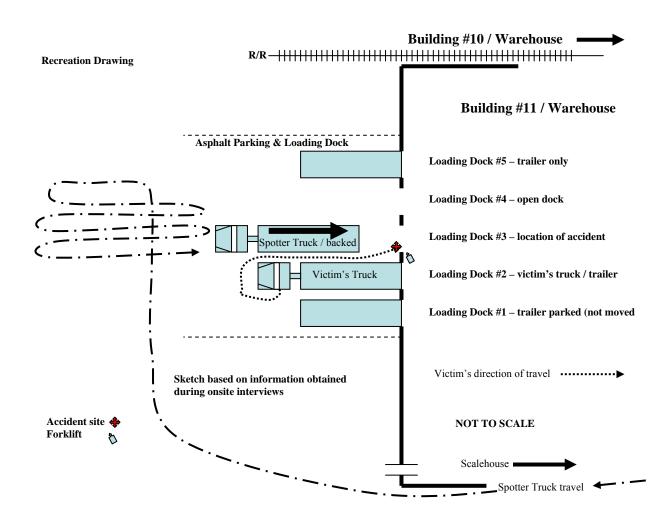
# Mine Safety and Health Administration

Donald L. Ratliff Supervisory Mine Safety and Health Inspector

Michael A, LaRue Mine Safety and Health Inspector Brett A. Calzaretta Mine Safety and Health Specialist

# **APPENDIX B**

# Sketch of Accident Area Building 11 - Loading Dock



# **APPENDIX C**

# **Aerial View of Mill Portion the Mine**

