

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Surface Mine  
(Limestone)

Fatal Slip/Fall of Person Accident  
January 8, 2020

Wendling Quarries Inc.  
Portable Crushing Department 415  
Garrison, Benton County, Iowa  
ID No. 13-02061

Investigators

Thomas H. Heft  
Mine Safety and Health Inspector

James A. Hines  
Mine Safety and Health Inspector

Randall W. Jamison  
Mine Safety and Health Inspector

Originating Office  
Mine Safety and Health Administration  
North Central District  
515 W. 1<sup>st</sup> Street, Suite 323  
Duluth, Minnesota 55802-1302  
Christopher A. Hensler, District Manager

# Table of Contents

OVERVIEW .....	1
GENERAL INFORMATION.....	2
DESCRIPTION OF ACCIDENT .....	2
INVESTIGATION OF THE ACCIDENT.....	2
DISCUSSION.....	3
Location of Accident.....	3
Weather .....	3
Equipment Involved .....	3
Training and Experience .....	4
ROOT CAUSE.....	4
CONCLUSION.....	5
ENFORCMENT ACTIONS .....	6
APPENDIX A.....	7
APPENDIX B.....	8
APPENDIX C .....	9



## **OVERVIEW**

Michael L. Griffith, a 30-year-old Truck Driver/Quality Control Person with one year and eight months of total mining experience, died on January 8, 2020. Griffith died when he fell into a lime surge hopper and became engulfed by the material.

The accident occurred because the mine operator did not: (1) provide a suitable walkway at the rim of the lime surge hopper; (2) ensure that the walkway at the rim of the lime surge hopper was examined by a competent person for conditions that may adversely affect safety before work was performed from the walkway; and (3) have policies/procedures on task training employees on safety hazards encountered when walking and working on walkways around hoppers.

## GENERAL INFORMATION

Wendling Quarries Inc. (Wendling), employs seven miners at the Portable Crushing Department 415 mine and they operate one, ten-hour shift, five days per week. Wendling drills and blasts limestone from multiple benches in an open pit mine. Blasted limestone is loaded out with front-end loaders and hauled by trucks to the processing plant. The processing plant crushes and screens the limestone into various products for the construction industry. During the screening process, a conveyor belt transports very fine limestone particles to a lime surge hopper. Material from the lime surge hopper is loaded into a truck and transported to a stockpile.

The principal officials for the mine at the time of the accident:

Anthony J. Manatt.....President  
Herb Miller.....Vice President/Secretary  
Bradford J. Manatt .....Director/Vice President

The Mine Safety and Health Administration (MSHA) completed the last regular inspection on March 27, 2019. The 2019 non-fatal day's lost (NFDL) incident rate for the Portable Crushing Department 415 mine was 0, compared to the national average of 1.30 for mines of this type.

## DESCRIPTION OF ACCIDENT

On January 8, 2020, at 6:30 a.m., Griffith began driving a dump truck and hauled crushed limestone from the plant lime surge hopper to a stockpile. In addition to hauling the limestone to the stockpile, Griffith's job duties included ascending the lime surge hopper's elevated walkway to check the condition of the material inside the hopper. When necessary, Griffith scraped off material clinging to the interior walls of the hopper using a scraper tool while standing on the lime surge hopper's elevated walkway.

At approximately 1:00 p.m., Peter Caspers, Front-end Loader Operator, notified Jonathan J. Cruise, Plant Man that the lime surge hopper discharge belt conveyor was slipping. Cruise went to investigate the belt conveyor slippage and discovered Griffith in the discharge opening of the lime surge hopper.

At 1:22 p.m., Caspers notified Jerry A. Maylone, Stockpile Truck Driver, who then called 911. The Benton County Sheriff Department, Garrison Fire Department, and North Benton Ambulance personnel responded and conducted rescue and recovery operations. Matthew Wilden, Physician Assistant Certified, Virginia Gay Hospital, pronounced Griffith dead at the scene of the accident at 2:08 p.m.

## INVESTIGATION OF THE ACCIDENT

On January 8, 2020, at 3:02 p.m., John L. Kulper, Safety and Environmental Director, contacted Anthony Runyon, Supervisory Mine Safety and Health Inspector, and informed him of the accident. James A. Hines, Mine Safety and Health Inspector, responded to the accident. Upon arriving at the accident scene, Hines secured the accident site and issued an order under provisions of 103(k) of the Federal Mine Safety and Health Act of 1977 to preserve the site and assure the safety of all persons at the operation.

On January 9, 2020, at 7:48 a.m., Thomas H. Heft, Mine Safety and Health Inspector, arrived at the mine to take over the fatal accident investigation as the lead investigator. MSHA's accident investigation team conducted a physical examination of the accident scene and interviewed mine employees and mine management. Michael Jackley, Training Specialist with MSHA's Educational Field and Small Mine Services, assisted in the review of training plans and documentation. MSHA conducted the investigation with the assistance of mine management and mine employees.

## **DISCUSSION**

### **Location of Accident**

The accident occurred at the lime surge hopper located on the west side of the plant. The lime surge hopper unit included a feed belt conveyor coming from the screen plant and a discharge belt conveyor located beneath the hopper. The lime surge hopper has three elevated metal walkways and the operator denotes them as north, west, and south rim.

### **Weather**

Weather reports on the day of the accident indicated a temperature of 24° Fahrenheit with no visibility restrictions. Weather was not a factor in the accident.

### **Equipment Involved**

Wendling obtained the lime surge hopper in 1995 from another mining company. The Carter Company manufactured the lime surge hopper. At the time of the accident, both the feed belt conveyor and the discharge belt conveyor were operating. The lime surge hopper had material caked to the walls preventing the material from flowing freely out of the bottom of the hopper. The lime surge hopper was not equipped with any flow enhancing devices.

The elevated metal walkway on the north and south sides of the lime hopper measured 16 inches wide and 131 inches long. The west side walkway measured 20 inches wide and 128 inches long. The walkways are about 12 feet above the ground and are equipped with 42-inch high handrails on both sides. The inside railings on the north and south rim have a 32-inch wide access gate with hinges on the bottom, which allow the gates to fold down into the hopper. The latch system for the gates consists of a metal plate mounted to each gate at mid-rail height with a bolt. The bolt allows the plates to swivel. A newel/support post with round lock pin secures the handrail gate. The round lock pin is inserted into the hole of the metal plate and the handrail newel post (see Appendices B & C). Miners interviewed stated that the gates were initially secured with the round lock pin inserted into the latch when the plant was set up.

At the time of the investigation, the access gate on the south side was in the down position and the access gate on the north side was held in place solely with wire (see Appendix C). Investigators searched for and did not find any round lock pins or wire similar to that used to secure the north-side access gate at the accident scene or in the material in the truck or lime hopper.

When material caked to the walls of the lime surge hopper, miners used a scraper tool to remove material from the sides. The tool was a straight metal rod that was approximately 13 feet long and weighed 13 pounds. The tool had a flat blade attached to one end. Investigators found the scraper tool in the lime surge hopper.

No one witnessed the accident, however, based on the evidence, investigators believe Griffith was scraping caked material from an interior wall of the hopper at the time of the accident. Wyatt L. Wilson, Stockpile Truck Driver, stated he saw Griffith on the south side of the lime surge hopper walkway that morning.

Travis J. Galloway, Plant Supervisor, stated that he is the person responsible for conducting workplace examinations. Galloway stated that he was aware that the lime stockpile truck driver is required to access the lime surge hopper elevated walkway to scrape the interior wall if material is not flowing properly. Galloway also stated that he did not go up on the walkway to conduct a workplace exam on the day of the accident, which is a requirement of 30 CFR 56.18002(a).

### **Training and Experience**

Michael L Griffith had approximately two weeks of mining experience at the mine and approximately 32 weeks of mining experience with Wending.

Michael L. Griffith received 30 CFR Part 46 - Newly Hired Experienced Miner Training and Site Specific Training. There are no records that Griffith received task training for working safely around bins and hoppers. The company did not provide polices/procedures on task training employees on safety hazards encountered when walking and working on walkways around hoppers.

## **ROOT CAUSE**

**Root Cause:** The mine operator did not provide a suitable walkway at the rim of the lime surge hopper.

**Corrective Action:** The mine operator repaired the gate latches on the lime surge hopper walkway to prevent persons from falling into the lime surge hopper.

**Root Cause:** The mine operator did not ensure that a competent person conducted workplace exams in all places prior to miners beginning work.

**Corrective Action:** The mine operator retrained all competent persons on how and when to conduct workplace exams in all working places before miners began work.

**Root Cause:** The mine operator did not provide task training on safety hazards encountered when walking and working on walkways around the lime surge hopper.

**Corrective Action:** The mine operator developed new polices/procedures on task training employees on safety hazards encountered when walking and working on walkways around hoppers. The operator then provided new task training to miners who walk or work on walkways around the lime surge hopper.

## CONCLUSION

Michael L. Griffith, a 30-year-old Truck Driver/Quality Control Person with one year and eight months of total mining experience, died on January 8, 2020. Griffith died when he fell into a lime surge hopper and became engulfed by the material.

The accident occurred because the mine operator did not: (1) provide a suitable walkway at the rim of the lime surge hopper; (2) ensure that the walkway at the rim of the lime surge hopper was examined by a competent person for conditions that may adversely affect safety before work was performed from the walkway; and (3) have polices/procedures on task training employees on safety hazards encountered when walking and working on walkways around hoppers.

Approved By:

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Christopher A. Hensler  
District Manager

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Date

## ENFORCEMENT ACTIONS

Order No. 9482396– Issued on January 8, 2020 under section 103(k) of the Federal Mine Safety and Health Act of 1977: A 103(k) order, 9482396, was issued January 8, 2020 at 5:30 p.m.

A fatal accident occurred at this operation on January 8, 2020. This order is issued to assure the safety of all persons at this operation. It prohibits all activity at the Crushing Plant identified as Dept. 415 as well as the lime surge hopper unit #76107595 and a 50 foot surrounding area from the listed equipment until MSHA determines it is safe to resume mining operations in the area. The mine operator shall obtain prior approval from an authorized representative for all actions to recover and/or restore operations to these affected areas.

Citation No. 9444775 - Issued to Wendling Quarries Inc., Portable Crushing Department 415 (13-02061), on March 19, 2020, under the provision of section 104(a) of the Mine Act for violation of 56.16002(b).

An accident, resulting in fatal injuries, occurred on this mine site on January 8, 2020, sometime shortly after 1:00 p.m., when a miner fell through an opening in the handrails and fell into the lime surge hopper and was engulfed in material. The stockpile truck driver job duties required him to access the lime surge hopper elevated walkway and clean the interior wall of the lime surge hopper with a scraper. The walkway at the rim of the lime surge hopper was not suitable to prevent miners from inadvertently falling into the lime surge hopper. Or, in the alternative: 56.11002 – Handrails and toeboards. A gate in the handrail of elevated walkway of the lime surge hopper was left open and the miner fell through the opening into the hopper resulting in the death of the miner.

Citation No. 9444776 - Issued to Wendling Quarries Inc., Portable Crushing Department 415 (13-02061), on March 19, 2020, under the provision of section 104(d) of the Mine Act for violation of 56.18002(a).

On January 8, 2020, an accident occurred, fatally injuring the stockpile truck driver. The stockpile truck driver job duties required him to access the lime surge hopper elevated walkway and clean the interior wall of the lime surge hopper with a scraper. The miner fell through an opening on the south side of the lime surge hopper's elevated walkway into the hopper and was engulfed by material. Mine management engaged in aggravated conduct constituting more than ordinary negligence in that the plant supervisor, who does the workplace examinations, did not inspect the lime surge hopper walkway on the day of the accident prior to the time that miners accessed the area. This is an unwarrantable failure to comply with a mandatory standard.

Order No. 9444777 - Issued to Wendling Quarries Inc., Portable Crushing Department 415 (13-02061), on March 19, 2020, under the provision of section 104(d) of the Mine Act for violation of 46.7.

On January 8, 2020, an accident occurred, fatally injuring the stockpile truck driver. The stockpile truck driver job duties required him to access the lime surge hopper elevated walkway and clean the interior wall of the lime surge hopper with a scraper. The miner fell through an opening on the south side of the lime surge hopper's elevated walkway into the hopper and was engulfed by material. The miner's training was reviewed and there was nothing to indicate the miner had received task training for working around hoppers. Mine management engaged in aggravated conduct constituting more than ordinary negligence by not providing task training for the tasks assigned. This is an unwarrantable failure to comply with a mandatory standard.



**APPENDIX A**  
**Persons Participating in the Investigation**

Portable Crushing Department 415

Travis J. Galloway ..... Plant Supervisor  
Jonathan J. Cruise ..... Plant Man  
Drew S. Bixler ..... Stockpile Truck Driver  
Peter Caspers ..... Front-end Loader Operator  
Wyatt L. Wilson ..... Stockpile Truck Driver  
Wade L. Wilson ..... Stockpile Truck Driver  
Jerry A. Maylone ..... Stockpile Truck Driver  
Brad Wise ..... Yard front-end Loader Operator  
Steve Boisen ..... Rip Rap Plant  
Harold Petersen ..... Rip Rap Plant  
John L Kulper ..... Safety and Environmental Director  
Matt Petersen ..... Assistant General Superintendent  
Kimberly D. Heber ..... Quality Control  
Howard Fruehling ..... 420 Plant Supervisor

Mine Safety and Health Administration

Thomas H. Heft ..... Mine Safety and Health Inspector  
James A. Hines ..... Mine Safety and Health Inspector  
Randall W. Jamison ..... Mine Safety and Health Inspector  
Michael Jackley ..... Training Specialist

**APPENDIX B**  
South Gate

Accident Scene



Opening in handrail where victim fell into lime surge hopper.

Connecting pin not in place at the time of investigation

Locking plate for connecting pin

**APPENDIX C**  
North Gate

Condition of north side gate at time of investigation



Newel post

Gate (north side)

Wire used to hold gate  
in place

Gate latch swivel point

Holes in gate latch and  
newel post used to  
secure gate with round  
lock pin