UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

REPORT OF INVESTIGATION

Facility (Aluminum Ore-Bauxite Mining)

Fatal Slip or Fall of Person Accident August 4, 2024

> Gramercy Operation Atalco Gramercy LLC Gramercy, Louisiana ID No. 16-00352

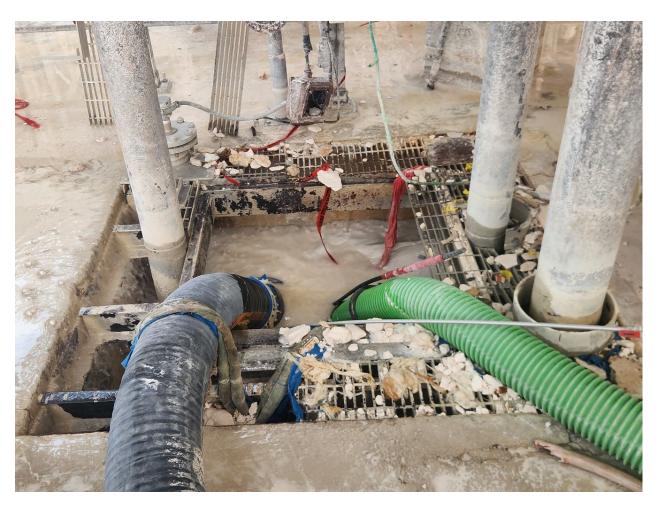
Accident Investigator

Brandon Olivier Mine Safety and Health Safety Specialist

Originating Office
Mine Safety and Health Administration
Dallas District
1100 Commerce Street RM 462
Dallas, TX 75242
Brett Barrick, Acting District Manager

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OVERVIEW

On August 4, 2024, at 12:58 p.m., Curtis Diggs, a 45-year-old industrial technician from Waste-Pro USA with one month of mining experience, stepped into an opening in the floor created by the removal of a sump pump and received thermal and chemical burns to his body. On September 2, 2024, Diggs was pronounced dead from his injuries.

The accident occurred because the mine operator did not: 1) install barricades or covers on the opening in the floor, 2) maintain the floor area in a dry condition, and 3) conduct workplace examinations and correct hazardous conditions.

GENERAL INFORMATION

DADA Holdings LLC and Concord Resources LTD own and operate the Atalco Gramercy LLC Mine (Gramercy). Gramercy is in Gramercy, Louisiana. This facility (mill) employs 504 miners represented by the United Steel Workers, Local 5702, and operates two 12-hour shifts, seven days per week. The raw bauxite ore is processed to make alumina. The mine operator sells the finished product to various industries.

The mine operator contracted Waste-Pro USA to provide hydro-blasting and vacuuming services to the company.

The principal management official at Gramercy at the time of the accident was:

John Habisreitinger

President

The principal management official for Waste-Pro USA at the time of the accident was:

Laken Petite

Division Manager

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on February 8, 2024. The 2023 non-fatal days lost incident rate for Gramercy was 3.5, compared to the national average of 1.23 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On July 30, 2024, the mine operator identified a defective sump pump in the Number 5 Filter area located in the Calcination section. According to interviews, the Number 5 Filter was taken offline. Kirk Rose and Ridge Deslatte, General Repairmen, removed the defective sump pump and floor grating at the direction of Charles Battles, Maintenance Coordinator; Jeff Whitney, Senior Manager of Logistics and Manufacturing; and Jaramy Burrus, Calcination Area Coordinator. Danielle Keller, Production Shift Crew Supervisor, assigned Blain Babin, Supervisor for Waste-Pro USA, to support the maintenance team by providing a vacuum truck to clean up the water and caustic liquid that had collected in the area where the sump pump was removed (see Appendix A).

On July 30, 2024, at approximately 4:00 p.m., the pump was removed. The mine operator left the sump area open and did not install any covers or barricades while Waste-Pro USA contractors continued to vacuum up the caustic liquid. Waste-Pro USA worked in the area until July 31, 2024, and then they were assigned to work in a different area on the mine site. The mine operator did not install any covers or barricades after Waste-Pro contractors left the area.

Between July 30, 2024, and August 2, 2024, the mine operator assigned scalers to scale and wash the area, starting on the upper level of the filter area down to the floor. On August 2, 2024, the cleanup on the upper levels was completed and Whitney and Burrus decided to put the Number 5 Filter back online without installing the sump pump or installing barricades (see Appendix B).

On August 4, 2024, at 7:00 a.m., Diggs, along with Kelvin Thomas and Elwynn Simms, Industrial Technicians for Waste-Pro USA, and Babin arrived at the mine site. Danielle Keller, Production Shift Crew Supervisor, met with Babin and assigned Waste-Pro USA to return to the Number 5 Filter area to resume the cleanup. Babin and Keller reviewed the Job Safety Analysis for mine operator's work permit SWP-000127794, and walked the job site discussing what needed to be done for the day which included vacuuming and cleaning the sump area.

According to interviews, Babin went over the job scope with his employees. His employees brought the vacuum truck and equipment to the area. While Waste-Pro USA employees were getting set up, Babin stretched out the vacuum truck's suction hose and positioned it inside the sump containment. He observed an accumulation of caustic liquid and hot water covering the area. Babin told his miners there was nothing they could do until the caustic liquid and water were pumped down.

Babin tried to start the portable diesel pump that was in the area, but it would not operate. Babin went to the Section 3 Smoke Pen located in the Precipitation area, across the street from the Calcination area. Babin saw Keith Lester, Class Operator, and asked him to come assist him with repairing the diesel pump. Once the pump was repaired and running, Babin proceeded back to the sump area. Thomas met Babin, to see if he needed any assistance. While talking to Babin, Thomas felt the heat of the caustic liquid through his rubber boots, so both he and Babin stood on top of the black suction hose of the portable diesel pump, approximately 3 to 5 feet from the sump pump opening. While standing there talking they saw Diggs walking towards them. Diggs walked past them and stepped into the unprotected opening. Babin and Thomas grabbed him, but he was already submerged up to his waist. They pulled him out of the opening and Thomas grabbed a two-inch water hose to wash him down. Lester saw Diggs being pulled out of the sump. Lester escorted Diggs to the mill's Area Control Room to shower. At 2:55 p.m., Lester called over the radio for the Emergency Response Team. At 3:00 p.m., Shane Hymel, Security Supervisor, called 911. At 3:09 p.m., Emergency Medical Services arrived at the mill and Diggs was transported by AirMed to University Medical Center New Orleans. On September 2, 2024, at 11:20 p.m., Lance Eugen Stuke, Physician, pronounced Diggs dead from his injuries.

INVESTIGATION OF THE ACCIDENT

On August 4, 2024, at 3:06 p.m., Sheridah Nelson, Safety and Health Manager, called the Department of Labor National Contact Center (DOLNCC) to report the accident. At 3:19 p.m., the DOLNCC contacted John Powers, Supervisory Special Investigator. Powers contacted Mike Tefertiller, Supervisory Mine Safety and Health Inspector, who sent Brandon Olivier, Mine Safety and Health Safety Specialist, to the mine as the lead accident investigator.

On August 4, 2024, at 6:45 p.m., Brandon Olivier 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 the preservation of evidence. The investigation began by conducting an examination of the accident scene, interviewing miners, contractors, and mine management, and reviewing conditions and work practices relevant to the accident. See Appendix C for a list of persons who participated in the investigation.

DISCUSSION

Location of the Accident

The accident occurred at the Number 5 Filter in the Calcination section of the mill (unit) (see Appendix D). The floor level of the unit contained approximately three to four inches of caustic, ore, and hot water estimated at 200 degrees Fahrenheit. The caustic liquid is a corrosive chemical that can cause severe skin burns and eye damage. The caustic liquid was not clear,

which limited the miners' visibility to see the opening on the floor. Investigators determined this condition contributed to the accident.

Weather

The weather at the time of the accident was 96 Degrees Fahrenheit with clear skies. Investigators determined that the weather did not contribute to the accident.

Equipment Involved

The removed piece of equipment that created the opening was referred to as the Number 5 Filter Sump Pump. The grating and sump pump were removed on July 30, 2024, creating a 38-inch by 41-inch opening. There was no scheduled time for the reinstallation of the pump and grating.

Procedures for Removing Grating and Sump Pumps

Investigators determined that the mine operator had a standard operating procedure (SOP) for the removal of sump pumps, but it was not followed. Since Waste-Pro USA was going to vacuum out the sump and was in the area, the mine operator and contractor that removed the pump, deviated from the SOP and did not re-install the grating or erect a barricade. Investigators determined this condition contributed to the accident.

Examinations

Workplace examination records were reviewed, and it was determined there were no examinations conducted for this area. Hazardous conditions existed in the area between July 30, 2024, and August 4, 2024. The miners and supervisors were not documenting obvious and extensive hazards, nor were they taking appropriate steps to correct the hazards. Investigators determined that this contributed to the accident.

Training and Experience

Diggs had one month of mining experience and received New Miner Training in accordance with MSHA Part 46 training regulations on July 3, 2024. Diggs was not trained in the SOP. The day of the accident was Diggs' first day in this work area and Waste-Pro USA's first time performing cleanup with a complete sump removal.

Investigators determined that Thomas and Simms were not trained in the SOP. Battles, Whitney, Burrus, Rose, Ridge, and Deslatte claimed they were trained in the SOP, but no training documentation could be provided. However, investigators determined that a lack of training did not contribute to the accident because the Atalco Gramercy LLC and Waste-Pro USA employees knew of the hazard of walking through an area flooded with caustic, ore, and hot water.

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 the mine operator and the contractor implemented the corresponding corrective actions to prevent a recurrence.

1. <u>Root Cause</u>: The mine operator and the contractor did not install barricades or covers in the opening on the floor.

<u>Corrective Action</u>: The mine operator and contract company trained all miners in the procedures for installing barricades when openings in the flooring exist.

2. Root Cause: The mine operator did not maintain the floor area in a dry condition.

<u>Corrective Action</u>: The mine operator repaired the sump pump and installed it back into the opening. The company also trained all miners in the sump pump and grading removal procedure.

3. <u>Root Cause</u>: The mine operator and the contractor did not conduct workplace examinations and correct hazardous conditions.

<u>Corrective Action</u>: The mine operator and contractor trained all miners and contractors on the workplace examination requirements. Examinations were conducted and verified.

CONCLUSION

On August 4, 2024, at 12:58 p.m., Curtis Diggs, a 45-year-old industrial technician from Waste-Pro USA with one month of mining experience, stepped into an opening in the floor that had been covered by a sump pump and received thermal and chemical burns to his body. On September 2, 2024, Diggs died from his injuries.

The accident occurred because the mine operator did not: 1) install barricades or covers on the opening in the floor, 2) maintain the floor area in a dry condition, and 3) conduct workplace examinations and correct hazardous conditions.

Approved By:	
Brett Barrick	Date
Acting District Manager	

ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Atalco Gramercy LLC.

An accident occurred at this operation on August 4, 2024, when a miner received burns from stepping in an open sump hole that contained caustic. This order is issued to ensure the safety of all persons at this operation. It prohibits all activity for the #5 Filter bottom floor including the water pump and vacuum truck until MSHA has determined that it is safe to resume normal 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 the affected area.

2. A 104(e)(2) Order was issued to Atalco Gramercy LLC for a violation of 30 CFR 56.11012.

A Notice of Pattern of Violations, 9676739, was issued on 7/10/2023.

An accident occurred on August 4, 2024, when a contractor was seriously injured while traveling in the #5 Filter area and stepped in an open hole in the floor. Openings near travel ways through which persons may fall shall be protected by railings, barriers, or covers. On July 30, 2024, the mine operator removed the #5 filter sump pump from the ground for service, and did not install railings, barriers, or covers around the opening to prevent miners from falling into the opening. The opening measured 38" x 41", and the sump is approximately eight feet deep. The floor level of the unit contained approximately three to four inches of caustic and hot water estimated at 200 degrees Fahrenheit. Several members of management were involved in the removal of the pump and were aware that: (1) there were no barricades installed around the opening, (2) this area is accessed each shift, and (3) miners would be working in this area. Management engaged in aggravated conduct constituting more than ordinary negligence in that they were aware of the condition of the sump and continued to allow the miners to access the area in this condition. This violation is an unwarrantable failure to comply with a mandatory standard.

3. A 104(d)(1) citation was issued to Waste-Pro USA for a violation of 30 CFR 56.11012.

An accident occurred on August 4, 2024, when a contractor was seriously injured while he was traveling in the #5 Filter area and stepped in an open hole. Openings near travel ways through which persons may fall shall be protected by railings, barriers, or covers. On July 30, 2024, the mine operator along with contractors removed the #5 filter sump pump from the ground for service and did not install railings, barriers, or covers around the opening to prevent miners from falling into the opening. The opening measured 38" x 41", and the sump is approximately eight feet deep. The floor level of the unit contained approximately three to four inches of caustic and water estimated at 200 degrees Fahrenheit. The contractor's supervisor was involved in the removal of the pump and was aware that there were no barricades installed around the opening, and that other miners and contractors would be working in this area. The supervisor engaged in aggravated conduct constituting more than ordinary negligence in that he was aware of the condition of the sump and continued to

allow his workers to access the area. This violation is an unwarrantable failure to comply with a mandatory standard.

4. A 104(e)(2) order was issued to Atalco Gramercy LLC for a violation of 30 CFR 56.20003(b).

A Notice of Pattern of Violations, 9676739, was issued on 7/10/2023.

An accident occurred on August 4, 2024, when a contract worker was traveling in the #5 Filter area and stepped in an open sump. At all mining operations where wet processes are used, drainage shall be maintained, and dry-standing places shall be provided where practicable. The #5 Filter sump pump and drainage were not being maintained which allowed the floor level to have approximately three to four inches of a caustic, ore and water mixture. The contractor was unable to see the opening in the ground while in the area. The unit is accessed by the plant operators at least once per shift for examinations and cleaning. This condition exposed the miners to serious injuries while they were traveling throughout the area.

5. A 104(e)(2) order was issued to Atalco Gramercy LLC for violation of 30 CFR 56.18002(a).

A Notice of Pattern of Violations, 9676739, was issued on 7/10/2023.

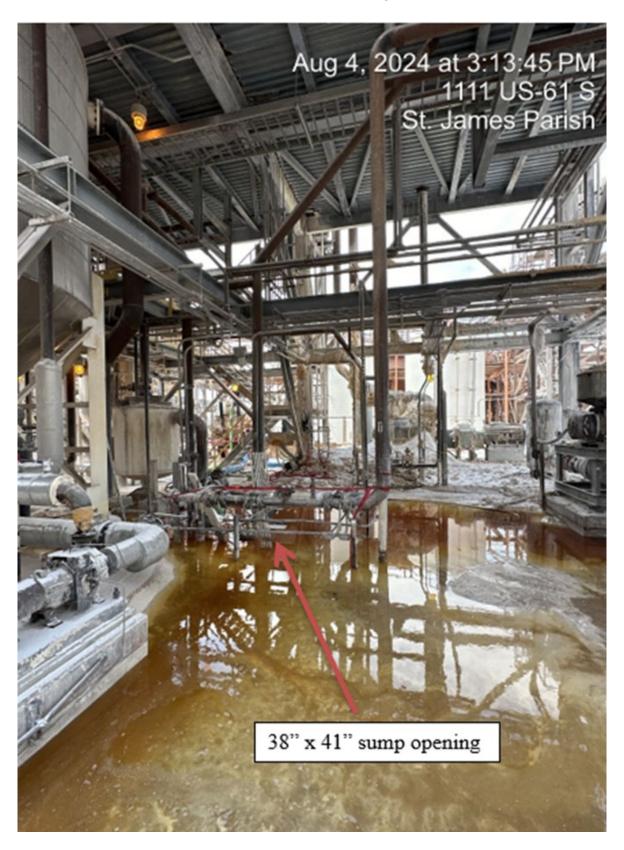
An accident occurred on August 4, 2024, when a contract worker stepped in an open sump in the #5 Filter area. A competent person designated by the operator shall examine each working place at least once each shift before miners begins work in that place, for conditions that may adversely affect safety or health. Several members of management were in the #5 Filter area on July 30, 2024, when the pump was removed. They were aware of the hazardous conditions and did not document them or take actions to address these hazards including three to four inches of water with a caustic and ore mixture, and the sump was open with no barricade. Management had accessed the unit several times between July 30, 2024, and August 4, 2024, and no hazardous conditions were documented. Management engaged in aggravated conduct constituting more than ordinary negligence in that they had reason to know of the hazards and continued to allow the miners and contractors to work in the area. This violation is an unwarrantable failure to comply with a mandatory standard.

6. A 104(d)(1) order was issued to Waste-Pro USA for violation of 30 CFR 56.18002(a).

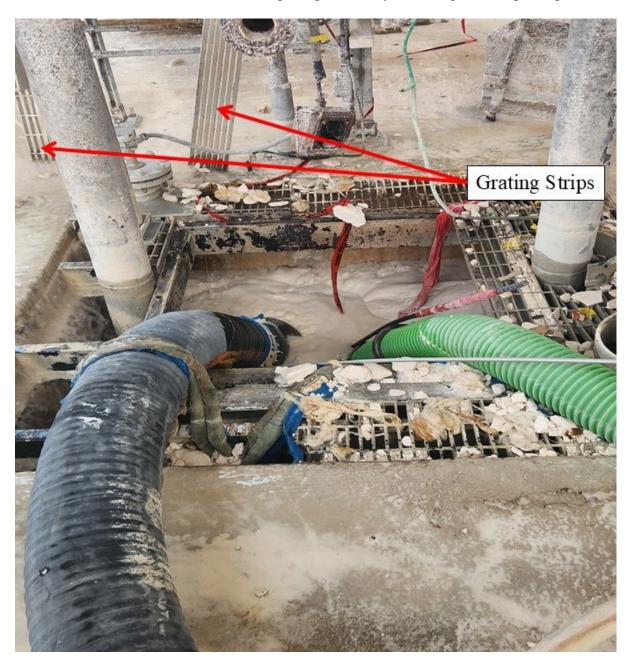
An accident occurred on August 4, 2024, when a contract worker stepped in an open sump in the #5 Filter area. A competent person designated by the operator shall examine each working place at least once each shift before miners begins work in that place, for conditions that may adversely affect safety or health. The contractor's supervisor was in the area on July 30, 2024, when the pump was removed, and on August 4, 2024, when the hazards were present. The #5 Filter unit contained several hoses in the walkway, the floor contained including three to four inches of water with a caustic and ore mixture, and the sump was open with no barricade. The supervisor engaged in aggravated conduct constituting more than ordinary negligence in that he was aware and had reason to know of the hazards and

continued to access the area along with his employees without taking action to correct the issues. This violation is an unwarrantable failure to comply with a mandatory standard.

APPENDIX A – South View of Number 5 Filter Floor Area



APPENDIX B -38" x 41" Opening created by removing the Sump Pump



APPENDIX C – Persons Participating in the Investigation

Atalco Gramercy

Jeff Whitney Senior Manager of Logistics and Manufacturing

Jaramy Burrus
Charles Battles
Maintenance Coordinator
Danielle Keller
Production Shift Crew Supervisor
Sheridah Nelson
Safety and Health Manager

Ridge Deslatte General Repair
Kirk Rose General Repair
Keith Lester Class Operator

Waste-Pro USA

Laken PetiteDivision ManagerJeremy NobleSafety ManagerBlain BabinSupervisorKelvin ThomasIndustrial TechnicianElwynn SimmsIndustrial Technician

Mine Safety and Health Administration

Brandon Olivier Mine Safety and Health Safety Specialist

APPENDIX D – North View of the Number 5 Filter Floor Area

