#### FAI-F00E0A7-1

#### UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

#### **REPORT OF INVESTIGATION**

Underground (Salt)

Fatal Powered Haulage Accident November 27, 2024

Cargill Deicing Technology-Cleveland Mn Cargill Deicing Technology Cleveland, Cuyahoga County, Ohio ID No. 33-01994

Accident Investigators

Arthur Wall Mine Safety and Health Inspector

Marty Morris Mine Safety and Health Inspector

Originating Office Mine Safety and Health Administration Warrendale District 178 Thorn Hill Road, Suite 100 Warrendale, PA 15086 Peter Montali, District Manager

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### **OVERVIEW**

On November 27, 2024, at 5:40 p.m., Grzegorz Sychla, a 58-year-old electrician with over ten years of mining experience, died after being struck by an underground Load Haul Dump (LHD) loader.

The accident occurred because the mine operator did not place signs or signals that warn of hazardous conditions at appropriate locations.

#### GENERAL INFORMATION

Cargill Deicing Technology owns and operates the Cargill Deicing Technologies-Cleveland Mn (Cleveland Mine). This is an underground salt mine located in Cleveland, Cuyahoga County, Ohio. The Cleveland Mine employs 220 miners and operates three eight-hour shifts, seven days per week. The mine operator uses the room and pillar method mining by drilling and blasting the salt. After blasting, LHD loaders transport the salt to the feeder crusher where belt conveyors transport it underground to skips, which then transport the salt to the surface for processing and shipment.

The principal management officials at the Cleveland Mine at the time of the accident were:

Eric Ferrer	Underground Production Supervisor
Eric Hahn	Surface Production Supervisor
Corey Cline	Underground Maintenance Supervisor

The Mine Safety and Health Administration (MSHA) completed the last regular safety and health inspection at this mine on October 15, 2024. The 2023 non-fatal days lost incident rate for the Cleveland Mine was 1.61, compared to the national average of 1.37 for mines of this type.

#### DESCRIPTION OF THE ACCIDENT

On November 27, 2024, at 2:40 p.m., Sychla arrived at the mine. According to interviews, Sychla traveled underground to the electrical rebuild shop and began his regular duties of repairing motors for various equipment. At 5:05 p.m., the crusher in Unit 43 stopped functioning. Corey Cline, Underground Maintenance Supervisor, called Sychla on the underground phone and assigned him to troubleshoot the crusher. Sychla traveled to Unit 43 in a utility vehicle and parked in the crusher control panel area (see Appendix A).

At 5:40 p.m. Sychla reset the breaker and put the crusher back into operation. Sychla got into his utility vehicle and began to back out of the crusher control panel area. At the same time, Travis Stigall, Production Operator, who had been operating an LHD loader to clean up overspill from the crusher's feed hopper, was traveling forward into the crusher control panel area with the LHD loader bucket raised approximately 37 inches off the floor. The LHD loader collided with Sychla's utility vehicle, pushing it approximately ten feet forward and causing Sychla to either fall or jump out of the utility vehicle. Sychla was then run over by the front left tire of the LHD loader. The LHD loader was then put in reverse, dragging the utility vehicle underneath the LHD loader bucket for 10.5 feet, until Stigall saw Sychla on the ground.

Stigall called for help using the underground phone and radio. Cline; Michael Duncan, Maintenance Luber/Fuel Man; Bryce Mantz, Maintenance Mechanic; and Eric Ferrer, Underground Production Supervisor, heard the call and went to the accident scene. Stigall attempted to render aid but could not detect a pulse.

At 5:48 p.m., Cline called Eric Hahn, Surface Production Supervisor, on the mine phone. Hahn called 911 at 6:07 p.m. At approximately 6:20 p.m., Cleveland Police, Fire, and Emergency Medical Services (EMS) arrived at the mine. At 7:30 p.m., the Mine Rescue team arrived and went underground with two Fire and EMS personnel. Mine Rescue, Fire, and EMS personnel brought Sychla to the surface where Thomas Collins, Cuyahoga County Medical Examiner, pronounced him dead at 8:50 p.m.

### INVESTIGATION OF THE ACCIDENT

On November 27, 2024, at 5:54 p.m. Hahn called the Department of Labor National Contact Center (DOLNCC) to report the accident. The DOLNCC called Kevin Abel, Assistant District

Manager. At 6:06 p.m., Abel called the mine and issued a verbal order under provisions of Section 103(j) of the Mine Act to ensure the safety of the miners and the preservation of evidence. Carl Graham, Supervisory Mine Safety and Health Inspector, contacted Marty Morris, Mine Safety and Health Inspector, and sent him to the mine. Abel sent Arthur Wall, Mine Safety and Health Inspector, to the mine and assigned him as lead investigator.

At 10:50 p.m., Martin arrived at the mine and modified the 103(j) to a 103(k) order. On November 29, 2024, Wall arrived onsite and met with Morris to continue the investigation. The MSHA accident investigation team conducted an examination of the accident scene, interviewed miners and mine management, and reviewed conditions and work procedures relevant to the accident. See Appendix B for a list of persons who participated in the investigation.

### DISCUSSION

# Location of the Accident

The accident occurred at crosscuts C and 26 of Unit 43.

#### Equipment Involved

The LHD loader involved in the accident was a Caterpillar R3000H, Company Number 332. Investigators examined the LHD loader and determined there were no defects that would have contributed to the accident.

The utility vehicle involved in the accident was a John Deere 6x4T, Company Number 809. The utility vehicle was equipped with a blue flashing strobe light (strobe) that turned on when the vehicle was in forward gear. Investigators examined the utility vehicle and found it was in forward gear, but the damage was too extensive to determine if the strobe was functional at the time of the accident.

### Traffic Control

The mine operator's traffic control policy at the time of the accident prohibited the use of earbuds other than hearing protection but allowed equipment operators to play music "at a level that you can still hear alert systems and other equipment." The traffic control policy also established hazard zones as the area around running mobile equipment, extending to the line-of-sight limits for that equipment. In order to coordinate work with equipment operators, miners must follow this procedure:

- 1. "No vehicle or person shall approach within that hazard zone without first making visual contact with the operator by using a signal to announce their intention to approach. The operator shall acknowledge this signal by putting the vehicle into park position (including putting the bucket or boom on the ground) and turning off the lights. The approaching person must relate his intentions to the operator before proceeding to work in this hazard zone.
- 2. It is the machine operator's responsibility to be aware of the vehicle or person within the hazard zone until they have left this zone. In the event a person is on foot, the operator shall not put the equipment back into operation until the person is in clear view outside of the hazard zone. If visual contact is lost for any reason, the operator will IMMEDIATELY stop the machine and return to park until contact is restored.

3. This does not apply to equipment passing on unobstructed roads unless passing restrictions apply or by production machines passing while in cycle."

Investigators found evidence of music and/or video devices in the LHD loader and utility vehicle but could not determine if Stigall and Sychla were distracted by these devices. Stigall was unaware that Sychla was in the crusher control panel area and therefore communication was not established between the two miners. The mine operator did not place signs or signals that warn of hazardous conditions at appropriate locations, which contributed to the accident.

#### Illumination

The mine operator mounted area lights on the mine roof above the crusher's feed hopper to illuminate the area. Additionally, the headlights on the LHD loader and utility vehicle were on at the time of the accident. Investigators determined illumination was sufficient and did not contribute to the accident.

#### Examinations

Ferrer conducted a workplace examination in Unit 43 on the day of the accident and did not document any hazards. Investigators determined the workplace examination was adequate and did not contribute to the accident.

Stigall conducted a pre-operational inspection of the LHD loader on the day of the accident and did not document any defects. Sychla conducted a pre-operational inspection of the utility vehicle on the day of the accident and did not document any defects. Investigators determined the pre-operational inspections were adequate and did not contribute to the accident.

### Training and Experience

Sychla had over ten years of mining experience, all as an underground electrician at the Cleveland Mine. Stigall had one year of mining experience and seven months of experience operating the LHD loader at this mine. Sychla and Stigall both received training on the mine's traffic control policy. Investigators determined Sychla and Stigall received all training in accordance with MSHA Part 48 training regulations.

#### 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.

<u>Root Cause:</u> The accident occurred because the mine operator did not place signs or signals that warn of hazardous conditions at appropriate locations.

<u>Corrective Action</u>: The mine operator developed and implemented a new written procedure that requires placards to be placed on the entrance to the units and on the placard board that indicate to all miners that an LHD loader is operating in an area and whether authorization is required to enter the unit. Additionally, the mine operator updated the traffic control policy to prohibit any devices or items that could cause a distraction inside the equipment operator's compartment. The mine operator trained all miners on these procedures.

#### CONCLUSION

On November 27, 2024, at 5:40 p.m., Grzegorz Sychla, a 58-year-old electrician with over ten years of mining experience, died after being struck by an underground Load Haul Dump (LHD) loader.

The accident occurred because the mine operator did not place signs or signals that warn of hazardous conditions at appropriate locations.

Approved By:

Peter Montali District Manager Date

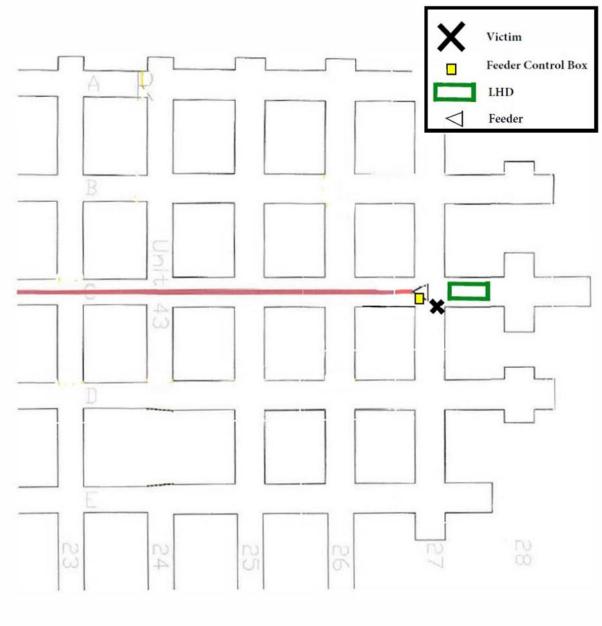
#### ENFORCEMENT ACTIONS

1. A 103(k) order was issued to Cargill Deicing Technology.

A fatal accident on November 27, 2024, at 5:40 p.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.

 A 104(a) citation was issued to Cargill Deicing Technology for a violation of 30 CFR 57.9100(b).

On November 27, 2024, an electrician with ten years of mining experience died after being struck by an underground Load Haul Dump (LHD) loader. The mine operator did not place signs or signals that warn of hazardous conditions at appropriate locations.



APPENDIX A – Unit 43 Crusher Area

### APPENDIX B – Persons Participating in the Investigation

### Cargill Deicing Technology

Eric Ferrer Eric Hahn Corey Cline Travis Stigall Bryce Mantz Michael Duncan Underground Production Supervisor Surface Production Supervisor Underground Maintenance Supervisor Production Operator Maintenance Mechanic Maintenance Luber/Fuel Man

# Mine Safety and Health Administration

Kevin Honeycutt Marty Morris Arthur Wall Staff Assistant Mine Safety and Health Inspector Mine Safety and Health Inspector