

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

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October 9, 2024

SECRETARY OF LABOR,
MINE SAFETY AND HEALTH
ADMINISTRATION (MSHA),
Petitioner,

v.

MORTON SALT INC.,
Respondent

CIVIL PENALTY PROCEEDING

Docket No. CENT 2023-0287
A.C. No. 16-00970-571304

Mine: Weeks Island Mine & Mill

DECISION AND ORDER

Appearances: Tyler Nash, U.S. Department of Labor, Office of the Solicitor, 525 Griffin Street, Suite 501, Dallas, Texas 75202

Donna Vetrano Pryor and Daniel Zimmer, Husch Blackwell LLP, 1801 Wewatta Street, Suite 1000, Denver, CO 80202

Before Judge Simonton

I. INTRODUCTION

This case is before me on a petition for assessment of civil penalty filed by the Secretary of Labor, acting through the Mine Safety and Health Administration, against Morton Salt Inc. (“Morton Salt” or “Respondent”), pursuant to the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. § 801.¹ This case involves two 104(a) citations and three 104(e) orders with a proposed penalty of \$36,594.00 against Morton Salt.

The parties presented testimony and documentary evidence regarding the citations at issue at a hearing held on April 9-11, 2024, in Lafayette, Louisiana. MSHA Inspectors Norman Ryes, Gregory Sensibaugh, O’Neal Robertson, and MSHA Health Specialist Supervisor William “Barry” Clark testified for the Secretary. Eric Gaudreau, the mine’s engineering manager, maintenance manager Jessica Garcia, production supervisors Scott Frith and Brian Provost, electric general foreman James Adam Schooley, miner Jeb Dionne, health and safety manager Fadi Qutaish, and electrician Cody Borque testified for the Respondent. After fully considering the testimony and evidence presented at hearing and the parties’ post-hearing briefs, I **AFFIRM** Citation Nos. 9648939, 9648940 and 9674895 as issued, **AFFIRM** Citation No. 9673196 as

¹ In this decision, the joint stipulations, transcript, Secretary’s exhibits, and Respondent’s exhibits are abbreviated as “Jt. Stip.,” “Tr.,” “Ex. P-#,” and “Ex. R-#,” respectively.

modified to reduce the likelihood of injury or illness to unlikely, reduce the negligence to low, and to remove the S&S designation, and VACATE Citation No. 9674873.

II. STIPULATIONS OF FACT

At hearing, the parties agreed to the following stipulations:

1. The parties have settled Citation Nos. 9674888 and 9674891
2. This docket involves an underground salt mine know as the Weeks Island Mine and Mill (the “Mine”), which is owned and operated by Morton Salt.
3. The Mine, located near New Iberia, Iberia Parish, Louisiana, MSHA Mine ID No. 16-00970, is a “mine” as defined in § 3(h) of the Federal Mine Safety and Health Act of 1977 (“the Mine Act”), 30 U.S.C. § 802(h).
4. The Administrative Law Judge has jurisdiction over this proceeding, pursuant to § 105 of the Mine Act, 30 U.S.C. § 815.
5. Morton Salt has been the “operator” as defined in § 3(d) of the Mine Act, 30 U.S.C. § 802(d), of the mine at which the citation at issue in this proceeding was issued at all relevant times.
6. Morton Salt’s operations have affected interstate commerce at all relevant times.
7. The assessed civil penalties would not independently affect Morton Salt’s ability to remain in business. However, given the mine’s POV status, these citations/orders could result in the mine’s closure.

Tr. 6-7.

III. FINDINGS OF FACT AND CONCLUSIONS

Morton Salt operates Weeks Island Mine and Mill, a domal salt mine located near New Iberia, Iberia Parish, Louisiana. Jt. Stip. 2-3. The citations at issue at hearing were issued by MSHA Inspectors Gregory Sensibaugh, O’Neal Robertson and Norman Ryes during inspections conducted on October 11, 2022, December 7, 2022, December 12, 2022, and December 28, 2022.

A. Citation No. 9648939

i. Factual Background and Summary of Testimony

On September 23, 2022, a front-end CAT loader located in the shop area of the mine caught fire. Tr. 37-38. The vehicle is a smaller loader used for clean-up work, berm building, and moving material around the mine. Tr. 613. It had been tagged out on September 17, 2022, approximately a week prior to the fire, due to suspected electrical problems. Tr. 167, 174. When equipment is tagged out, the tag is placed where a person can see it, such as on the steering

wheel or the master disconnect switch. Tr. 174. Mechanics who work on or perform maintenance on tagged-out machines are trained to turn the machine off once work is complete. Tr. 184. If the power switch is left in an on position, it could cause a short circuit with no one around to attend to it. Tr. 63.

Mechanics from Morton Salt and CAT both worked on the loader while it was tagged out. Tr. 79. Morton Salt maintains a work order list that shows the sequence of tasks assigned to the loader with a description of the issue or concern. Tr. 619. Originally, it was believed that there was an issue with the loader's batteries, but after new batteries were installed, it was determined that the batteries were not the issue. Tr. 78. A Morton Salt employee replaced the batteries on the loader. Tr.167-168, 261. Other parts were ordered to replace the belt tensioners and the idlers. Tr. 78-79, 620.

Inspector Greg Sensibaugh testified that he spoke to the CAT mechanics, Brian Smith and Michael Breaux who told him that when the belt tensioners and idlers arrived, they installed them, checked for codes, and then turned the loader off before going to lunch. Tr. 77-79, 168. When they returned, they saw smoke coming from the battery compartment. Tr. 79, 169. They removed the battery cover and turned the disconnect switch to off to stop the smoke. Tr. 79-80. The CAT mechanics explained they then left the switch in the off position, but did not disconnect the connection, and the loader remained tagged out. Tr. 80, 617. Morton Salt was notified that the loader had been smoking and that the loader needed a replacement battery cable and a new terminal or junction box. Tr. 617-618. The CAT mechanics did no further work on the loader, and there was no record of anyone working on the loader after them. Tr. 81, 620. A couple of days later on September 23, 2022, the fire started. Tr. 81, 171.

Based on Morton Salt's investigation into the fire, the evacuation began immediately after an employee saw smoke. Tr. 165. Fourteen employees who were underground evacuated using the primary escape way and the south doors. Tr. 166. During the evacuation, which was conducted using vehicles, the miners encountered and were exposed to heavy smoke. Tr. 236. Some of the miners were wearing monitors to test for gases such as methane and carbon monoxide, which did not go off during the evacuation. Tr. 223-224.

Sensibaugh was called to Weeks Island on September 23, 2022, after the fire had started. Tr. 30, 38. He used a gas detector that had been calibrated at MSHA's field office to take readings at the mine. Tr. 39-41. These readings reflected that there was elevated carbon monoxide, which is indicative of a fire, and that there was no methane present. Tr. 41. Because Weeks Island is a 2a (or gassy) mine and an active fire is an ignition source for methane, he did not go underground and only went to the exhaust shaft. Tr. 46, 48, 51.

Inspector Sensibaugh continued his investigation on September 26, 2022, after the mine had been cleared and it was safe to go underground. Tr. 49, 52. He took air quality readings underground and inspected the actions Morton Salt was taking to correct loose roof conditions caused by the fire. Tr. 49-50. The air quality readings were normal clean air readings and did not indicate that there was methane. Tr. 50, 135. There was a bit of residual smoke in an abandoned shop area. Tr. 52-53. Carbon monoxide was "a little bit elevated" in the shop. Tr. 54, 135.

On September 29, 2022, Sensibaugh returned again to look at and photograph the loader that caused the fire. Tr. 56-57; Ex. P-23. When examining the loader, he found that the disconnect switch was in the “on” position, which was verified by examining a different loader of the same type. Tr. 59, 95-96. A battery cable and copper wiring were also left lying across a post. Tr. 97. The power switch’s position completed the loader’s circuit and the position of the cable and the wiring allowed the batteries to provide electrical power to the circuit, allowing the machine to run. Tr. 62. Sensibaugh further testified that the fire could not have occurred if the switch was in the “off” position or if the batteries were disconnected because it would have removed the heat source. Tr. 99-100. The machine had a known short circuit, making it critical to remove or isolate the battery from the machine before walking away. Tr. 100. He also noted that there was a lot of salt on top of the battery compartment. Tr. 88; Ex. P-23.

In addition to taking photographs and inspecting the loader, Sensibaugh also conducted interviews with miners who had evacuated as a result of the fire. Tr. 59, 77. He learned that miners encountered heavy smoke when evacuating the mine on the day of the fire and drove through it in order to exit. Tr. 236; Ex. P-22. The inspector testified that the safety hazard associated with going through smoke include the inhalation of carbon monoxide and the possibility that an operator may wreck a vehicle in the heavy smoke and cause a pileup of others attempting to exit the mine. Tr. 67-68. Carbon monoxide, as a toxin, can cause a cumulative effect when it builds up in the bloodstream and cause death hours after exposure. Tr. 44. While the miners were equipped with self-rescuers, which can protect a person from carbon monoxide, no one had put one on. Tr. 68, 71, 140-143. Additionally, an equipment fire can also release other gases in small amounts that can impact human health. Tr. 45.

Eric Gaudreau, the engineering manager at Morton Salt, testified for the Respondent. Tr. 153-154. Previously, he had worked at a CAT dealership as a mining specialist helping an account manager to manage a fleet. Tr. 157. Gaudreau was familiar with the loader that had caught on fire. Tr. 158. He was not at the mine when the fire occurred, but as part of the mine rescue team, he received a call to be on standby. Tr. 159. After the fire, he worked with the local CAT dealership during Morton Salt’s investigation into the fire’s cause to see if there were equipment changes Morton Salt could make to mitigate the cause of the fire. Tr. 163, 209. CAT ultimately determined that the equipment did not need modification. Tr. 209.

He also testified regarding his understanding of the cause of the loader fire, based upon a presentation that he helped assemble. Tr. 164; P-31. Morton Salt believed that the incident was due to the buildup of salt leading components to overheat, short circuit, and start a fire. Tr. 172-173, 184. Morton Salt had been aware of the ability of salt to cause short circuits in electrical components prior to the fire. Tr. 172. At the time of the incident, it was believed that the batteries had been disconnected, but “cable memory,” where stiff cables used to a certain position return to that position, caused the cables to contact the pole of the battery. Tr. 175-177. If the batteries hadn’t been touching the cable, there would have been no fire because a short circuit could not occur if the batteries were disconnected. Tr. 177, 183. Gaudreau did not personally examine the loader or speak with the CAT mechanics or the Morton Salt mechanics. Tr. 171-172.

Morton Salt mechanic Jeb Dionne serviced the loader prior to the fire. Tr. 245, 253. The loader was moved to the shop because it was unable to start. Tr. 254, 260. He removed the

batteries from the loader a week before the fire because they were no longer working. Tr. 253, 261. When the fire started, the loader was in the same place it had been originally parked. Tr. 260.

After the fire, Dionne heard that the junction box had shorted on the loader and caused the fire by creating heat. Tr. 256. He testified that the batteries would need to be connected to start the fire. Tr. 257. Although employees were trained to turn the disconnect off to ensure there would be no power anywhere on the machine and to prevent the batteries from dying, it was common for miners to leave the switch on when they were finished operating it because of “laziness.” Tr. 255, 256, 259-260.

Jessica Garcia, the maintenance manager at Morton Salt, presented an alternate theory for the cause of the loader fire. Tr. 613. She testified that this loader fire was the result of a short circuit, likely due to slight contact with the terminal by something that would normally connect to the battery and the terminal post. Anything touching the frame could complete the circuit. Tr. 631. The top cable of the battery, which comes from the positive terminal, runs through the frame of the loader from the post and connects to the junction box. Tr. 621-622; Ex. R-II. The cable on the other battery also runs through the frame but connects to the negative terminal; the battery was disconnected from this cable. Tr. 622; Ex. R-II. This turns off the negative side of the battery and ensures that there cannot be a full circuit. Tr. 622. Garcia testified that with this setup, there could still be a fire with the disconnect in the “off” position because the cables could still connect the circuit by touching the post or the frame. Tr. 622-623, 630. The accumulation of salt also could have connected the circuit, even if the cables were pulled out of the way. Tr. 623. This theory is based on the premise that the cables were disconnected. Tr. 635. The battery needs cables to be considered a heat source. Tr. 633. If the cables had been disconnected from the terminal blocks, that would be an interruption to the system. Tr. 635.

If the machine was running as it should, she believed that the battery would not need to be separated from combustible material and it would not combust under normal operating conditions. Tr. 625, 627. In a normal operating state, when the switch is off the circuit is incomplete; turning the switch on completes the circuit and sends power throughout the system. Tr. 633-634. It would not be possible to operate the loader without the batteries connected or if the disconnect was in the off position. Tr. 630. The operator had never received a citation for operating the loader when the battery is not disconnected or when the disconnect was not in the “off” position. Tr. 630-631. There were some pieces of equipment at Weeks Island that did not have disconnect switches and the operator had never received a citation related to a failure to disconnect batteries for these vehicles. Tr. 627.

ii. Fact of Violation

The Commission has long held that “[i]n an enforcement action before the Commission, the Secretary bears the burden of proving any alleged violation.” *Jim Walter Res., Inc.*, 9 FMSHRC 903, 907 (May 1987); *Wyoming Fuel Co.*, 14 FMSHRC 1282, 1294 (Aug. 1992). The burden of showing something by a “preponderance of the evidence,” the most common standard in civil law and the standard applicable here, simply requires the trier of fact “to believe that the existence of a fact is more probable than its nonexistence.” *RAG Cumberland Res. Corp.*, 22

FMSHRC 1066, 1070 (Sept. 2000); *Garden Creek Pocahontas Co.*, 11 FMSHRC 2148, 2152 (Nov. 1989).

On October 11, 2022, Inspector Sensibaugh issued 104(a) Citation No. 9648939, which alleged:

A fire occurred on #7 CAT M serial #OJ3R00843 Front End Loader at approximately 6:45 PM on September 23, 2022. The Loader was located in the main shop on the 1400 level. Eighteen miners were underground. The Loader had been in the shop since 9/17/2022 and was tagged out of service for electrical problems. The last work order #60623777 on 9/21/2022 was to replace the battery cables and junction. Post fire the main switch was in the “ON” position and the left battery cable melted into the terminal and top of battery. Fire was the result of a short circuit.

Ex. P-21-1.

Sensibaugh designated the citation as a significant and substantial violation of 30 C.F.R. § 57.4500 that was reasonably likely to cause an injury that could reasonably be expected to be “fatal,” would affect eighteen miners, and was caused by Respondent’s moderate negligence. Ex. P-21-1.

30 C.F.R. § 57.4500 states:

Heat sources capable of producing combustion shall be separated from combustible materials if a fire hazard could be created.

When the inspector conducted his inspection of the loader, he found the disconnect switch in the “on” position and the battery cables looked to be connected. Through Jessica Garcia’s testimony, Respondent contends that a fire event such as this could occur during normal operating conditions and would not constitute a violation. However, these conditions were not normal operating conditions because the loader had been found smoking only a few days prior. Under these circumstances, a reasonable miner would know to leave the disconnect switch off and any combustible material far away. Considering this was a machine that was known to have an electrical issue and that miners were trained to leave the switch in the off position, I affirm that there was a violation of 30 C.F.R. § 57.4500.

iii. Gravity and S&S

The inspector assessed the hazard as reasonably likely to cause a fatal injury or illness. During his testimony, he described how smoke exposure can lead to the inhalation of carbon monoxide and other toxins. He also testified that driving through smoke can lead to vehicle pileups, increasing the time of exposure. As miners did encounter smoke while escaping and did not use self-rescuers, I affirm these designations.

The citation was also designated as significant and substantial. To establish that a violation is significant and substantial, the Secretary of Labor must prove: (1) the underlying

violation of a mandatory safety standard; (2) the violation was reasonably likely to cause the occurrence of the discrete safety hazard against which the standard is directed; (3) the occurrence of that hazard would be reasonably likely to cause an injury; and (4) there would be a reasonable likelihood that the injury in question would be of a reasonably serious nature. *Peabody Midwest Mining, LLC*, 42 FMSHRC 379, 383 (June 2020). The Commission has explained that “the proper focus of the second step of the [S&S] test [is] the likelihood of the occurrence of the hazard the cited standard is designed to prevent.” *Newtown Energy, Inc.*, 38 FMSHRC 2033, 2037 n.8 (Aug. 2016).

I have found that a violation of a mandatory safety standard has occurred. The second step concerns whether the violation was reasonably likely to cause the occurrence of a discrete safety hazard against which the standard is directed, which in this case are fire hazards. A fire did in fact occur, which generated thick, potentially toxic, smoke. The inspector interviewed several miners who stated that they had crossed smoke during the evacuation and that they did not use their self-rescuers. Additionally, escaping in vehicles through dark smoke that is difficult to see through may lead to vehicles crashing and causing a pile-up, delaying evacuation. Based on the facts of the violation, it is reasonably likely that miners would inhale toxic gases, satisfying the second step. These types of occurrences are reasonably likely to cause injuries that would be reasonably serious in nature. I affirm the S&S designation.

iv. Negligence

Under the Mine Act, operators are held to a high standard of care, and “must be on the alert for conditions and practices in the mine that affect the safety or health of miners and to take steps necessary to correct or prevent hazardous conditions or practices.” 30 C.F.R. § 100.3(d). MSHA’s regulations define reckless disregard as conduct which exhibits the absence of the slightest degree of care, high negligence as actual or constructive knowledge of the violative condition without mitigating circumstances; moderate negligence as actual or constructive knowledge of the violative condition with mitigating circumstances; and low negligence as actual or constructive knowledge of the violative condition with considerable mitigating circumstances. 30 C.F.R. § 100.3: Table X.

Sensibaugh assessed the negligence as moderate. The testimony indicates that miners were trained to leave the disconnect switch in the off position and that the Respondent knew the loader had been smoking three days before the fire. The Respondent was also aware of the ability of salt to build up inside electrical components and cause short circuits. As sufficient precautions were not undertaken to prevent a fire, I affirm that the Respondent’s negligence was moderate.

B. Citation No. 9648940

i. Factual Background and Summary of Testimony

In conjunction with Citation No. 9648939, Inspector Sensibaugh issued Citation No. 9648940 for exposing miners to toxic gases from the shop fire. Tr. 101. He testified that the smoke from the fire was ventilated towards where miners from the 1500’ and 1600’ levels were

evacuating, exposing the miners to potentially toxic gases. Tr. 120-121. Twelve miners had to cross through smoke to evacuate. Tr. 109.

The Respondent did not attempt to reverse the air during this fire event. Tr. 131. Inspector Sensibaugh further testified that it “was evident” there was incorrect routing, because the operator used alternative routing for the mine shop exhaust in such a way that it passed through and intersected the escape route. Tr. 108, 149. To prevent smoke exposure, the air should have been routed somewhere else away from where miners would need to egress. Tr. 149-150. After the incident, the operator corrected the routing. Tr. 150-151. MSHA approves ventilation plans and inspectors review them twice per year, but citations are only issued if a problem arises. Tr. 127-128.

When the fire occurred, the mine’s fan was located at the surface, and it had no brake. Tr. 114. Without a manual brake, it would take at least ten minutes to reverse the fan without stalling it or causing damage, which Sensibaugh determined would not be considered rapid reversal in emergency circumstances. Tr. 112, 114-115. There were additional auxiliary fans underground that only push air around an isolated area and were not sufficient for rapid reversal. Tr. 125. At some point, Weeks Island had a fan that was rapidly reversible to comply with the standard, but Sensibaugh did not know when the operator had that fan or when it was taken out of service. Tr. 112.

Inspector Sensibaugh further testified that it is the intention of the standard for miners to not cross through smoke while evacuating. Tr. 129-130. He designated the citation as reasonably likely because miners were in direct contact with smoke from the fire. Tr. 101-102. The severity of the injury from this violation was designated fatal because exposure to toxic smoke and gases were present and miners took it upon themselves to drive through smoke they could not see through and did not don any self-rescue devices. Tr. 102-103. Should a vehicle operator crash while evacuating, it could cause a pile-up and delay others exiting the mine. Tr. 67-68. While miners had been trained to use self-rescuers, which can protect a person from carbon monoxide, no one used one. Tr. 68, 140-143. One miner opened the package but did not put the self-rescuer on. Tr. 71. Inhaling carbon monoxide could cause a fatality by bonding to red blood cells in the blood stream and inhibiting their ability to carry oxygen through the body. Tr. 103-105. The negligence was assessed as moderate because there was a bit of mitigation, as the previous management at the mine had made ventilation changes. Tr. 110, 145. Sensibaugh also thought that the entire process had to be rapid, not just how long it took to turn the fans back. Tr. 130. The standard, however, does not have a definition for “rapid.” Tr. 129, 130.

Eric Gaudreau again testified for the Respondent regarding this citation. Morton Salt complies with the standard by situating the exhaust ventilation shaft within the maintenance shaft and by having a maintenance fan. Tr. 188. The main fan is located at the surface and is

reversible, which he testified is a process that takes around 15 minutes. Tr. 188, 195, 204. Smaller auxiliary fans are placed underground in active headings to direct flow in areas further away from the exhaust shaft. Tr. 188-189. These fans are focused on daily mining activities to move gases out of the room. Tr. 189. Air coming into the shop travels in one direction. Tr. 190.

Before reversing the fan, a manager would need to give approval. Tr. 196, 203, 205. To make that decision, management would need to know where the fire is, where miners are, and why reversal is necessary. Tr. 196-197, 203. During an evacuation scenario, locations of miners working underground may be difficult to pinpoint but miners will gather at cluster points to use Femco phones to get in contact with people on the surface. Tr. 197. But because miners may be working anywhere in the mine, managers need to take time in making the decision to ensure that they have the right information before proceeding with reversal. Tr. 200.

On the day of the fire, Morton did not use the reversible fan, as it was determined that reversing the fan did not make sense based on the fire's location. Tr. 205, 207. Gaudreau learned that miners encountered smoke while evacuating during the investigation into the cause of the loader fire. Tr. 193. In his testimony, he confirmed that there was a way to route the air so that it would not cross over the miners' escape route. Tr. 226-227, 229.

ii. Fact of Violation

On October 11, 2022, Sensibaugh issued 104(a) Citation No. 9648940, which alleged:

Routing air to the exhaust system. If used as an alternative, routing the mine shop exhaust air directly to an exhaust system shall be done so that no person would be exposed to toxic gases in the event of a shop fire. Inadvertently the mine shop exhaust air directed to the exhaust system routed through 9 drift to the #3 shaft intersects "E" which is the escape route to the #4 shaft. During the evacuation of a mine fire September 23, 2022, twelve miners traveled through toxic smoke during their escape.

Ex. P-35-1.

Sensibaugh designated the citation as a significant and substantial violation of 30 C.F.R. § 57.4761(b) that was reasonably likely to cause an injury that could reasonably be expected to be "fatal," would affect twelve miners, and was caused by Respondent's moderate negligence. Ex. P-35-1.

30 C.F.R. § 57.4761(b) states:

Routing air to exhaust system. If used as an alternative, routing the mine shop exhaust air directly to an exhaust system shall be done so that no person would be exposed to toxic gases in the event of a shop fire.

Respondent contends that the citation should be vacated for two reasons. First, Respondent argues that there was no violation because there were two alternative means of ventilation for the mine shop. R. Br. at 16. Concerning this first argument, the parties do not dispute that miners were exposed to smoke while evacuating along the primary escape route. This is explicitly prohibited by the standard, and while it may be true that Respondent had an alternative method to ventilate the mine, they did not use it.

Second, if there is a finding of a violation, Respondent argues that they did not have fair notice of the requirements of the standard because the regulation does not lay out whether a mine may use two separate independent means of ventilation and because MSHA had approved of their ventilation plans in the past without issuing a citation or otherwise raising a concern that the plan did not comply with the standard. R. Br. at 16. The plain language of the statute expressly states that no person should be exposed to toxic gases. This is enough to put the Respondent on notice that no matter how they designed their ventilation plan, they needed to ensure that miners were not exposed to toxic gases while escaping.

I do not find either of these arguments persuasive and I affirm that there is a violation of the standard.

iii. Gravity and S&S

The inspector assessed the hazard as reasonably likely to cause an injury or illness. It is reasonably likely a fire will produce toxic gases that can lead to serious injury. Additionally, the smoke in this case was so thick that evacuating miners could not see the LED lights in the shop. If a vehicle were to crash in this type of smoke, it could lead to a pile-up and delay evacuation. He designated that the injury would reasonably be expected to be fatal, because of the potential for exposure to toxic gases and the effect of carbon monoxide. I affirm these designations.

The citation was also designated as significant and substantial. The Secretary has proven that a violation of a safety standard has occurred. The safety hazards posed by this violation are similar to Citation No. 9648939, which are the inhalation of potentially dangerous gases and the possibility of a vehicle pile-up from driving through thick smoke. As heavy smoke was ventilated across the primary escape path and miners encountered this smoke while escaping, I find that step 2 of the analysis is satisfied. An occurrence of one of these safety hazards is reasonably likely to cause reasonably serious injuries. The S&S designation is affirmed.

iv. Negligence

Sensibaugh assessed the negligence as moderate. Respondent argues that there are several factors that should mitigate the negligence and change the designation to low. R. Br. at 21. First, although the feature was not used during the fire event, the mine's fan was capable of rapid reversal. Second, the Respondent was also not put on fair notice as to the standard's requirements. Third, the Respondent also maintains a written plan of action for fire evacuation. As discussed above, I do not find the Respondent's second argument persuasive. While I agree that the written plan of action and the reversible fan are mitigating factors, it is not enough to reduce the negligence to low given the risks associated with traveling through thick smoke and

Eric Gaudreau's testimony that there was a way to route the exhaust so it would not intersect with the miners' escape route. I affirm the negligence as moderate.

C. Citation No. 9673196

i. Summary of Testimony

Morton Salt maintains an Atmospheric Monitoring System ("AMS") at Weeks Island to monitor methane levels. Tr. 467. The system is comprised of sensors placed underground on the closest non-permissible piece of equipment to detect gases where miners are working. Tr. 467-468, 510. The sensors are grouped and are powered by one of three outstations. Tr. 499, 703-704. When gas is detected, it is reflected on the monitor by a squiggly line. Tr. 494. When methane levels of 0.25% are detected, a low alarm will sound. Tr. 723-724. At methane levels of 0.5%, the system will shut down the power in the mine and an alarm will sound near the monitor screen, which is located on the surface. Tr. 722-723. At any methane level lower than 0.5%, the monitor screen must be read by a person at the surface in order to know the methane level in the mine. Tr. 722. Morton Salt assigns an employee to check the AMS during his shift. Tr. 734.

There are limited circumstances when a miner may be underground without a functional AMS. When the system goes offline or needs to be calibrated, one miner is permitted to be underground near a sensor in order to communicate the sensor's reading to the surface and ensure it is the same as the reading on the monitor. Tr. 505-506. Miners may also go underground after a blast in order to do a gas check and make sure that the mine is safe. Tr. 508-509. Additionally, as long as there is no drilling or cutting and the miners are checking the air on a consistent basis, they are allowed to be underground while the AMS is down. Tr. 507-508. In these circumstances, they use handheld monitors to check for methane. Tr. 508.

MSHA Inspector O'Neal Robertson inspected Weeks Island in response to a hazard complaint made to MSHA. Tr. 461, 466. In part, the complaint alleged that miners were working underground without a functional AMS. Tr. 466; Ex. P-49. When he arrived at the mine, he inspected the AMS room, where he saw that monitors were only working on the 1400' level. Tr. 474. Outstation 2 of the AMS at Weeks Island was unable to give an audible warning to miners underground for two to three hours; the system had shut down because the batteries died. Tr. 467-468, 504-505; Ex. P-51. During this time, miners were sent underground in diesel-powered equipment. Tr. 468. On the night of the incident, the inspector learned that some levels of methane had been detected in the mine, but it was below the limits of what the law requires to prevent miners from going underground. Tr. 503, 515; Ex. P-5. It is normal that there are low levels of gas that do not reach the threshold at Weeks Island. Tr. 518.

Production supervisor Brian Provost informed the inspector that rooms had been shot and blasted that night. Tr. 476-477. After blasting, Morton Salt performed a fire boss and used a monitor to check the methane levels in the mine. Tr. 502. The inspector did not look at the

readings that were taken during the fire boss or have any concerns with the way the fire boss was conducted. Tr. 502, 518. However, the inspector was concerned that the fire boss only checked the rooms that were blasted, and there was a possibility that methane of unknown levels could have been in other rooms that weren't cleared. Tr. 515.

There was a period of time where the system was operating on back up power and a period of time when outstation 2 went offline completely. Tr. 521-522, 526-527. Miners were underground when outstation 2 was not functioning, although the inspector did not know how many miners were on shift at the time. Tr. 476, 523, 526. The workplace exams reflect that miners were underground doing active work during the time when the AMS was powered by backup batteries, but that work was unlikely to liberate methane. Tr. 489, 494-495, 504. Without working monitors, however, miners could inadvertently take diesel-powered equipment with a high exhaust system into a methane-rich environment. Tr. 510. Diesel equipment can emit particulate from the exhaust system that can be an ignition source for methane. Tr. 509. To ensure the safety of the miners, the inspector would have kept everyone on the surface until the operator knew that all the monitors were working with power in its regular function. Tr. 536-537.

Robertson issued a citation because miners were working underground without a functioning AMS system. Tr. 490; Ex P-48. Tr. 490. As a colorless, odorless gas that is explosive, there are many hazards associated with methane. Tr. 465. The AMS at Weeks Island was determined to not be fully functional at the time of the citation because it was being powered by backup batteries. Tr. 465. While the regulations do not define what is fully functional or explicitly state that using the AMS on battery backup does not make it fully functional, the inspector interpreted the regulations to mean that the system should run on electricity and that a battery backup is intended as a safety feature so that the system is still operational for evacuating miners in the event of electricity failure. Tr. 465-466, 504, 520. Operating on backup battery power is an indicator that there are components that failed and the system is not working properly. Tr. 521. There was also a period of time where outstation 2 was without power completely. Tr. 526-527. He designated the citation as reasonably likely to cause an injury or illness because miners could enter an area with non-permissible equipment and potentially cause an ignition. Tr. 469. He assessed the injury as fatal because a methane ignition is usually fatal and causes an explosion and the negligence as moderate crediting the operator for training their employees. Tr. 469-470.

Brian Provost, the production supervisor on duty at the time of the citation, testified for the Respondent. He was working the graveyard shift on December 3, 2022. Tr. 696. The mine had been blasted on the previous shift to knock down some loose rock, which killed the power in the mine. Tr. 697. When the power tripped in the mine, the previous shift's supervisor called an electrician on the surface to restore power. Tr. 698. When that did not work, the supervisor returned to the surface. Tr. 698. There were loaded faces that were then shot. Tr. 719. Provost was not on shift for any of the blasting. Tr. 719. He did conduct the fire boss which did not

indicate that there were any gases. Tr. 698-699, 734. If he had found methane, he would not have allowed miners to enter the area if he had gotten high methane readings. Tr. 734.

After the fire boss, Provost called down the maintenance supervisor and an electrician to start the generator to power the methane monitor system. Tr. 699. Outstation 1 was on generator power while outstations 2 and 3 were on battery backup. Tr. 704. Provost testified that the system works the same, no matter what type of power it is on. Tr. 705. If the AMS detects methane and needs to power off, it can still do so on battery power. Tr. 705. The Femco phones were working on that day, and people on the surface could give a warning to those underground if needed. Tr. 705-706.

After ensuring that the AMS was online and active, he called the crew down at 3:00 a.m. Tr. 699. When the crew came down, Provost gave them their job assignments, which were on different floors. Tr. 700. Approximately eight to eleven miners were under his supervision that night, but there were other miners underground that were not under his supervision. Tr. 714. Provost was in communication with the maintenance supervisor regarding where the miners' locations were underground. Tr. 714. The job assignments that night were not likely to liberate methane. Tr. 700-701.

Provost testified that the time shown on the monitor was incorrect and outstation 2 actually went offline at 4:43 a.m. rather than at 3:43 a.m. as the inspector believed. Tr. 707. While the inspector believed that the AMS was without power for two or three hours, the actual time was closer to an hour and a half. Tr. 726. When outstation 2 went offline, it was no longer able to detect methane, and someone would need to see the monitor to know when it went offline because there would be no alarm in that situation. Tr. 724-725. When Provost learned that the power source to outstation 2 failed at 6:00 a.m., everyone underground was brought to the surface. Tr. 708, 721. One miner had been working in the 1600' level of the mine, the area that is monitored by outstation 2, but he had been picked up before the outstation went offline. Tr. 736. To get to one of the areas where miners were working, they would need to go through an area of sensors that were powered by outstation 2. Tr. 731-732. Miners did not have, and are not required to, have methane monitors on their person. Tr. 733.

ii. Fact of Violation

On December 12, 2022, Robertson issued 104(e)(1) Citation No. 9673196, which alleged:

The atmospheric monitoring system ("AMS") for the mine was found not fully functional. The atmospheric monitoring system was not able to give audible or visible warnings to the miners working underground for approximately 2-3 hours for the graveyard shift on 12/03/2022. The crew was called underground at approximately 3:00 to work underground without the mine having power and the

(AMS) on battery backup power. Miners were sent in the working areas in the 1500-, and 1600-foot levels on diesel powered equipment to remove non permissible equipment from the areas and to perform other tasks. This condition left the miners working in these areas with unknown mine hazards at the time they were in the working areas, this condition exposes the miners to fatal injuries if a fire or a methane release was to occur without having a warning device.

Ex. P-48-1.

Robertson designated the citation as a significant and substantial violation of 30 C.F.R. § 57.22301 that was reasonably likely to cause an injury that could reasonably be expected to be “fatal,” would affect ten miners, and was caused by Respondent’s moderate negligence. Ex. P-48-1.

30 C.F.R. § 57.22301 states in its entirety:

(a) An atmospheric monitoring system shall be installed to provide surface readings of methane concentrations in the mine atmosphere from underground locations. Components of the system shall be approved by MSHA under the applicable requirements of 30 CFR parts 18, 22, 23, and 27; or be determined by MSHA under 30 CFR part 18 to be intrinsically safe or explosion-proof.

(b) Atmospheric monitoring systems shall— (1) Give warnings on the surface and underground when methane at any sensor reaches 0.5 percent or more, and when power to a sensor is interrupted. Warning devices shall be located so that they can be seen and heard by a person designated by the mine operator; and (2) Automatically deenergize power in affected areas, except power to monitoring equipment determined by MSHA to be intrinsically safe under 30 CFR part 18, when methane at any sensor reaches— (i) 1.0 percent in a Subcategory I–A or V–A mine; or (ii) 0.5 percent while persons are underground and 1.0 percent during blasting in a Subcategory II–A mine. Timing devices are permitted to avoid nuisance tripping for periods not to exceed 30 seconds, except during blasting or the ventilation time following a blast in a Subcategory II–A mine.

(c) Atmospheric monitoring systems shall be checked with a known mixture of methane, and calibrated, if necessary, at least once every 30 days. Certification of calibration tests shall be made by signature and date. Certifications of tests shall be retained for at least one year and made available to authorized representatives of the Secretary.

The Secretary argues that there was a violation of the standard because miners were sent underground while the AMS was operating on backup battery power and that the battery backup is supposed to function as a safeguard when miners are already underground should the system lose power. Nothing in the plain reading of the standard, however, defines what it means to have a “fully functional” AMS or states that it is a violation if the AMS is operating on backup battery power. Further, testimony from Brian Provost demonstrates that the AMS functions the same no matter what type of power it is using. While it may be more prudent to reserve battery power for emergency situations, a plain reading of the standard does not mandate a violation for operating on a backup power source.

The evidence does indicate, however, that outstation 2 lost power at 4:43 a.m. and that the mine was not evacuated until 6:00 a.m. As miners were underground for one hour and fifteen minutes while an outstation was without power, leaving those sensors unable to detect methane, I find there is a violation of 30 C.F.R. § 57.22301.

iii. Gravity and S&S

The inspector assessed the hazard as reasonably likely to cause a fatal injury or illness. Ex. P-48-1. As discussed above, the Secretary of Labor did not prove that the entire AMS was not functional for two to three hours. In fact, the evidence demonstrates that one outstation was without power for an hour and fifteen minutes. This particular outstation powered sensors for the 1600' level and two sensors on the 1500' level and there was no indication that miners were working on this level while the outstation was down. The only miner on the 1600' level had been picked up prior to the outstation losing power and there was no evidence that miners were near the two sensors on the 1500' level while the power was out. I am lowering the likelihood of injury or illness from reasonably likely to unlikely. The inspector did testify regarding the danger of methane as an ignition source. Therefore, I affirm the severity of the injury as fatal.

The citation was also designated as significant and substantial. However, the analysis fails at the second step, as the facts of the violation are not reasonably likely to cause the occurrence of a discrete safety hazard. As a result, I am removing the S&S designation.

iv. Negligence

The negligence was assessed as moderate, with the inspector crediting the Respondent for training. However, the production supervisor was not notified that the outstation had lost power until 6:00 a.m., at which point he immediately evacuated the mine. I credit this quick action and am lowering the negligence to low.

D. Citation No. 9674873

i. Summary of Testimony

Inspector Norman Ryes, who has nine years of experience as an inspector, issued this citation when a splice, or repair, in a 4160-voltage cable failed. Tr. 263-266; Ex. P-1-1. The cable needed to be spliced after a falling scale damaged it the night prior to the splice's failure. Tr. 266, 269. The cable was located near the man cage, which is accessed by miners every shift to enter and exit the mine. Tr. 270-271. When the splice failed, there was no evidence of copper vapors, exposed copper conductors or copper splatters in the cable, which can be hazards associated with splice failure. Tr. 355-356. The inspector did not know the volume of copper vapor that was generated or expelled by the fault, or if there was any copper vapor generated at all. Tr. 357

Ryes was at the mine in the shop area when the splice failed, causing the shop to lose power. Tr. 266. He spoke with Adam Schooley, the electrical general foreman at Weeks Island, about the cause of the failure in the splice. Tr. 271-272, 362. Ryes testified that Schooley told him that the splice failed due to oil, and that any traces of oil in the splice was from the electrician's carelessness. Tr. 271-272, 362. Electricians are supposed to use clean hands when doing this type of splice to a high voltage cable. Tr. 280.

When the splice was brought to the surface, Ryes examined it but did not take custody of it. Tr. 276-277, 291. He recorded notes and information about the splice, such as the megger reading. Tr. 277. While he did not understand the meaning of the information, he recorded it to consult with others at MSHA about the areas he was unfamiliar with. Tr. 277-278. He took photos of the splice that depict the broken strands of the ground wire, the crimps, and showed where the outer jacket was pulled apart. Tr. 281-282; Ex. P-3. The splice was positioned vertically and could not be laid flat. Tr. 280. Normally, a splice would be performed by lying the cable flat, but this splice was made while the cable was hanging in the air. Tr. 281.

Inspector Ryes returned with another inspector, O'Neal Robertson, to help with the investigation. Tr. 291. Inspector Robertson took a video cutting the splice open. Tr. 291. Respondent's electrician Rob Freeman, production supervisor Scott Frith, and a miners' representative were present from Morton Salt when the video was taken. Tr. 291. Inspector Ryes did not interview Cody Borque, the contracted electrician who repaired the cable. Tr. 361.

Ryes interpreted the regulation to mean that if a splice fails, it is an automatic violation. Tr. 290. The fault came at the splice because it was the weakest part of the cable. Tr. 290. Ryes testified that the cable was not mechanically strong because there was a fault. Tr. 365. He assessed the citation as reasonably likely, because the splice was hanging against a handrail where miners waiting to enter the cage may lean against it. Tr. 273. If miners had been present when the splice failed, they may have been subject to an arc flash that could cause blindness, eyesight damage, hearing damage, or burns. Tr. 274. However, he did not know if an arc flash did in fact occur during this fault. Tr. 363. The negligence was assessed as moderate because Morton Salt decides who can perform splices and the inspector was told only permitted qualified electricians do so. Tr. 275, 360. After the investigation was conducted, the citation was modified to the whole standard rather than just subpart a, and the cited practice or condition was modified to say that the insulation on the splice was not equal to or greater than the original. Tr. 294-295; Ex. P-1-2. Inspector Ryes also modified the citation to indicate that the only area that lost power was the shop. Tr. 295.

William Barry Clark is a safety specialist supervisor with one and a half years of experience at MSHA and testified for the Secretary regarding this citation. Tr. 375. Previously, he worked as an electrical safety specialist and performed general inspections along with specialty

electrical audits. Tr. 376. He has been an electrical specialist his entire tenure at MSHA and has an electrical certification. Tr. 379-380.

He has conducted approximately 350 4160-voltage cable installations and 100 4160-voltage cable splices. Tr. 428-429. A splice on a 4160 cable is a very specific task that not all electricians are trained to perform. Tr. 447-448. Clark explained in his testimony the importance of following the instructions in the splice kit. Tr. 388-389. The insulation applied to the splice must be at the same degree as what came from the manufacturer on the original cable. Tr. 388. The splice needs to be cleaned, the crimps need to be staggered so they don't rip together, and the shielding must be put back on so there is not excess current buildup and so the integrity of the insulation will hold. Tr. 389. Additionally, the cable should be flat to make performing the splice easier. Tr. 452. When the failure in the splice occurred at Weeks Island, he was contacted by Inspector Ryes because he has more experience and Ryes wanted a better understanding of the hazards associated with 4160 splice failures. Tr. 381.

Clark did not physically inspect the cable and only reviewed photographs and the video taken of the splice being cut open. Tr. 382, 430, 432; Ex. P-4, P-10. He determined that the splice was not mechanically strong due to the way the crimps were made. Tr. 398, 409-410. The crimps on the failed splice were knotted and close together. Tr. 413, 416. It was obvious to Clark where the splice failed because there was carbon track, and the insulation was gone. Tr. 405, 407. When asked on cross examination whether the failure would be instantaneous Clark replied "could be, could not be, depending on the current." Tr. 459. He testified that there was no shielding on the splice because he could not see remnants of shielding on the failed splice in the photographs. Tr. 410; Ex P-4. He also testified he did not see a semiconductor in the photographs taken of the failed splice. Tr. 400-401; Ex. P-4. The semiconductor shield also appeared to be missing, which helps the insulation process bleed off excess voltage and current. Tr. 401. He did not have measurements of the insulation on the original cable or on the splice at the time of failure but testified that the failure indicated the splice was not insulated properly. Tr. 412, 432. The splice kit used to repair the splice would have had these materials and the instructions on the splice kit stated that a shield should be applied. Tr. 402-404, 425; Ex. P-8.

Clark's interpretation of the cited standard requires that the splices be mechanically strong, have equal to or greater than the same insulation value as what the manufacturer was, and all the bonding be mechanically strong. Tr. 385. For a splice to be mechanically strong, the crimps need to be made correctly, or the splice will blow apart. Tr. 386-387. The effects of a bad crimp include not getting the full surface area, which can cause the current conductor to come out of the splice and form a direct short. Tr. 387, 408-409. When the crimps are stacked together rather than staggered, the insulation will also not work, and the splice will short out. Tr. 414; Ex. P-66-C. He did not participate in the decision to write the citation. Tr. 432. However, in support of issuing inspector Ryes' decision to issue the citation, Clark testified on cross examination that

he thought section (b) of the standard which specifically addresses insulation was violated and that it was “possible” other sections of the standard may have been violated as well. Tr. 431.

Regarding the hazards posed by a failed splice, Clark testified that electrocution, the flow of electricity through a person, can cause defibrillation or otherwise cause a fatality. Tr. 389-390. A failed splice can also create an arc flash, an explosion that occurs from phases coming into contact with each other or the ground. Tr. 391. Arc flashes can cause burns, hearing loss, and the inhalation of toxins or molten metal. Tr. 391-392. This can cause fatalities or other long-lasting effects. Tr. 392. Inspector Ryes told him that the splice was located at the cage when it blew. Tr. 416. Clark was concerned because the miners congregate at the cage each shift. Tr. 417. If someone was within 15 to 20 feet when it blew, they could be exposed to the hazards of an arc flash. Tr. 417-418. There are also multiple metal objects around the cage, and if an arc flash caught part of the metal, it could have caused it to go flying and injure someone. Tr. 418. Copper flakes were also visible in the photos, which presents a hazard to miners if inhaled. Tr. 408.

Inspector Clark also gave testimony regarding his experience with instantaneous trips or relays. Tr. 419. Depending on the current applied, the trip can be one to two seconds, but it could be possible that any instantaneous trip can occur in less than a second if it has the right technology. Tr. 421-422. Clark did not know what kind of technology this cable had. Tr. 422. Injuries from an arc flash, however, can occur in less than one second. Tr. 423. Even with an instantaneous relay of 16 milliseconds, like Morton Salt claims to have on the cable with the failed splice, splice failure can still create an arc flash depending on other variables such as maintenance. Tr. 435.

Cody Borque, a master electrician at Dixie Electric and the person who performed the failed splice, testified for the Respondent. Tr. 638-639, 641. He has been an electrician for 16 years and has performed approximately 300 4160 voltage splices. Tr. 639, 642. Borque performed the splice using a splice kit that he had assembled, and he testified that he made sure the insulation in the splice kit was at least equal to the original. Tr. 646-647. When he performed the splice, he cleaned the interior of the cable using a substance known as Lectra Clean and some clean rags. Tr. 644. Borque understood the importance of clean hands when working on a splice because moisture or oil on the hands can cause the splice to fail. Tr. 643, 675. Borque testified that he always wears gloves when splicing. Tr. 675. The splices on the repair were staggered, which he stated is not necessary to do, and he testified that he would not have completed the repair without using a shield. Tr. 674-676. The cable was hanging vertically about five and a half feet above the ground while it was repaired. Tr. 642, 673-674. The splice took one hour and forty-five minutes to two hours to repair, which Borque stated is the fastest he could complete the repair while still doing a good job. Tr. 649.

Borque became aware there was a failure in the splice eighteen hours after he repaired it. Tr. 648. He believed that the splice was mechanically strong, because a bad splice would have blown right away. Tr. 649. He could not say why the failure occurred. Tr. 649-650. Because there was an instantaneous trip monitor on the cable, he did not believe there was any risk of electrocution because a failure would have tripped the circuit. Tr. 650, 658.

In December 2022, Borque gave a written statement to Morton Salt that detailed his understanding of the sequence of events that occurred when he made the splice at the request of Adam Schooley. Tr. 654-655, 659; Ex. R-L. He testified that this statement was accurate. Tr. 657. Notably, while he wrote that he cleaned the splice itself, he never wrote that he cleaned his hands prior to working on the splice. Tr. 655; Ex. R-L. He also did not mention shielding in his statement but testified that he did shield the splice and that it was visible in photographs of the failed splice. Tr. 660, 673; Ex. R-L. The shielding in the photo of the failed splice was black, because it was covered in soot, but was silver originally. Tr. 666-667. He testified that he should have written down that he used shielding in his statement. Tr. 673.

James “Adam” Schooley oversees all electrical, underground maintenance, surface maintenance, construction, mine advances, power moves, safety and discipline of electricians, and the scheduling, managing, and materials at Weeks Island. Tr. 742-743. He was responsible for hiring Dixie Electric and has worked with Cody Borque in the past. Tr. 743. He assigned Cody Borque to repair the power cable eighteen hours before the splice failed because the cable had been hit by a scale. Tr. 753-754. Splice kits on site at the time of the incident, were put together by Cody Borque, including the instructions and the materials. Tr. 752-753; Ex. R-J. Borque had told him he did the splice correctly when Schooley questioned him about it. Tr. 760.

When Schooley arrived, MSHA had already finished investigating the failed splice and Schooley could only look at photos of the failure. Tr. 754. He did examine the cable after it was cut up during the MSHA inspection and did not see any problems with the splice or anything to indicate why the splice failed. Tr. 757, 759, 760, 776. He later performed a Root Cause Analysis of the failed splice which concluded that Borque had correctly performed the splice. Tr. 757; Ex. R-I. It was determined that the splice had 3/16th insulation, which is greater than the 1/8th insulation on the original cable. Tr. 759. The cable failed eighteen hours after the splice, which indicated to Schooley that the splice had in fact been done correctly because otherwise the failure would have been instant. Tr. 761-762. He testified that he did not tell the inspector that there was oil in the splice. Tr. 766. He did state that while it was a possibility that oil had been in the splice, there was no way to tell. Tr. 767. In his testimony, Schooley stressed that cleaning is the most important step in repairing a cable. Tr. 744.

Schooley speculated that moisture got in the cable while it was being repaired, because the shaft could have accumulated moisture over time due to the humidity. Tr. 776-777. If

something like oil or moisture got in the splice, it could not be detected by the naked eye. Tr. 787. During the repair, the splice would have been exposed to open air. Tr. 787-788. Moisture causes tracking, which is electricity tracking to another phase or the ground and causing it to creep. Tr. 789. If moisture had gotten in, then it would have taken time for the splice to fail and the cable to blow. Tr. 790. A cable is supposed to be dry and clean during a splice and he has never known moisture to get inside of a cable previously. Tr. 778-779.

The cable in question had a relay with instantaneous monitoring set to trip at 16 milliseconds should a failure be detected. Tr. 763-764. Schooley did not believe there was a risk of electrocution or arc flash because of this instantaneous trip system and the lack of contact with metal. Tr. 764-765. There was no evidence of an arc flash, charring, or shrapnel and no one reported an arc flash. Tr. 765. While the cable had a hole in it, if an arc flash had occurred it would have been completely open. Tr. 766.

ii. Fact of Violation

On December 7, 2022, Inspector Ryes issued 104(e)(1) Citation No. 9674873, which alleged:

Permanent splices and repairs made in power cables, including the ground conductor where provided, shall be mechanically strong with electrical conductivity as near as possible to that of the original. The splice in the 4160 volt cable which supplied power to the shop area located as the #4 shaft near the man cage was not mechanically strong as that of the original. On 12/05/2022 at 18:05 there was failure in the splice causing power outage in the mine underground. The cable had been previously repaired. Miners congregate at this area (#4 shaft @ 1400ft level) on every shift (3) to enter and exit the mine. This condition exposes mines to fatal injuries from toxic copper vapors along with extreme heat and arc flashing.

Ex. P-1-1.

Ryes designated the citation as a significant and substantial violation of 30 C.F.R. § 57.12013(a) that was reasonably likely to cause an injury that could reasonably be expected to be “fatal,” would affect one miner, and was caused by Respondent’s moderate negligence. Ex. P-1-1.

Notably, the citation was modified the next day on December 8, 2022. Ex. P-1-2. The cited standard was adjusted to the entirety of 30 C.F.R. § 57.12013, rather than subpart (a). The condition and practice portion of the citation was also modified to read:

The permanent splice and repair made to the 4160 volt cable which supplies power to the maintenance shop area located at the #4 shaft at the 1400ft level near the man cage was not insulated to a degree at least that of the original. On

12/05/2022 at approximately 6:05pm (CST) the splice failed causing power outage in the mine underground. Miners congregate at this location for various purposes as it serves as the primary entry and exit to the 1400ft level of the mine, and free for access throughout each shift for the miners as needed. This condition exposes miners to fatal injuries from toxic copper vapors along with extreme heat and arc flash.

Ex. P-1-2.

30 C.F.R. § 57.12013 states that:

Permanent splices and repairs made in power cables, including the ground conductor where provided, shall be (a) mechanically strong with electrical conductivity as near as possible to that of the original; (b) insulated to a degree at least equal to that of the original, and sealed to exclude moisture; and, (c) provided with damage protection as near as possible to that of the original, including good bonding to the outer jacket.”

At hearing, testimony from the Secretary’s witnesses focused primarily on the strength of the splice’s mechanical crimps and subpart (a) of the standard. However, the cited condition or practice was modified to focus *only* on subpart (b), the insulation of the splice on the repaired cable, and not on the mechanical strength of the splice. Clark, who did not physically inspect the cable and relied on reviewing photographs and video of the splice being cut open, testified that it was *possible* for the other sections, subparts (a) and (c), to have been violated. I find this testimony insufficient to meet the Secretary’s burden of proof by a preponderance of evidence. Respondent’s witness Schooley who actually observed and conducted a root cause analysis of the splice after MSHA cut it open testified convincingly regarding subpart (b) of the standard, the adequacy of the insulation on the splice. His testimony was consistent with Borque’s testimony describing in detail how he performed the splice. Together Schooley and Borque’s testimony in this regard was straightforward, unequivocal and persuasive.

It is critical to note the splice failed eighteen hours after the repair was conducted. This fact is uncontroverted. The Secretary did not adequately address this fact in the presentation of the case. Respondent’s witnesses testified persuasively and without equivocation that if there had been an issue with the shielding or insulation, or if the splice was not mechanically strong, the splice failure would have been instant. While Clark did state on cross examination a crimp failure, “could be or could not be” instant depending on the current no other testimony or evidence was proffered by the Secretary to address the eighteen-hour delay. Specifically, the Secretary failed to address or provide an adequate explanation as to how a splice with insufficient insulation or that was not mechanically strong could fail eighteen hours after repair as opposed to instantaneously. I find that the Secretary did not meet her burden to prove that the insulation on the failed splice was not equal to or greater than the insulation on the original, in accordance with the modified practice or condition. Accordingly, I vacate the citation.

E. Citation No. 9674895

i. Summary of Testimony

Respondent's current safety superintendent Scott Frith was a production supervisor when this citation was issued. Tr. 540-541. He explained on cross examination that scales are any kind of loose material that is ready to fall from a certain height and are hazardous because they could lead to injury depending on the size and thickness. Tr. 598. Training documents from Morton Salt state that there is an inability to predict when scales can fall which make them one of the most serious hazards. Tr. 599; Ex. P-62. To combat the hazards of scales, the mine should be examined to identify scales and other dangerous conditions.

Inspector Ryes testified that a ground control examination is a special examination to identify and test hazards that takes place after blasting and should be performed by trained experienced personnel. Tr. 297, 298, 335. Hourly miners can perform ground control examinations if they have been trained and are experienced. Tr. 329. Mines aren't required to document ground control inspections. Tr. 330, 583. A workplace examination on the other hand examines for all kinds of hazards and should be done before work takes place in the area the miner is assigned to work. Tr. 297. Workplace and ground control examinations are separate examinations, however, if they are performed by someone qualified, they may take place at the same time. Tr. 335-336, 583. Morton Salt's new miner training, refresher training, and annual training all address and review ground control issues, procedures for working safely, and hazard recognition. Tr. 339-341; Ex. R-W.

Ryes issued this citation after finding several ground conditions near the screen plant that were obvious and hazardous. Tr. 296; Ex. P-11. He first found loose ground that had fallen from a scale near tower 3 and the screen plant. Tr. 298-299; Ex. P-17. The loose ground was right in front of the door to the MCC, which houses electrical equipment and is accessed every shift. Tr. 313-314. When the inspector identified the conditions from the ground using his spotlight, he climbed a ladder to get a better view. Tr. 300-301, 308-309. He identified a crack that had opened up the higher he went, indicating that the condition had existed for a while. Tr. 301, 321. The inspector testified that while he was using his spotlight, when he first observed the conditions, the conditions still could have been seen without turning on the spotlight and were obvious. Tr. 308, 309-310. The inspector had the operator put up barrier tape, around fragments that had fallen on the ground. Tr. 310.

It was significant to Inspector Ryes that the conditions were near the MCC, where miners go in and out of the building. Tr. 310. One person was doing clean up in the area and there was another obvious condition on the other side of the room where miners were working. Tr. 311-312. The miners present were not trained to do ground control examinations and were only trained to do workplace examinations. Tr. 297, 337. Because the conditions were so obvious, it

appeared that no one had conducted ground control examinations in the area. Tr. 319-320. If they had done a proper ground control examination, the area would have been barricaded off. Tr. 312. The inspector did not know if someone had observed and checked the scales prior to the inspection. Tr. 349.

Ryes reviewed the workplace examination cards that showed that the miners had looked for ground conditions. Tr. 330-332. Ex. P-18, P-19. A miner who spoke to the inspector said that they are trained to look for trip hazards and scales when they get to the job site. Tr. 322. Miners also informed the inspector that they can only see what their equipment allows; they had only cap lamps and not spotlights. Tr. 296. While miners do shine their lights on the ribs, the cap lamps limit how far they are able to see. Tr. 322. Previously, miners had requested better lights, which were only provided to management. Tr. 323. The inspector also spoke to temporary supervisor Steven Hebert about the ground control issues in the area. Tr. 298. Hebert told the inspector that everyone is required to do an examination before work takes place. Tr. 299. He confirmed that miners do not carry spotlights, and that if a miner's light does not illuminate a hazard, they probably will not look there otherwise. Tr. 299-300.

Frith, who was a production supervisor at the time the citation was issued testified that to comply with the cited standard, Morton Salt checks and tests for anything found that is questionable and by training their employees to inspect and examine the grounds. Tr. 579. Everyone at Weeks Island is qualified to examine ground conditions, and Morton Salt maintains a list that is provided to MSHA of employees who are qualified to test ground conditions. Tr. 575, 577, 579; Ex. R-S. Miners are trained to observe conditions from the ground level, although they are free to go higher if they think it is necessary. Tr. 604, 610-611. If a miner finds a concern for them while doing ground control, they are trained to try and take care of it, or otherwise barricade the area and report it to their supervisor. Tr. 586-587. Additionally, miners have work stop authority when they encounter a condition they feel uncomfortable with to seek out a supervisor or fellow employee to help them manage the concern. Tr. 608-609. Miners are not required to carry a spotlight, but they have access to them upon request. Tr. 562, 602. Spotlights are stocked in the storeroom and a request for a stronger light has never been refused. Tr. 562, 587.

Additionally, Frith explained Morton Salt provides training on workplace examinations, which includes looking at ground conditions underground. This training occurs during new miner training, refresher training, or during safety meetings. Tr. 549, 555; Ex. R-W. Miners are quizzed throughout the training to check their understanding of the material. Tr. 556-557. Frith did not know the process for verifying when a miner has enough experience to test for ground conditions. Tr. 608. Morton Salt was not required to provide any additional training in order to abate the citation. Tr. 580. In addition to training, the mine's safety unit meets once per week and covers a variety of topics during their meetings. Tr. 553-554. The topics may include workplace

examinations, equipment inspection, prevention of accidents, hazard recognition, and barricades. Tr. 555; Ex. R-X.

Safety rules are enforced through coaching and discipline. Tr. 559. Management conducts audits underground to ensure that miners are performing their workplace examinations and miners incur corrective action or discipline for failing to complete workplace examinations. Tr. 549, 559-560; Ex. R-BB. Morton Salt further incentivizes miners for finding and reporting safety defects through a rewards program. Tr. 558; Ex. R-V.

Frith accompanied the inspector when the citation was issued. Tr. 581. Concerning the ground conditions observed by the inspector, Frith did not believe that the scales were obvious or that they constituted loose ground. Tr. 584-585, 600. He testified that scale was only noticeable from the third or fourth floor of the deck and it would be difficult for a miner to identify the condition from the ground. Tr. 603-604. When Morton Salt employees tried to remove the scale, they could not remove it with scaling boards or airbags and no material came down. Tr. 585. On the day of the citation, workers had conducted workplace examinations, including the ground conditions in the area. Tr. 581-583; Ex. P-18, P-19.

Frith also testified about an investigation Morton Salt conducted into Inspector Ryes regarding comments Ryes made about the firing of his nephew. Tr. 567-574. However, during the hearing it was revealed and is undisputed that Ryes' nephew was terminated on March 10, 2023, three months after the citation was issued. Tr. 595-596; Ex. P-11-1.

Fadi Qutaish, a health and safety manager at Morton Salt, also testified for the Respondent. Tr. 791-792. He has 14 years mining experience. Tr. 792. As part of his job responsibilities, he regularly interacts with MSHA inspectors. Tr. 793. He testified that Morton Salt did not have to do any new training to abate the ground control training citation. Tr. 795. He gave the list of qualified employees that could test ground control to Inspector Ryes. Tr. 795; Ex. R-S. He also tried to provide training documents to the inspector to prove that there were people present who were trained and qualified to test for ground conditions when the citation was issued. Tr. 797; Ex. R-T. All miners are trained to examine ground conditions. Tr. 798. While they are new, they are paired with an experienced miner until they are comfortable performing their job duties, which includes testing for ground conditions. Tr. 798.

ii. Fact of Violation

On December 28, 2022, Inspector Ryes issued 104(e)(1) Citation No. 9674895, which alleged:

Persons experienced in examining and testing for loose ground shall be designated by the mine operator. Appropriate supervisors or other designated

persons shall examine and, where applicable, test ground conditions in areas where work is to be performed, prior to work commencing, after blasting, and as ground conditions warrant during the work shift. There were scales and loose ground conditions found on the north rib near tower #3 between the MCC and the take up located in the screen plant underground that were not identified prior to work commencing in the immediate area. This condition exposes miners to fatal injuries if the loose ground were to fall while miners were in the area.

A written Notice of Pattern of Violations No. 9679401 was issued by MSHA on 12/01/2022.

Standard 57.3401 was cited 4 times in two years at mine 1600970 (4 to the operator, 0 to a contractor.)

Ex. P-11-1.

Ryes designated the citation as a significant and substantial violation of 30 C.F.R. § 57.3401 that was reasonably likely to cause an injury that could reasonably be expected to be “fatal,” would affect one miner, and was caused by Respondent’s moderate negligence. Ex. P-11-1.

30 C.F.R. § 57.3401 states that:

Persons experienced in examining and testing for loose ground shall be designated by the mine operator. Appropriate supervisors or other designated persons shall examine and, where applicable, test ground conditions in areas where work is to be performed, prior to work commencing, after blasting, and as ground conditions warrant during the work shift. Underground haulageways and travelways and surface area highwalls and banks adjoining travelways shall be examined weekly or more often if changing ground conditions warrant.

I credit the inspector’s testimony as consistent and unwavering. Any potential bias that the inspector may have developed occurred after the citation was issued. Therefore, I place no weight on the testimony provided regarding Morton Salt’s investigation into inspector Ryes and any possible comments that may or may not have been made regarding the firing of his nephew.

Ryes testified that he first identified loose fragments on the ground. When he investigated the source of these fragments, he discovered scales that were located 50 to 60 feet above the ground. While it is clear that the Respondent does train its miners to inspect for ground conditions and there is a group of qualified miners who can test for ground conditions, the fragments indicate that this area was not sufficiently examined. I find that there was a violation of the cited standard.

iii. Gravity and S&S

The inspector assessed the hazard as reasonably likely to cause a fatal injury or illness. Ex. P-11-1. The inspector testified that the scale was located 50 to 60 feet above the entrance to the MCC, which is accessed at least once per shift. Additionally, there were fragments that had already fallen underneath the scale. Based on these facts, I affirm the designations.

The citation was also designated as significant and substantial. A violation of a mandatory safety standard has occurred, satisfying the first step in the analysis. The cited standard is meant to prevent the hazard of scales and other hazards from falling onto miners. As part of the scale had already fallen, it is reasonably likely that this safety hazard would occur, satisfying the second step. The scales here were located 50 to 60 feet above the ground near the MCC, frequently traveled by miners. If the scales were to fall on a miner below it would likely result in a fatality satisfying steps three and four of the S & S criteria. I find that all four steps of the S & S criteria have been met.

iv. Negligence

The negligence was assessed as moderate. The evidence demonstrated that the Respondent maintains a group of miners who are qualified to test for ground conditions and provides training to all miners regarding how to identify loose ground conditions. With these mitigating factors in place, I affirm the moderate negligence designation.

F. PENALTY

It is well established that Commission administrative law judges have the authority to assess civil penalties de novo for violations of the Mine Act. *Sellersburg Stone Company*, 5 FMSHRC 287, 291 (Mar. 1983). The Act requires that in assessing civil monetary penalties, the Commission ALJ shall consider the six statutory penalty criteria:

(1) the operator's history of previous violations, (2) the appropriateness of such penalty to the size of the business of the operator charged, (3) whether the operator was negligent, (4) the effect on the operator's ability to continue in business, (5) the gravity of the violation, and (6) the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of a violation.

30 U.S.C. § 820(i).

For Citation No. 9648939, the Secretary proposed a regularly assessed penalty of \$9,211.00. Morton Salt does not have a history of these violations, as this was the only violation in the history report. The parties stipulated that this penalty will not individually impact Morton Salt's ability to continue in business. I find that this S&S violation was reasonably likely to result in a fatal injury and was the result of Morton Salt's moderate negligence. Morton Salt demonstrated good faith by updating the ventilation plan so that smoke would not cross the evacuation route in the event of future fires. In light of these considerations, I find that the proposed penalty of \$9,211.00 is appropriate.

For Citation No. 9648940, the Secretary has proposed a penalty of \$9,211.00. Morton Salt does not have a history of these violations, as this was the only violation in the history report. The parties stipulated that this penalty individually will not impact Morton Salt’s ability to continue in business. I find that this S&S violation was reasonably likely to result in a fatal injury and was the result of Morton Salt’s moderate negligence. Morton Salt demonstrated good faith by adding ventilation curtains. In light of these considerations, I find that the proposed penalty of \$9,211.00 is appropriate.

For Citation No. 9673196, the Secretary proposed a regularly assessed penalty of \$12,012.00. Morton Salt does not have a significant history of previous violations. The parties stipulated that this penalty will not individually impact Morton Salt’s ability to continue in business. As discussed above, I find that this non-S&S violation is unlikely to result in fatal injury and is a result of Morton Salt’s low negligence. In light of these considerations reducing the likelihood of injury from reasonably likely to unlikely and the negligence from moderate to low, I find that a penalty of \$2,000.00 is appropriate.

For Citation No. 9674873, the Secretary proposed a regularly assessed penalty of \$3,080.00. As discussed above, I find that the Secretary did not prove that cited practice or condition was a violation of the standard. This citation is vacated.

For Citation No. 9674895, the Secretary proposed a regularly assessed penalty of \$3,080.00. Morton Salt has a history of four previous violations. The parties stipulated that this penalty individually will not impact Morton Salt’s ability to continue in business. I find that this S&S violation was reasonably likely to result in fatal injury and was the result of Morton Salt’s moderate negligence. Morton Salt demonstrated good faith by quickly attempting to abate the citation. In light of these considerations, I find that the proposed penalty of \$3,080.00 is appropriate.

Listed below is a summary of the penalty amounts for the adjudicated citations.

| Citation/ Order No. | Originally Proposed Assessment | Judgment Amount | Modifications |
|--------------------------------|---|----------------------------|--|
| 9648939 | \$9,211.00 | \$9,211.00 | Affirm as Issued |
| 9648940 | \$9,211.00 | \$9,211.00 | Affirm as Issued |
| 9673196 | \$12,012.00 | \$2,000.00 | Modify Injury/Illness from “Reasonably Likely to “Unlikely” Modify Significant and Substantial from “Yes” to “No” Modify Negligence from “Moderate” to “Low” Reduction in Payment |
| 9674873 | \$3,080.00 | \$0.00 | Vacate |
| 9674895 | \$3,080.00 | \$3,080.00 | Affirm as Issued |
| TOTAL | \$36,594.00 | \$23,502.00 | |

G. PARTIAL SETTLEMENT

The parties have filed a motion to approve partial settlement regarding the two settled citations. The originally assessed amount for these two actions was \$14,834.00 and the settlement amount is \$4,599.00. The settlement includes:

| Citation/ Order No. | Originally Proposed Assessment | Settlement Amount | Modifications |
|------------------------|--------------------------------------|----------------------|------------------|
| 9674888 | \$10,235.00 | \$0.00 | Vacate |
| 9674891 | \$4,599.00 | \$4,599.00 | Affirm as Issued |
| TOTAL | \$14,834.00 | \$4,599.00 | |

The Secretary has vacated Citation No. 9674888. The Secretary's discretion to vacate a citation or order is not subject to review. *See, e.g., RBK Constr. Inc.*, 15 FMSHRC 2099 (Oct. 1993).

The parties have submitted facts in support of the proposed changes. I have considered the representations and documentation submitted and I conclude that the proposed settlement is appropriate under the criteria set forth in section 110(i) of the Act. The motion to approve partial settlement is **GRANTED**, the citations contained in this docket are **MODIFIED** as set forth above.

H. ORDER

It is hereby **ORDERED** that Citation Nos. 9648939, 9648940 and 9674895 are **AFFIRMED** as issued and Citation No. 9673196 is **AFFIRMED** as modified to reduce the likelihood of injury or illness to unlikely, reduce the negligence to low, and to remove the S&S designation. Citation No. 9674873 is **VACATED**. Morton Salt, Inc., is **ORDERED** to pay the Secretary the total sum of **\$28,101.00** within 40 days of this order.²



David P. Simonton
Administrative Law Judge

² Please pay penalties electronically at Pay.Gov, a service of the U.S. Department of the Treasury, at <https://www.pay.gov/public/form/start/67564508>. Alternatively, send payment (check or money order) to: U.S. Department of Treasury, Mine Safety and Health Administration P.O. Box 790390, St. Louis, MO 63179-0390. Please include Docket and A.C. Numbers.

Distribution: (Electronic and certified mail)

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