

Freeport Safety Updates

April 2024

(Incidents and Communications from March 2024)





Freeport Monthly Safety Content



The following slides have been provided to aid in compiling content for monthly Health & Safety meetings, tailgates, etc. with Freeport employees and contractors.

 Please keep in mind - some of this information is preliminary and may be pending complete investigations.

Best Practices

- Be familiar with content prior to presenting.
- Hide/unhide incidents that are relevant to your team.
- Interact with your audience, relating information to your specific work.
- Update dashboards to share meaningful data (<u>Incident Summary Power BI</u>, <u>FRM</u> <u>- Power BI</u>). Contact your local Health and Safety staff for site-specific dashboards or external access.



Freeport Safety Incidents, Successes, & Alerts

March 2024







Exposure to Electrical Hazards

	Preliminary Incident Details
Operation	Chino
Date / Time	March 6, 2024 / 12:30 p.m.
Event Type	Injury, first aid – electrical shock
Summary	A crane operator was harvesting cathodes from cell 8 inside a jumper frame. The employee was removing the second pull when a wet pantleg came into contact with the jumper frame above the boot. The operator sustained a minor shock.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 The insulator on the crane hook was wet and offered no insulating value (showed no resistance) The insulating material on the strongback was worn
Applicable Policies / Procedures	FCX Policy - EW ER Electrical Safety Rev. 2.pdf
Employee Condition	Employee was evaluated and released to full duty.
Contact	Jim Cook, Manager-Health and Safety



Strongback handle



Area the operator's leg contacted the jumper frame

Handle with replaced insulation





Actionable Event: Water Truck Hits Berm

Vehicle Collision

	Preliminary Incident Details
Operation	Morenci
Date / Time	March 10, 2024 / 2:05 a.m.
Event Type	Property Damage
Summary	During a second run to water drills, a water truck was travelling on a ramp with approximately 10,000 gallons of water in the tank. At the top of the ramp, the operator identified the area was no longer adequate to safely turn around without running over drill holes. The operator decided to back down the ramp to exit the work area. While backing down, the truck drove through a berm and was high centered at a 45-degree angle. On the other side of the berm was an approximate 180-foot drop.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Berms were sufficient height and width Operator failed to follow operating procedure inhibiting reverse travel with water load
Applicable Policies / Procedures	Applicable Morenci SOP
Employee Condition	No injuries
Contact	Rassie Ras, Manager-Health and Safety

Actionable ID # 2024-7 Event ID # 20014011

Photos / Links



Water truck on berm



Water truck tire marks on ramp and impacted berm



Arrow points to location of water truck on berm



Actionable Event: Fallen Idler

Falling Objects

	Preliminary Incident Details
Operation	Morenci
Date / Time	March 11, 2024 / 1:15 p.m.
Event Type	Near Miss
Summary	A contractor crew was cleaning buildup underneath the head end of a conveyor near the transfer tower. While on their lunch break and stationed across the street, the crew witnessed a return idler that fell 20 feet down from the conveyor. The idler landed close to the crew's working area. The conveyor was running, the idler was mounted and in use at the time of the event.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Conveyor was left on while unattended Need to set up segregation or turn off belt while unattended No baskets or guarding were used under the idler
Applicable Policies / Procedures	N/A
Employee Condition	No injuries
Contact	Corina Rodriguez- Senior Supervisor-Health and Safety

Actionable ID # 2024-8 Event ID # 20014041

Photos / Links



Location where idler fell



Worn idler that fell from conveyor



Idler fell from section of conveyor circled in yellow



Entanglement & Crushing

E-VI FREEPORT-MO	MoRan
ID # 2024-9	SAFE
Event ID # 20014323	PRODUCTION MATTERS

Photos / Links

	Preliminary Incident Details
Operation	Morenci
Date / Time	March 22, 2024 / 9:20 p.m.
Event Type	Injury – First Aid
Summary	While attempting to clean out material in a 2B shorthead, an employee's head became stuck between the mill locking post and discharge chute. When the employee realized they were stuck, they tapped a supervisor's shoulder. The equipment was backed off, and the employee was released.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	Control of Hazardous Energy
Applicable Policies / Procedures	FCX HS04 Control of Hazardous Energy
Employee Condition	Employee was treated by first aid
Contact	Jacob Sweet, Manager-Health & Safety Jason Bartlett, Manager-Mill



Pinch Point – Hydraulic ram and feeder



Hover over image for animation of incident



Actionable Event: Forklift and Truck Collision

	Preliminary Incident Details
Operation	El Paso
Date / Time	March 22, 2024 / 1:32 p.m.
Event Type	Property Damage
Summary	A forklift operator was weighing a cathode bundle at the scale. When complete, the operator reversed and struck a travelling pickup truck. Both operators failed to look in the direction of travel and identify other mobile equipment in the area. Both continued work without stopping.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Failure to make eye contact with equipment operators Failure to yield to moving equipment Failure to look in direction of travel Failure to utilize horn signals for movement notification
Applicable Policies / Procedures	SAF-0220 Powered industrial equipment operations
Employee Condition	No employees were injured.
Contact	Roland Ruybe, Manager-Health & Safety

E-V FREEPORT-MCMoRAN ID # 2024-11 SAFE MATTERS Event ID # 20014372

Photos / Links 10000

Position of forklift and truck upon collision.



Actionable Event: Invalid Motor Lockout

=	:MoRan
ID # 2024-10	SAFE MATTERS
Event ID # 20014325	PRODUCTION MATTERS

	Preliminary Incident Details
Operation	Henderson
Date / Time	March 22, 2024 / 8:20 a.m.
Event Type	Near Miss
Summary	Four contractor employees were working to align a belt system motor next to a gear box and break disk with removed guarding. The energy control coordinator (ECC) released the belt brake to initiate the lock out process which caused the belt to move one foot. Contractor employees recognized the system was not locked out and notified site supervision.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Lack of lock out, tag out, try out (LOTOTO) Contractor missed ECC radio notification
Applicable Policies / Procedures	 <u>Henderson Operations LOTOTO Program</u> <u>FCX HS04 Control of Hazardous Energy</u>
Employee Condition	No employees were injured.
Contact	Benjamin Goertz, Manager-Health & Safety



Operations lock box. Contractor was locked on this box without the ECC lock.



Photos / Links



Contractor work area



Actionable Event: Rock Impact to Head

Preliminary Incident Details	
Operation	Morenci
Date / Time	March 27, 2024 / 9 a.m.
Event Type	Injury – First Aid
Summary	A contractor employee was cleaning a tail pulley belt on crusher level one when struck on the head by a rock weighing about 30 pounds. The rock fell from an upper-level dribble shoot where other crews were actively working nearby.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Failure to conduct line out prior to task start. Failure to identify loose material. Failure to identify employee work locations. Crews should not be working directly above other workers.
Applicable Policies / Procedures	 FCX-HS19 Flagging and Barricading FCX-HS02 Working at Heights
Employee Condition	The employee was transported for evaluation and was released for full duty.
Contact	Jacob Sweet, Manager-Health and Safety

ID # 2024-12 Event ID # 20014444

Photos / Links







Area where rock fell.

Spillage on edge of support beams over dribble chute on second level.

Rock size.



Illustration of work area and location of affected contractor.



Actionable Event: Fall from Height in Chute Hatch

ID # 2024-13 Event ID # 20014496

Preliminary Incident Details	
Operation	Sierrita
Date / Time	March 28, 2024 / 8:30 a.m.
Event Type	Near Miss
Summary	Three employees were clearing deadbed material stuck on catch bars in the secondary chute. The confined space attendant opened a hatch on the north side of the chute to help improve access to the material. An employee inside the chute, unaware of the opened hatch, stepped on deadbed material covering the hatch, pushing one foot through the opening, and was exposed to a nine-foot fall.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Lack of risk assessment Failure to communicate Failure to initiate stop work authority
Applicable Policies / Procedures	 FCX-HS05 Confined Space FCX-HS02 Working at Heights FCX-HS04 Control of Hazardous Energy
Employee Condition	No injuries
Contact	 Procopio Gonzales, Superintendent-Crush/Convey Cara Forbregd, Manager-Health and Safety





Potential Fatal Events

March 2024







Actionable Event:

Rail Impact to Person



Rail Impact to Person

	Preliminary Incident Details
Operation	Morenci
Date / Time	March 5, 2024 / 11:00 a.m.
Event Type	Injury with Medical Treatment
Summary	The Industrial Railroad crew was switching out boxcars at the south side of a copper dock. The locomotive operator and a trainee were standing on the engine stairs and leaned out facing away from the direction of travel. While doing so, the operator's body struck a rail switch guard sign. The operator flipped over the handrail, landing face down on the ground. The operator's right arm landed on the track and was run over. A Mayday was called, and emergency services were dispatched to the area.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Employee leaned out of moving train while standing on stairs At least 30 inches of continuous clearance from the farthest projection of moving railroad equipment was not maintained with rail switch guard sign placement
Applicable Policies / Procedures	 FCX-22 Industrial Railroad Policy Site Standard Operating Procedure – Riding Trains and Locomotives
Employee Condition	Injury resulted in amputation of employee's right forearm
Contact	Dale Patterson, Manager-GSC Dana Wise, Manager-Health and Safety



Employees were riding on the stairwell of the 51 locomotive when event occurred





Rail Impact to Person

Incident Overview Morenci, March 5, 2024

The Industrial Railroad crew was switching out boxcars at the south side of a copper dock. The locomotive operator and a trainee were standing on the engine stairs and leaned out facing away from the direction of travel. While doing so, the operator's body struck a rail switch guard sign. The operator flipped over the handrail, landing face down on the ground. The operator's right arm landed on the track and was run over. A Mayday was called, and emergency services were dispatched to the area.



Causal Factors

- Locomotive operator and trainee leaned out from the engine stairs while facing away from the direction of travel.
- Clearance from the rail switch lever to the outside of rail cars was minimal.

Site Specific Actions

- Administrative Control Re-create a Global Railroad Steering Team to share best practices, standards, and findings amongst all sites. All relevant standard operating procedures, work standards and training records will be reviewed for deficiencies, then corrected.
 - Administrative Control Within 30 days, evaluate the Morenci rail system for unidentified impaired clearance situations (any distance under 30 inches) and high-risk areas (i.e., switches on steep grades).
- Engineering Control Within 60 days, identify impaired distances that can be mitigated by extending switches, lowering switches or clearly marking impaired distances and mapping those switches (i.e., docks and unloading stands).
- Elimination Control Conduct an assessment as outlined in the Freeport Industrial Railroad Policy section 3.4. Determine alternative means to minimizing or eliminating the need for train ground crews to mount/dismount a train in motion.

We Champion a Work Environment Where Everyone Goes Home Safely





Rail Impact to Person

Incident Overview

Morenci, March 5, 2024

The Industrial Railroad crew was switching out boxcars at the south side of a copper dock. The locomotive operator and a trainee were standing on the engine stairs and leaned out facing away from the direction of travel. While doing so, the operator's body struck a rail switch guard sign. The operator flipped over the handrail, landing face down on the ground. The operator's right arm landed on the track and was run over. A Mayday was called, and emergency services were dispatched to the area.



Railroad operators and employees working near railroads

- Be aware of the Industrial Rail Policy
- Do not ride on train stairs
- Complete site assessment to determine alternate means to minimize or eliminate the need for train ground crews to mount/dismount a train in motion
- Train crew may only ride on the platform of the leading end of railcars, if necessary to perform duties
- Switch personnel may only ride on leading end of railcars for spotting during pushing/shoving operations
- Do not work on or around rail or trains unless trained to do so



Morenci Leadership

- Review and audit critical components of Rail Fatal Risks according to the Industrial Rail Policy and Fatal Risk Management program.
- · Reinforce execution of policies. Regularly check for understanding and adequate training.
 - · Hold our employees and ourselves accountable when policies aren't followed.
- Ensure that site standard operating procedures are in line with corporate policy requirements



All of Us

- Review field training programs.
 - Confirm mentors fully understand policies and procedures. Mentors should reinforce correct behaviors while training in the field.
 - Utilize knowledge checks to regularly confirm understanding of training.
- Utilize stop work obligation when processes or procedures are not being followed, or control improvements are identified.

Turning Our Commitment into Action





	Preliminary Incident Details
Operation	Tyrone
Date / Time	March 10, 2024 / 1:43 p.m.
Event Type	Lost Time Injury
Summary	A contractor driller became bound and entangled when their jacket snagged on a 4-inch core barrel as they tried to remove it from a running sonic drill. The assistant on deck and the one on the ground were unable to reach the emergency stop button based on their positions. The driller rotated with the core barrel until becoming unbound and sustained multiple injuries.
Risk Category	Actionable – Significant (3) Likely (3)
Findings / Missing Controls	 Failure to follow contractor standard operating procedure for barrel removal Improper/missing tool for the task Rotation Barrier Interlock was bypassed
Applicable Policies / Procedures	FCX-HS04 Control of Hazardous Energy Policy
Employee Condition	The driller sustained multiple injuries to the left leg requiring surgery as well as minor cuts and scrapes. They are expected to make a full recovery.
Contact	Rachel Adams, Manager-Health and Safety

Photos / Links Drille Actual location of driller hard hat **Re-enactment of the scene** Drill head with 4-inch core barrel CHIEF CHIEF Location of Driller **Assistant B**



Lifting Operations

PFE # 2024-7 Event ID # 20014069

Preliminary Incident Details	
Operation	Morenci
Date / Time	March 12, 2024 / 11:45 a.m.
Event Type	Injury – First Aid
Summary	Two contractor mechanics were replacing a 1600-pound final drive on a D8 dozer with the assistance of a forklift. One mechanic was operating the forklift while the other mechanic was greasing the mounting seal. The loaded forklift, positioned 6 to 10 feet behind the mechanic, began to roll forward. The operator applied the brakes which caused the final drive to roll off the forklift. The ground mechanic's leg became pinned between the final drive and the dozer.
Risk Category	PFE - Significant (3) Likely (3)
Findings / Missing Controls	 Engineered lifting device was not used Forklift parking brake was not set Forklift load was not properly secured
Applicable Policies / Procedures	Lack of forklift applicable policies and procedures
Employee Condition	 Mechanic – knee injury Forklift Operator – hand laceration from helping lift the final drive off the pinned mechanic
Contact	Dale Patterson, Manager-GSC Dana Wise, Manager-Health and Safety



Final resting place of final drive after rotating off the forklift

Photos / Links

Re-enactment of employee's leg pinned between final drive and D8





Agency Shares

March 2024





Safety Share

Overexertion in the Workplace





Employees who do physically demanding work may be working too hard and putting themselves at risk of injuries from overexertion. Overexertion injuries are costly because there are so many of them and because they often involve days away from work. Estimates place the total cost to employers at over \$10 billion annually. Another important fact about overexertion injuries is that they are preventable. It takes training, policies, procedures, and employee involvement to make an overexertion prevention program work.

- IDENTIFY OVEREXERTION RISKS Once you have pinpointed the risks, you can modify workstations, job procedures, and the work
 environment to minimize the risks. Storing heavy items low to avoid excessive reaching and strain; reducing the depth of shelves to reduce
 overreaching; and modifying the work environment to reduce the need for twisting, bending, and other awkward postures.
- **PROVIDE LIFTING AIDS** Manual and powered lifting aids reduce the strain on human bodies and greatly reduce the risk of overexertion in many material handling tasks. Examples would be forklifts.
- **PROHIBIT SOLO LIFTING OF HEAVY LOADS** Recommend a 50-pound limit for solo lifting. More than that and employees should be required to get help or use a lifting aid. Lifting or carrying loads that weigh 50 pounds or more increases a person's risk for a serious back injury.
- INCLUDE LIFTING POLICIES IN JOB DESCRIPTIONS Include lifting requirements in the job description so that these requirements will be taken into account when hiring new workers.
- **REQUIRE FREQUENT SHORT BREAKS** A study conducted by NIOSH indicates that workers who do a lot of lifting should take frequent breaks to relax tired, tense muscles and reduce the risk of injury, particularly back injury.
- PERFORM REGULAR AUDITS Studies show that frequent and unannounced audits by management and supervisors will greatly reduce safety issues like overexertion. Review audit results with team supervisors and create a "Critical Risk Assessment" document for high-risk jobs and tasks





MINE FATALITY – On November 13, 2023, a rotating drill steel of a roof bolting machine entangled a miner, causing fatal injuries.



- Always follow manufacturer recommendations when conducting maintenance on equipment, including:
 - Turn off or de-energize the machine.
 - Secure the equipment against hazardous motion.
- Never touch or hold the drill steel, wrench, or bolt while it is rotating.
- Do not wear loose-fitting or bulky clothing when working around any machinery with rotating parts.





MINE FATALITY – On August 5, 2023, a piece of granite fell, striking two miners, killing one and seriously injuring the other.



- Examine work areas to identify loose ground or unstable conditions before work begins and as conditions change. Report hazards and do not work in unsafe conditions.
- Correct unsafe conditions or barricade areas to prevent access before beginning work.
- Consider mining methods that do not require miners to work or travel near the base of a highwall.





MINE FATALITY – On March 1, 2024, a miner died after a metal slurry pipe struck him. The miner was removing the last bolt connecting two metal slurry pipes when the pipe broke free and swung in his direction.



PDF LINK

- Prevent miners from positioning themselves in a manner that will expose them to hazards while performing a task.
- Examine work areas before and during the shift for hazards.
- Ensure that blocking material is competent, substantial, and adequate to stabilize the load.
- Train miners in safe work procedures and hazard recognition. Monitor personnel routinely to ensure they follow safe work procedures.



MINE FATALITY – On August 21, 2023 a crusher lid that was being moved into place struck a miner when the rigging broke. The miner died from his injuries on August 23, 2023.



- Do not work under suspended loads.
- Use properly rated lifting equipment and ensure that the load is well secured.
- Attach tag lines to suspended loads to steady or guide the load.
- Communicate lift plans to all persons working in the lift zone. Follow manufacturer's recommended work procedures.



Industry Fatality Alert – Codelco



MINE FATALITY – On March 8, 2024, a haul truck driver was killed after the vehicle caught fire. The driver was unable to evacuate the truck and could not activate the manual fire suppression equipment.



- Inspect and maintain fire suppression equipment
- Know procedures for fire suppression activation
- Perform fire drills on equipment
- Practice equipment evacuations
- Check for leaks
- Take equipment out of service if needing repair