FCX Monthly Safety Content



The following slides have been provided to aid in compiling content for monthly Health & Safety meetings with FCX 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>). Contact your local H&S staff for site-specific dashboards or external access.



FCX Safety Updates

November 2023

(Incidents and Communications from October 2023)









FCX Safety Incidents, Successes, & Alerts

October 2023









High Risk Event: Shovel Hit a Parked Truck

CA	
PRODU	CTION
MAI	LEKS

Incident Details		
Operation	Cerro Verde	
Date / Time	September 20, 2023 / 12:30 a.m.	
Туре	Property Damage	
Summary	During a shovel operator change, the outgoing operator placed the bucket on the ground, and the incoming operator parked near the shovel. The bucket began to rotate slowly and hit the hood of the parked vehicle.	
Fatal Risk	Vehicle Collision or Rollover	
Risk Category	Actionable	
Pre / Post Rating	Significant (3) Likely (3) NOT A PFE	
Absent / Insufficient Controls	 Non-compliance of Procedures: Entering and parking within shovel rotation radius without authorization Failure to apply equipment brakes after bucket was placed on the ground 	
Applicable Policies / Procedures	FCX-23 Interaction with Heavy Mobile Equipment	
Employee Condition	No Injury	
Contact	Frank Tapia, Superintendent – Mine Operations	





High Risk Event: D-Ring Failure

FREEPORT-McMoRan

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Incident Details		
Operation	Morenci	
Date / Time	September 29, 2023 / 10:30 p.m.	
Туре	Near Miss	
Summary	While rigging up the cable to the D-rings on the back of the FL090A Forklift for a track change, the operators put tension to the track for installation of the track and the D-ring on the right side of the forklift failed, causing the ring to break and be projected across the shop area striking a toolbox in its path.	
Fatal Risk	Uncontrolled Release of Energy	
Risk Category	Monitor	
Pre / Post Rating	Significant (3) Possible (2) NOT A PFE	
Absent / Insufficient Controls	The wire rope sling was connected to the forklift D- ring that is not designed for pulling or lifting.	
Applicable Policies / Procedures	SOP – Changing a Bulldozer Track	
Employee Condition	No Injury	
Contact	Joseph Rodriquez, Superintendent Mine Maintenance	



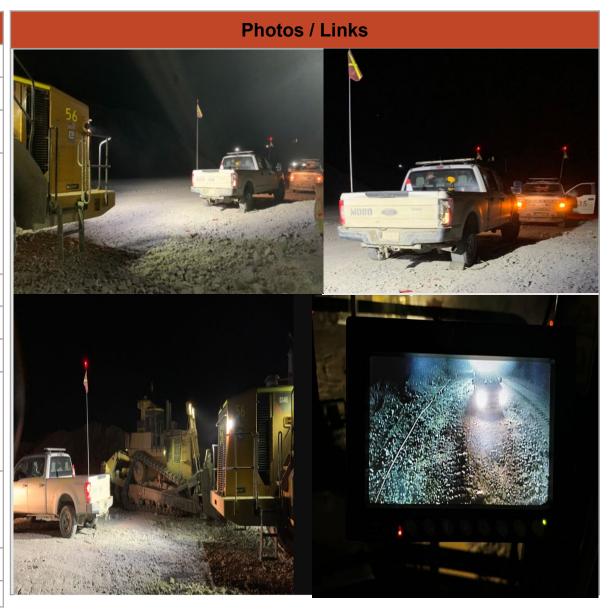


High Risk Event: RTD Backed into Light Vehicle



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Incident Details		
Operation	Sierrita	
Date / Time	October 3, 2023 / 10:10 p.m.	
Туре	Property Damage	
Summary	Rubber tire operator backed his rubber tire into the rear tailgate area of the oiler's pickup, which was parked approx. 15ft from the rear of the rubber tire. This caused damage to the MO88's right rear taillight.	
Fatal Risk	Vehicle Collision or Rollover	
Risk Category	Monitor	
Pre / Post Rating	Significant (3) Possible (2) NOT A PFE	
Absent / Insufficient Controls	 Failure to Utilize Mirrors/Cameras on Equipment Standard of work or SOP being reviewed with crews on parking distance between light Vehicles and Heavy Equipment 	
Applicable Policies / Procedures	Interaction with Heavy Mobile Equipment- Surface Road Design, Light vehicle& Ground Personnel Policy	
Employee Condition	No Injury	
Contact	Allen Bruce Kinney, Mine Superintendent	

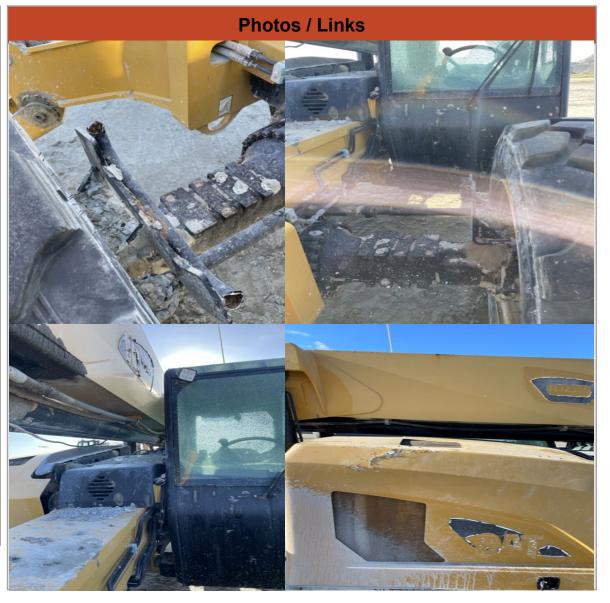




High Risk Event: Discharge Line Struck Reach Fork

CA	
PRODU	-T1000
MAT	PERS

Incident Details		
Operation	Sierrita	
Date / Time	October 11, 2023 / 7:40 a.m.	
Туре	Property Damage	
Summary	While working to relocate the berm builder discharge line, the pipe became stuck on the impoundment berm. In the process of repositioning the reach fork to free the line, the pipe fell off the forks and struck the reach fork, breaking the fender, mirror, and windshield.	
Fatal Risk	Uncontrolled Release of Energy	
Risk Category	Actionable	
Pre / Post Rating	Significant (3) Likely (3) NOT A PFE	
Absent / Insufficient Controls	No specific SOP	
Applicable Policies / Procedures	Develop standard of work and train employeesHDPE Pipe Handling Policy	
Employee Condition	No Injury	
Contact	Chris Fiedler, Tailing Superintendent	





PFE Events

October 2023



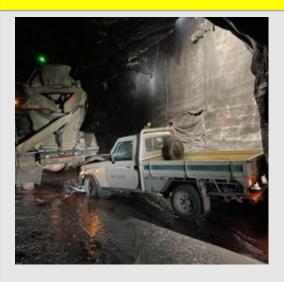






Potential Fatal Event: SVS Mixer Contacts Light Vehicle

	Preliminary Incident Details
Operation	PT Freeport Indonesia
Date / Time	September 12, 2023 / 2:25 p.m.
Туре	Property Damage
Summary	A light vehicle was traveling along a drift to the crane bay shop and came up behind an SVS mixer that was stopped behind a line of vehicles blocked by a Jumbo drill. The LV along with other vehicles began to reverse to seek alternative access. The LV stopped when the truck behind it stopped, but the SVS mixer kept reversing. The LV driver sounded the horn. The SVS mixer continued to reverse and contacted the LV, pushing it into the rib. The front left tire burst, damaging the front end and hood. No one was injured.
Fatal Risk	Vehicle Collision or Rollover
Risk Category	Actionable
Pre / Post Rating	Significant (3) Likely (3)
Findings / Missing Controls	 Failure to initiate correct action – SVS mixer lost visual of the LV and continued to reverse Competing sounds made the LV horn inaudible
Applicable Policies / Procedures	 Mobile Equipment Interaction SOP UM.2.18.GBC.SVS-MTO.02.03/19 SVS Mixer Truck Operating Procedure SOP-4.04-PTFI-002 Light Vehicle Operation
Employee Condition	No Injury
Contact	Andri Abdullah or Phillip Murphy





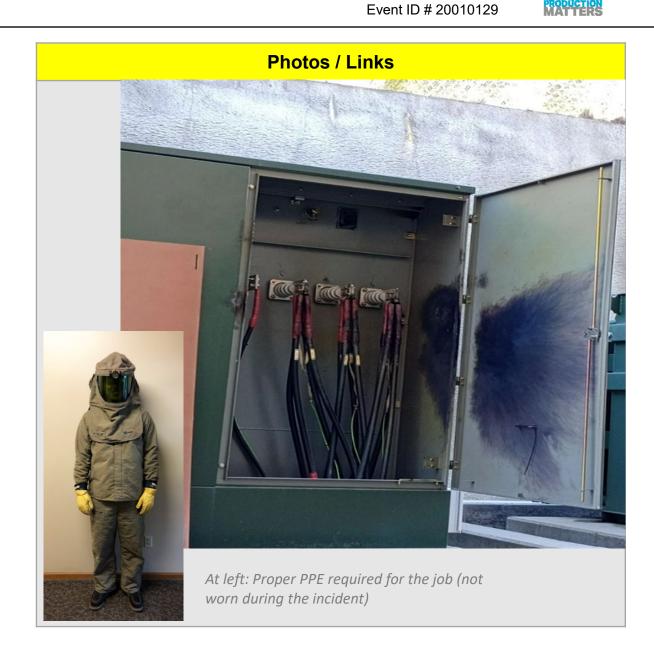




Potential Fatal Event: 4160-Volt Transformer Arc Flash

FREEPORT-MCMORAN
PFE # 2023-22
SAFE

Preliminary Incident Details		
Operation	Climax	
Date / Time	September 30, 2023 / 8:10 a.m.	
Туре	Injury	
Summary	Two electrical subcontractors involved in rerouting a power line for the new water treatment plant under construction at Climax were preparing to check the phase rotation of a 4160-volt transformer that had not been de-energized. When they attempted to attach the meter, an arc flash occurred. The workers were not wearing the proper PPE, and both sustained burns to the face. One was treated at the hospital and released while the other was hospitalized with second-degree burns.	
Fatal Risk	Exposure to Electrical Hazards	
Risk Category	Monitor	
Pre / Post Rating	Significant (3) Possible (2)	
Findings / Missing Controls	 Contractors were not using appropriate PPE Instrumentation was rated for 600 volts 	
Applicable Policies / Procedures	FCX-HS03 Electrical Safety Policy	
Employee Condition	Both workers sustained first- and second-degree burns to the face.	
Contact	Chris Young, Mill Manager, or Amy Reyes, Senior Supervisor- Health and Safety	





Potential Fatal Event: Contact with Live Power Line

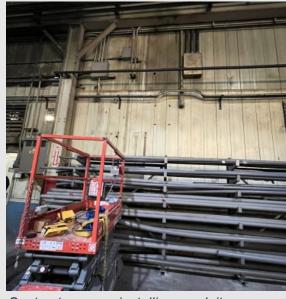
FREEPORT-McMoRAN PFE # 2023-23 Event ID # 20010240



	Preliminary Incident Details
Operation	El Paso Rod Mill
Date / Time	October 3, 2023 / 3 p.m.
Туре	Near Miss
Summary	Electrical contractors installing communication line conduit inside of a motor control center got ahead of schedule and began installing the conduit on the wall outside of the MCC near an overhead crane rail. Unaware the crane was energized, one of the workers contacted the rail's 480-volt power line, causing a short and arc to ground. No injuries were sustained, and power to the overhead crane tripped off.
Fatal Risk	Exposure to Electrical Hazard
Risk Category	Monitor
Pre / Post Rating	Significant (3) Possible (2)
Findings / Missing Controls	Contractors proceeded with work in an area outside the original scope of work and did not lockout, assuming the crane rail was de-energized.
Applicable Policies / Procedures	FCX – HS04 Control of Hazardous Energy/Job Risk Assessment
Employee Condition	No injuries
Contact	Alejandro Valadez, Rod Mill Manager



Overhead crane rail and wall



Contractors were installing conduit using scissor lift



Conduit that contacted the 480v line



Potential Fatal Event: Pressurized Acid Exposure

	Preliminary Incident Details
Operation	Chino
Date / Time	October 4, 2023 / 8:27 a.m.
Туре	Injury
Summary	A mechanic was cutting the bolts off the flange of a depressurized acid tank car when there was a sudden and unexpected burst of pressurization, causing acid to spray into the air. The employee was wearing a face shield but not other personal protective equipment. A small amount of acid got on the neck of the employee, who immediately rinsed off at the nearby safety shower.
Fatal Risk	Fire
Risk Category	Actionable
Pre / Post Rating	Significant (3) Likely (3)
Findings / Missing Controls	 Wrong tool for the job – angle grinder used to cut bolt created a spark that ignited hydrogen buildup in the tank Failure to monitor lower explosive limit before performing hot work Failure to wear proper acid suit
Applicable Policies / Procedures	FCX-HS06 Hot Work Policy
Employee Condition	 The worker was evaluated at the local clinic and allowed to return to work without restrictions. Employee received first aid treatment, sustained small rash to the neck and head.
Contact	Joseph Lightner, Senior Supervisor-Mill, or Daniel Coyle, Senior Supervisor-Health and Safety



Flange where bolt was cut.



Condition of overalls after exposure to acid.



Work platform above the acid tanker car.



Potential Fatal Event: Falling Rebar Mat

FT FREEPORT- MCMORAN

PFE # 2023-26

Event ID # 20010509

	Preliminary Incident Details
Operation	Safford
Date / Time	October 16, 2023 / 1:45 p.m.
Туре	Lost-Time Injury
Summary	A contractor crew was preparing to lift a rebar mat into place to form a reclaim chamber wall at the fine ore stockpile construction site. The mat was 36 feet tall (66 rebar sticks) by 35 feet wide (57 rebar sticks). Upon reaching the vertical position, the rebar ties towards the top began to fail, causing the rebar to fall to the ground. Two individuals were in the area manning taglines. One of them ran away unharmed while the other (foreman) was struck by falling rebar, resulting in a broken right elbow and dislocated left wrist.
Fatal Risk	Falling Objects
Risk Category	Actionable
Pre / Post Rating	Significant (3) Likely (3)
Findings / Missing Controls	Insufficient rebar tiesInadequate rigging
Applicable Policies / Procedures	Rigging/SignalingStrength calculations for load prior to lift
Employee Condition	Immediately after event, employee was transported to the local emergency room for CT scans (negative), then air-lifted for surgery on right elbow. Employee is in stable condition and recovering.
Contact	Drew Borcherding, Manager-Health and Safety



Circled in red is the area where the rebar ties first began to fail.



The incident area after the rebar mat fell. The arrow at left points to the location of the chamber wall where the rebar mat was to be placed.



Potential Fatal Event: Fall Through an Open Hole

FREEPORT-McMoRAN PFE # 2023-27 Event ID # 20010740



	Preliminary Incident Details
Operation	Miami Smelter
Date / Time	October 25, 2023 / 11:30 a.m.
Туре	Injury
Summary	A contractor worker carrying a junction box with both hands in front was following a fellow worker on a catwalk. A hatch door was open in the catwalk to provide access to a lower platform. The first worker stepped over the open hatch. The second worker, who was carrying the junction box, could not see the open hatch. Without warning, the worker fell through and dropped approximately nine feet before hitting the platform below, sustaining minor injuries.
Fatal Risk	Fall From Heights
Risk Category	Monitor
Pre / Post Rating	Significant (3) Possible (2)
Findings / Missing Controls	 Chain guards not used Hard barricade and flagging not used Failure to initiate correct action to close hatch door before proceeding
Applicable Policies / Procedures	FCX-HS02 Working at Heights
Employee Condition	Worker sustained abrasions and contusions along left arm and leg. Released to full duty after evaluation at the local emergency room.
Contact	Cameron Coon, Senior Supervisor-Health and Safety



The open hatch the worker fell through and platform below (looking top down).



An example of how the catwalk with hatch and chains are to be used when the hatch is open.



Agency Shares

October 2023







MSHA Safety Alert – Water Related Fatalities



Water-Related Fatalities on the Rise





(Upper Left) Floating pump station that a miner was working on capsized. (Upper Right) Dredge operator drowned.

5 water-related fatalities since 2022

Hazards of Working Around, Over, or Near Water

HAZARDS - undercut banks, sloughing ground, varied water depth, swift currents, inadequate berms, narrow roadways

POTENTIAL DANGER - Entrapment, Entanglement, Drowning, Electrocution

RISKS – Traveling, operating mining equipment, around, over, or near water



Long Reach Excavator in water.

Best Practices

- Conduct daily workplace examinations.
- Know the water depth and subsurface conditions and ground conditions before you begin work.
- Keep equipment a safe distance back from the water's edge.
- Provide handrails around docks and work boats.
- Properly berm roadways near water hazards.
- Provide and ensure workers wear a Coast Guard approved Type I or Type V personal flotation device (PFD) when working around water.
- Keep water rescue equipment easily accessible.
- Practice good housekeeping and keep all travel ways clear around water hazards.
- Post warning signs near water hazards.



PFD



Report accidents and hazardous conditions: 1-800-746-1553 msha.gov | askmsha@dol.gov | @MSHA DOL

MSHA Safety Alert – Bulldozer Related Fatalities



Three bulldozer related fatalities

A bulldozer operator was fatally injured when the bulldozer he was operating rolled down a 375 feet embankment. A second bulldozer operator was fatally injured when the bulldozer he was operating rolled down a 300 feet embankment. A third bulldozer operator was fatally injured when the bulldozer backed over the edge of a highwall. In all three accidents the operator was not wearing a seatbelt.



Best Practices

- Conduct workplace examinations prior to beginning work.
- Maintain control and stay alert when operating mobile equipment.
- Wear seat belts when operating equipment.
- Train Miners to perform task safely and to recognize potential hazards.

Report accidents and hazardous conditions: 1-800-746-1553 msha.gov | askmsha@dol.gov | @MSHA_DOL

MSHA Safety Alert – Machinery Related Fatalities



Ten Machinery Fatal Accidents

Ten machinery accidents occurred. These fatal accidents involved three bulldozers, a haul truck tire's locking ring that dislodged and struck a miner, and the side plate of a shaker screen that fell during disassembly and struck a miner. It also includes two truck drivers who were fatally struck, and three miners who were struck while equipment lifts were being performed.



(Left to Right) Shaker screen disassembly. Bulldozer rolled down an embankment. Locking Ring dislodged from truck wheel. Bulldozer rolled down an embankment.

Best Practices

- Maintain equipment in safe operating condition.
- Examine work areas prior to beginning work and operating heavy equipment.
- Operate equipment on stable ground and away from hazards.
- Maintain control of equipment and stay alert.
- Always wear seatbelts: remain inside the cab; never attempt to jump clear; consider the use of four-point seat belt systems and new technology that provides early warning of tipping.
- Provide adequate means to prevent locking rings (rims) from creating a hazard. Use tire cages and deflate tires before conducting repairs.
- Train miners to safely perform task.

Report accidents and hazardous conditions: 1-800-746-1553 msha.gov | askmsha@dol.gov | @MSHA DOL



MSHA Safety Alert – Maintenance Hazard



Maintenance Hazard on Dipper Buckets

A miner died when a 13-ton steel dipper door he was working on closed, crushing him between the dipper door and the edge of the bucket. Maintenance work on a dipper bucket's door when it is separated from the bucket is dangerous. Make sure to always have a redundant blocking mechanism when performing such work.



Best Practices

- Make sure miners are positioned in a safe location and away from potential pinch point areas.
- Securely block equipment against motion before beginning maintenance or repairs.
- Assure blocking material is substantial and installed correctly to support and stabilize the load.
- Make sure miners conduct repairs according to manufacturer's recommendations.

Report accidents and hazardous conditions: 1-800-746-1553 msha.gov | askmsha@dol.gov | @MSHA DOL

MSHA Safety Alert – Working Alone





Best Practices

- Evaluate the assigned task
 - Do you have adequate training, knowledge, skills and equipment to do the job safely?
 - Do you need help to complete the task safely?
- Always inform a responsible person where you will be working or traveling in the mine
- Identify hazards
- Correct and isolate the hazard(s) or report the hazard(s) to your supervisor
- o Always use the proper tools and equipment to do the job
- Don't take shortcuts, do the job safely
- Follow established communications procedures
- Use established check-in/check-out procedures
- It's your safety! Protect it!

Report accidents and hazardous conditions: 1-800-746-1553 msha.gov | askmsha@dol.gov | @MSHA_DOL