

# WELCOME!

Contractor Safety Meeting October 10, 2023





## Agenda



- Safety / Environmental Share
- Safety Stats
- PFEs
- Safety Focus
  - Workplace Exams
  - Accountability Conversations
  - Incident Reporting Requirements (Jerry & Garrit, reference CSM but then request help...)
- Plant Engineering Safety Champion Team Update
- Training Dept / GSC

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#### Environmental Share PCB Management



- Polychlorinated Biphenyls (PCBs) are regulated under the Toxic Substance Control Act. PCBs can cause harmful environmental and health effects
- PCB containers need to be properly labeled and stored
  - PCB containers are located at electrical shops and the Environmental Yard
- Oil-filled electrical equipment that may contain PCBs (BMP 309)
  - Transformers
  - Rectifiers
  - Capacitors
  - ✤ Light Ballasts
- The Environmental Department must be immediately notified when planning to purchase, dispose or relocate any oil-filled electrical equipment

Questions? Or need more information call: Environmental Services (928) 865-6000



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# **Safety Stats**



### **Safety Stats**





## **Morenci Contractor Reportables**



Incident Date	Incident Type	Incident Full Description	Incident Responsible Department
09/05/2023	Restricted Duty	A contract employee was demolishing siding when they felt an insect sting. The employee continued working and pain and irritation continued through the night. The next morning there was a rash and some light swelling and the employee asked to go to the clinic.	Administration>Townsite>Townsite
09/13/2023	Restricted Duty	As a contractor employee stepped out of van, his boot contacted ground toe side first and foot rolled forward from momentum. He felt	Processing>Hydrometalurgical>Leaching Dumps
09/13/2023	Lost Time	Contract employee working in the Morenci canyon tasked with crusher 1 counterbox replacement. Employee was utilizing I-Beam trolley with rigging to move parts back and forth. Employee was positioning trolley with rigging closer to the teeth of pinion. I-Beam trolley went past stopper and came off the I-Beam and dropped approximately 3ft and falling onto the employee's right hand.	Processing>Mill Maintenance>Mill 2
09/18/2023	Medical Treatment	An employee was installing a vent pipe, as he was pushing through the hole he had to use more force to get it through. as it came through, his hand struck a metal electrical box cutting his thumb.	Administration>Townsite>Townsite
09/19/2023	Restricted Duty	Contractor was attempting to remove some rigging from a pipe	Administration>Administration>Global Supply
09/27/2023	Medical Treatment	Contractor lineman was retrieving a tool a from his truck when he was walking away he stepped over a mound of dirt and slipped causing him to fall back and hit his head on the railing of the bed.	Administration>Administration Technical>Plant Engineering



# **Freeport PFEs**







Preliminary Incident Details				
Operation	El Abra			
Date / Time	September 3, 2023 / 3:30 p.m.			
Туре	Injury			
Summary	Two employees were working at night to install an aeration system. They parked their light duty truck in the piping area, which was beyond the designated parking zone. During the job, one of the employees got back in the truck and drove in reverse to leave, striking another employee who was behind the truck. Emergency protocol was activated. The injured employee sustained multiple fractures.			
Fatal Risk	Vehicle Impact to Person			
Risk Category	Monitor			
Pre / Post Rating	Significant (3) Possible (2)			
Findings / Missing Controls	<ul> <li>Poor visibility due to glare from light plant on nearby facility</li> <li>No signage prohibiting parking beyond designated area</li> <li>Aftermarket engineering controls were not working properly (i.e., proximity sensor, backup alarm, backup camera)</li> </ul>			
Applicable Policies / Procedures	Interaction with Heavy Mobile Equipment - Surface			
Employee Condition	Recovering and in stable condition			
Contact	Jaime Choque, jchoquer@fmi.com, +56-55-281-8645			



View of incident area.



Position of injured employee





Preliminary Incident Details				
Operation	Morenci			
Date / Time	September 6, 2023 / 4:05 p.m.			
Туре	Injury			
Summary	A dozer operator trainee was pushing material to maintain appropriate berm height at a dump. The support equipment lead and dozer mentor pulled up to the dump face in a light vehicle to inspect the berm height. The dozer operator trainee was about 65 feet away and started to back up. The support equipment lead noticed the trainee was headed towards the LV and not stopping. The lead tried to put the LV in reverse. The dozer trainee felt resistance while backing up and discovered they had contacted the LV.			
Fatal Risk	Vehicle Collision and Roll Over			
Risk Category	Actionable			
Risk Rating	Significant (3) Likely (3)			
Absent / Insufficient Controls	<ul> <li>Failed to make positive communication</li> <li>Approaching and parking in the blind spot of heavy equipment</li> </ul>			
Applicable Policies / Procedures · FCX – 23 Interaction with Heavy Mobile Equipment				
Employee Condition	Minor abrasion to the left arm of the light vehicle operator			
Contact	Haris (Kudir) Kudadiri, Manager-Fragmentation & Loading			

#### Photos / Links







Preliminary Incident Details				
Operation	Manyar Smelter Project			
Date / Time	September 3, 2023 / 8:35 a.m.			
Туре	Injury			
Summary	A contractor crew was preparing a crane for operations. The main hook was secured using a makeshift shackle. The operator began to raise the boom, which caused the shackle to break. A spotter in the line of fire was struck on the left side of the head by the crane hook.			
Fatal Risk	Falling Objects			
Risk Category	Monitor			
Pre / Post Rating	Significant (3) Possible (2)			
Findings / Missing Controls	<ul> <li>Employee position (line of fire)</li> <li>Missing barricading/segregation</li> <li>Sub-standard equipment modification</li> </ul>			
Applicable Policies / Procedures	Flagging and Barricading			
Employee Condition	The employee sustained head trauma that required multiple surgeries. Currently hospitalized and recovering.			
Contact	Zach Scrivner, Manager-Corporate Project Engineering Safety			



Illustration of crane hook movement when shackle broke



#### Photos / Links

Preliminary Incident Details				
Operation	El Paso Refinery			
Date / Time	September 5, 2023 / 11:45 a.m.			
Туре	Near Miss			
Summary	Contractors were assigned to saw cut over a utilities tunnel to begin infrastructure repairs at the refinery. A Blue Stake permit was executed five days earlier. During asphalt/dirt excavation, contractors uncovered conduit that did appear on engineering drawings. Refinery electricians tested it with a Megger Easyloc Rx and did not find electrical power. The contractors continued with asphalt/dirt removal, then began to saw cut concrete. They noticed a spark and smoke and immediately stopped work. A 2400v line had been contacted. No one was injured.			
Fatal Risk	Contact with Electricity			
Risk Category	Actionable			
Pre / Post Rating	Significant (3) / Likely (3)			
Findings / Missing Controls	<ul> <li>Electrical department had no formal Megger cable locator training</li> <li>Megger cable locator was not the appropriate tool for the task due to rebar/rail tracks in the area</li> <li>Inadequate utility identification and not in compliance with the policy.</li> </ul>			
Applicable Policies / Procedures	Blue Stake Policy FCX-13 /     Digging Permit (Blue Stake) SAF-0050			
Employee Condition	No Injuries			
Contact	David Caraveo, Sr. Supervisor-Electrical Maintenance			

**Broliminory Incident Details** 





Area marked for excavation; not all utilities marked with correct color

Excavation made outside of white paint



Saw used to make cut into concrete





	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	<ul><li>Contractors were not using appropriate PPE</li><li>Instrumentation was rated for 600 volts</li></ul>		
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 Sup Health and Safety			



At left: Proper PPE required for the job (not worn during the incident)



# **Safety Updates**



# **High-Risk: Swivel Lifting Eye Failure**





While lifting the discharge end of the ball mill in the west repair bay Morenci Concentrator, the lifting eye failed causing the discharge end of the ball mill to fall to the ground. It was approximately 3.5' in the air when it fell. The employees state they were a safe distance from the load, no one was in the line of fire. When it fell to the ground, there was damage to one of the liner bolts on the piece discharge end of the ball mill. Employees reported to day shift supervisor close to shift change.

Analysis: This lifting eye failed due to improper use and installation. There is no evidence or markings that this hoist ring was torqued to the proper spec. The threaded shank of the bolt is bent with a brittle fracture. There is also evidence of a pipe wrench being used to tighten the bolt from the teeth marks on the side of the head of the bolt.



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# **High-Risk: Swivel Lifting Eye Failure**







- □ Could not determine who installed lifting device
- □ Bolts on swivel eyes are installed in different orientations
- □ Practice: Bolts are not torqued to spec by FMI or contractors
- □ JRA <u>did</u> call out Lifting Operations and rigging

#### Actions:

- RCM tested inventory of lifting devices at West Repair bay
- (NDT) using eddy current and visual methods.
- Place this action on a recurring work order 28 days
- inventorying critical lifting devices that require scheduled NDT inspections
- Develop work standard on lifting operations of feed/discharge end maintenance
- Train on Hy-Torque Impact wrench

Behavior Individual willingness & focus on safety				
		Pre/Post Job		
Inspect Equipment/Tools		Consequence Thinking 🛛 Housekeeping	Fit for Duty	
Work Place Examination Other:		Hand / Body Placement 🗆 3 Points of Contact	Communication	

- Rigging/equipment Inspection: Why does this conversation look like?
- What tasks could this impact? Who is affected here today?

# **WPE – Initial Survey Findings**



- Supervisor led Involved WPE processes
- Several examples of Hybrid WPE forms that incorporate:
  - JRA
  - Inspections
  - WPE



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#### **Workplace Exam Forms**



WORKPLACE EXAM	M RECORD [Requirements On	y]	intended recipients and may contain information th	hat may be privileged, confidential or copyrighted under applicable law. If you an	Accupational Health and Safety, and is being distributed only for the exclusive use by the enot the intended recipient, you are hereby formally notified that any use, copying or
Location*:			distribution of this material, in whole or in part, is s		HS-SPS-1.9-001 – Rev. January 2016
Competent person(s):***			Freeport-McM	WORK PLACE EXAMINATION	DN
WORKIN	G AREA(S) EXAMINED:				
			EXAMINER:	DATE:	SHIFT:
			PLACE:		
Conditions Not Prompt	tly Corrected	Date Corrected		DNS NOTED:	CORRECTIONS NEEDED:
	•				
*"Location" is meant to indicate the overall site—thi	is could be "Mine" or "Plant" or "Unit,	' as appropriate.			
**The rule only requires that the date of the exam b					
performed for each shift, unless the shift is indicated covered.					
***The competent person who performed the exam	nination must be identified, but no sigr	ature is required.			





## **Incident Reporting Requirements**



#### 7.1 Incident Reporting

- Incidents of a serious nature may require "immediate" notification to government agencies. Contractors are
  responsible for this notification in the time limits set in regulation. Once time sensitive reports are made, the
  FCX Health and Safety Representative will also be notified.
- All incidents will be reported to the FCX Health and Safety Department immediately with the initial written
  report to be submitted by shift end. Initial reports will include, at minimum:
  - o Location of incident
  - Name of persons involved
  - o Equipment involved
  - Time/date of incident
  - o Nature of incident: occupational injury, occupational illness, near miss, property damage
  - o Brief description of incident
  - Where injured (body part)
  - o Name of person contacted for report
- Written final report is due to the Health and Safety Department within 48 hours of the incident, unless
  otherwise extended based on severity of incident.
- Each incident will be reviewed immediately to determine if it had the potential to result in a fatality. In such
  instances, the event will be investigated with the same rigor as if a fatality had occurred.
- Contractors may be required to conduct or participate in any investigations and/or root cause analysis (RCA).
- Action plans may be developed and implemented to prevent reoccurrence.
  - Written Final Report = Investigation

- Complete Logbook Report
   > ASAP helps us
- Include statements, pictures, WSEs, JRAs, Contractor
- Additional Information Sheet
- Review with FMI safety specialists with issues delays or questions

#### **Incident Reporting Requirements**

All Statements - 24HR



1.	ACCIDENT SCENE			
	Ensure scene is safe and mitigate any hazards to rescuers			
	Ensure employee is taken care of (applicable medical care is on the way)			
	Contact FMI Project Management/Safety			
	Pictures (Pictures should tell the story of what happened)			
	Statements (Direct Witnesses)			
	Contact MSHA/OSHA/ASMI (For immediately reportable accidents ONLY)			
	Secure scene for further investigation (If applicable)			
2.	CLINIC			
2.				
	Ensure employee's family is contacted (If necessary)			
	Have a supervisor or equivalent at clinic in case the provider has questions			
	Statement (Injured Employee)			
	Gather incident details (Additional Information Sheet)			
	Coordinate with provider to understand treatment & follow-up date			
3.	DOCUMENT SUBMITTAL (TO FMI)			
	Initial Incident Report ( <u>Logbook</u> ) – BY END OF SHIFT			
	<ul> <li>Name of person involved</li> <li>Equipment Involved</li> <li>Injured Body part</li> <li>Time/Date/Location of Incident</li> <li>Type of Incident (Near Miss, Injury, Prop. Damage)</li> <li>Person Contacted</li> </ul>			
	All Photos - <b>24HR</b>			

# **Accountability Conversations**



- All Reportable Injuries Injured employee/contractor will meet with responsible division GM
  - Bobby Pollock (Admin/Townsite)
  - Fio Giana (Mine)
  - Bill Sircy (Processing)



- Prompt and meaningful conversations with employees to prevent reoccurrence
- Appropriate accountability and alignment on expectations
- Correct process gaps where appropriate



# GSC/Training/Security Updates





# P.E Safety Champions Team 3Q2023

Jenna Ramirez Matt Olcott Dustin Young Mauricio Chiquete Roberto Ponce Garcia





## Introduction



Safety Champions Program – Plant Engineering

- The vision for this program is to achieve alignment among the Plant Engineering team (PE) by collaborating with the Health and Safety department (H&S) and putting a special emphasis on fatal risk management improvement. Plant Engineering is aiming to develop the same toolset to approach any situations with a safety mindset and always utilize a fatal risk management approach during the project planning and project execution.
- Rotation of team members every quarter.

Contacts for Q3

- Jenna Ramirez- (928)292-4345
- Roberto Ponce Garcia- (928)292-0952
- Mauricio Chiquete- (928)965-5863
- Matt Olcott- (928)865-6308

# **Safety Champions Goals-Q3**



- Shadow H&S on audits for JRA's, workplace exams, and tailgates.
- Check for understanding or clarifications on safety policies by testing P.E with knowledge checks every 2 two weeks.
- Provoke positive recognition within our department and around our site in daily discussions with contractors.
- Support H&S with crane & rigging policy.
- Provide feedback during FRM Audits and conduct the FRM them before the work begins to participate in equipment inspections as well as the contractor's tailgate.

## **Audits**



FRM - Metcalf Reclaim Water Pump Station



#### JRA Audit – S26 & S27





## **Knowledge Checks**



 Safety Champions team perform a knowledge check every 2 weeks on (1) safety policy where Plant Engineering and a Safety representative answer the quiz during our daily morning tailgate meeting (by EOD), and Safety Champions team revise, collect data, and review results to discuss the next morning tailgate meeting.

Knowledge Check Quiz (Pt. 2) 9/26/23 Hazardous Gas Policy (FMI)	1. What training is required for Hazardous Gas policy? (Select those that may apply)       (20         85% of respondents (22 of 26) answered this question correctly.       (20
Please refer to the Hazardous Gas Policy for this quiz.	
	Confined Space 4
	Site Specific Training 25 🗸
* Required	Task/Technical Training 23 ✓
* This form will record your name, please fill your name.	HDPE Pipe Handling Training
	2. True or False: In leach stockpile areas, are air relief valves required at high point (20 elevations on the main feed pipelines? points)       8% of respondents (23 of 26) answered this question correctly.
Task/Technical Training	
HDPE Pipe Handling Training	● True 23 ✓
	🔴 False 1
<ol> <li>True or False: In leach stockpile areas, are air relief valves required at high point elevations on the main feed pipelines? * (20 Points)</li> </ol>	Maybe 2
O True	
O False	3. What are the leaching area requirements? (Select those that apply) (20 points)
() Мауbe	77% of respondents (20 of 26) answered this question correctly.
3. What are the leaching area requirements? (Select those that apply) * (20 Points)	Site Specific Training 25 ✓
Site Specific Training	Personal Monitors 26
Personal Monitors	● PPE 24 ✓
PPE	MOC-if any changes to the sens 23 🗸
MOC-if any changes to the sensor and approval from Hydromet	

### **QR Code**

<u>Link -- ></u>



Contractor Safety Meeting 10.10.23 Safety Champions-Plant Engineering





# Thank you, thank you very much!



