

DRIVEN BY VALUE



# Monthly Contractor Safety Meeting

August 2018

# INTRODUCTION

- Facilities
- Emergency Exits/Meeting Point
- Cell Phones
- Safety Share
- This months focus
  - Special Presentation
    - Rory Wilson from Ames Construction
  - Environmental Share
    - Management of Change (MOC) Process
  - Branch Safety Performance
- Contractors Safety Manual
  - Section 5.17.10 Fixed (non-mobile) Cranes

# Freeport-McMoRan Inc. Public Portal

As of March 31, 2018, this site (<http://fcx365-public.sharepoint.com>) will be deleted.

The new site is <https://publicportal.fmi.com/>

Please update your bookmarks accordingly.

# Environmental Share

## Management of Change (MOC) Process

### What is Management of Change (MOC) Process:

*a multi-disciplinary review tool to ensure projects move forward with the review from all necessary parties*

### Why should we submit an MOC:

- to establish a means to evaluate process &/or site changes,
- to ensure compliance with legal and other requirements,
- identify any potential issues regarding safety, environmental, security, purchasing, maintenance, etc.

### What are some of the events when an MOC should be submitted:

- New projects
- Operational/Process changes
- Use of new chemicals in large amounts
- Installation / replacement of equipment
- Re-routing pipeline/roadways, etc
- Tank removals, moves, new installation
- Asbestos related work

(MOC submission is not limited to just the events/activities listed above)

Refer to BMP 900, located on the Morenci Management Systems Sharepoint site (<https://fmteams.fmi.com/sites/MORMANSYS/SitePages/Home.aspx>) for more information and instructions

**To submit an MOC link:**

<https://fmteams.fmi.com/sites/MORMANSYS/Lists/Management%20of%20Change/AllItems.aspx>

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



**When in doubt. Call an Environmental Services representative.**



**SPILL HOTLINE — (928) 865-7745**



**Environmental Administration Office — Christina Seballos — (928) 865-6000**

**Environmental Yard, Satellite Accumulation, Roll Offs & Hoppers — Cody Watkins — (928)-965-6928, Bobby Scott — (928) 965-1770**

**Asbestos & Lead, Air Quality — Shanna Holguin — (928) 965-0245, Waleed Sunna — (928) 215-5695, Sam Madan (928) 965-6030,  
Rob Walker — (928)-215-6422**

**Environmental ISO 14001 & Product Approvals — Ruth Chismar — (928) 215-5899 — Jon Anderson (928) 215-2730**



**Water Quality & Wild Life — Jim Hogan — (928) 965-0061, Dee Broadwell — (928) 965-3142, Jamie Aberle — (928) 215-0667,  
Leah Sunna (928) 215-2067**

**Asset Recovery & Morenci Transfer Station — Bobby Scott — (928) 965-1770**

**Environmental Administration Accounting & Contracts — Cheryl Wright — (928) 965-1785**



# Contractor On-Boarding and Up-Dating

- Danny Leyvas and Bryon Wiley – **Safety**
- Christina Seballos – **Environmental**
- Dusty Gatlin – **Training**
- Amanda Medina – **Contracts Administration**
- Gay Cole – **Contracts Management**

# FMMO Safety Departments/Contacts

## Processing

- Morenci Mill/Filter Plant/Moly Plant/CLP – **Cliff Mull**  
**928-965-2530**
- Metcalf Mill/Tailings– **Jessica Rodriguez**  
**928-965-6104**
- Hydromet – **Frank Maldonado**  
**928-965-0219**
- C&C –**Rachel Adams**  
**928-215-5720**
- Maintenance Services – **Deborah Kamba**  
**928-965-4035**
- Leaching – **John Koon**  
**928-215-0547**

# FMMO Safety Departments/Contacts

## Administration

- All Administration/Including Town-Site –  
Danny Leyvas 928-965-0292  
Bryon Wiley 928-965-3540
- Industrial Hygiene – Chineye Isichei  
928-965-0824



# FMMO Safety Departments/Contacts

## Mine

- Resource Management/Fragmentation/Elect Shop – **Trent Mitchell**  
**928-215-6000**
- Mine Shops – **Garrit Culver**  
**928-965-4890**
- Loading Support/Shovel & Drill/Fab Shop – **Danny Leyvas**  
**928-965-0292**
- Haulage – **Robert Franco**  
**928-965-0198**



## 3 Prioritized Safety Goals

*1. Prevent Fatalities*

*2. Reduce Incident Severity*

*3. Improve Continuously*

# LIVING the VISION shares

## Ames Construction

Fusing HDPE pipe:

The swivel part of the rigging was worn

# Safety Performance

7/16/2018

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Day of the Year 196	FMMO Employees working Safely (Reportable Injuries Only)			Days w/o Lost Time Injury	Hours w/o Lost Time Injury	Days w/o Reportable Injury (MT/RD)	Hours w/o Reportable Injury (MT/RD)
	TOTAL	MTD	YTD				
	3,723	3,717	3,687				

 **FREEPORT-McMoRAN**

REPORTABLE INJURY RATE TRIR				Lost Time Injury Rate LTIR				Property Damage Rate PDIR				High Energy High Impact HEHI Events			
MTD	YTD	QTD	Target	MTD	YTD	QTD	Target	MTD	YTD	QTD	Target	MTD	YTD	QTD	Target
8	50	8	1.86	1	10	1	0.45	26	331	26	13.29	0	1	0	0.36
3.63	1.85	3.63		0.45	0.37	0.45		11.81	12.26	11.81		0.00	0.04	0.00	

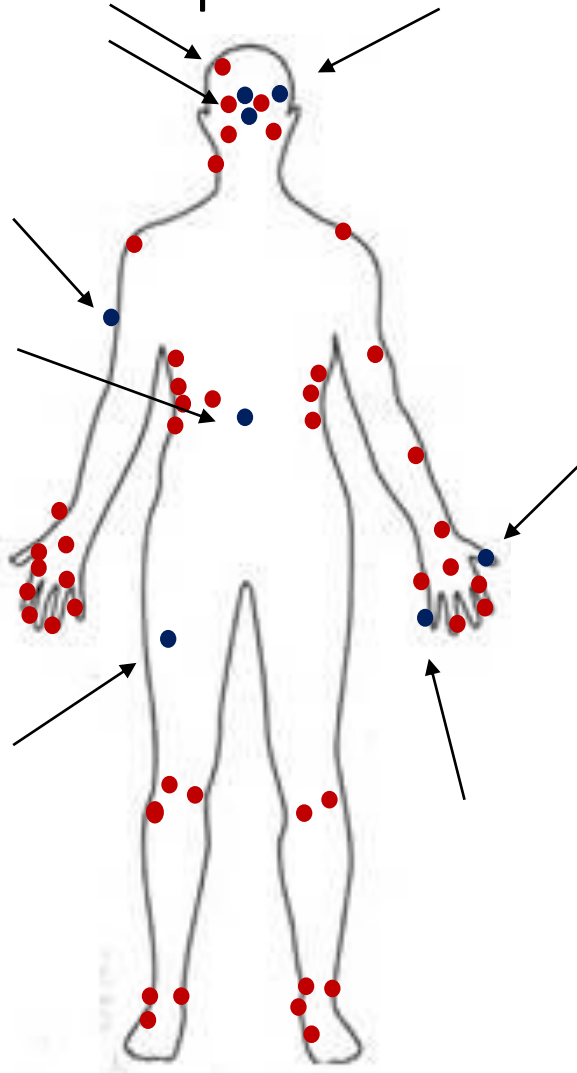
# Injury Report

Incident Date	Incident Type	Organization/ Division	Short Description
7/2/2018	Medical Treatment	Processing Metcalf Concentrator	An employee was using a pocket knife to cut a plastic hose when the knife slipped causing a laceration to the employee's leg.
7/2/2018	First Aid	Mine Mine Maintenance	On 7/2/2018 an Empire employee slipped on a ladder and received a small cut on the forehead from the inner suspension of their hardhat. Reported on 7/3/2018.
7/3/2018	First Aid	Mine Haulage	An employee was stung by an unknown insect.
7/5/2018	Restricted Duty	Processing Metcalf Concentrator	On 7/5/2018,an employee reported pain in the abdomen area after performing crusher liner changes.
7/6/2018	Medical Treatment	Mine Mine Maintenance	An employee was troubleshooting a diaphragm pump system when they removed the cam lock and the employee was sprayed in the face with highly pressurized oil due to the check valve stuck in the open position.
7/8/2018	Medical Treatment	Contractor Mine Maintenance	A Steel Unlimited employee was using a needle scaler to chip away slag when a piece flew into their eye causing a minor abrasion.
7/13/2018	First Aid	Processing Metcalf Concentrator	An employee reported that their hand hurt.
7/14/2018	First Aid	Administration Security	An employee was stung by a bee.
7/12/2018	Lost Time	Contractor Metcalf Concentrator	A Brahma employee stepped up on the structure of the conveyor and stepped back down when they lost footing causing the employee to fall resulting in a fracture to the upper arm.
7/9/2018	First Aid	Mercantile Conoco	As employee was lowering a basket of food into the deep fryer, a small amount of hot grease splashed up into the employees left eye.
7/10/2018	Medical Treatment	Mine Mine Maintenance	On 7/10/2018,an employee felt something in their eye after grinding and reported the following day after continued discomfort.
7/12/2018	First Aid	Mercantile Community Center	An employee jumped up at the volleyball net and landed on their left ankle causing it to swell.
7/14/2018	Medical Treatment	Mine Frag-Loading/ Support	The operator of the 21R Drill closed the cab door on their hand causing a laceration to the left index finger.
7/14/2018	Medical Treatment	Mine Haulage	Employee lost his balance and went back, slamming his right fourth finger on the doorframe.

● = Last 2 week's injuries

● = Year to date injuries.

# Reportable Injuries - Top Injuries



Nature of Injury	Total Injuries	MT	RD	LT
Sprain/Strain	17 34%	0	12	5
Cut/Laceration	13 26%	9	3	1
Fracture	7 14%	0	5	2
Irritation	3 6%	3	0	0
Abrasion	2 4%	2	0	0
Hernia	2 4%	0	1	1
Amputation	1 2%	1	0	0
Avulsion	1 2%	0	1	0
Bruise/Contusion	1 2%	0	1	0
Burn (chemical)	1 2%	0	0	1
Concussion	1 2%	0	1	0
Foreign body embedded	1 2%	1	0	0

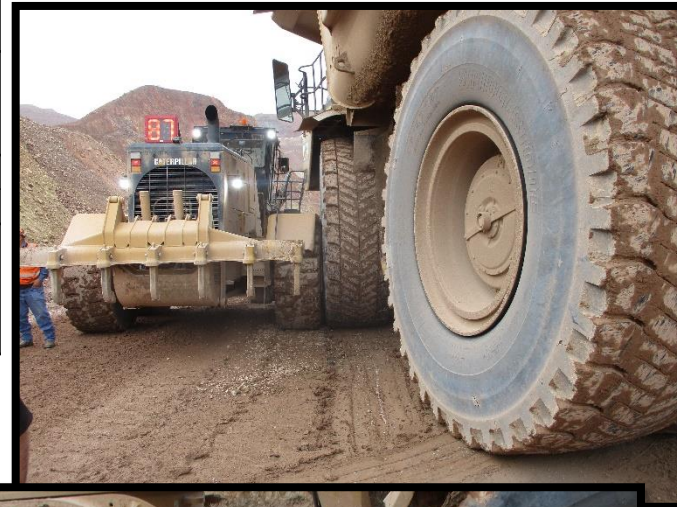
Nature of Injury	Total Injuries	MT	RD	LT
Finger	10 20%	7	3	0
Knee	5 10%	0	2	3
Hand	5 10%	2	2	1
Eye	5 10%	5	0	0
Lower Back	5 10%	0	3	2
Ankle	4 8%	0	3	1
Foot	3 6%	0	3	0
Shoulder	2 4%	0	2	0
Face	2 4%	1	0	1
Abdomen	2 4%	0	1	1
Wrist	2 4%	0	2	0
Chest	1 2%	0	1	0
Head	1 2%	0	1	0
Neck	1 2%	0	1	0
Upper Leg	1 2%	1	0	0
Upper Arm	1 2%	0	0	1



# Incident Recall

## Property Damage

<b>Date</b>	07.13.2018		
<b>Organization</b>	Mine Organization		
<b>Division</b>	Haulage		
<b>Potential Risk</b>	<b>3</b>	<b>2</b>	<b>6</b>
	Consequence	Likelihood	Potential Risk
<b>Brief Description</b>	Around 5:30 P.M. the 87 Blade was parked on the HHH haul road behind the blasting blockers when the 578 Haul Truck came around the corner and could not stop due to slick road conditions. At the time of impact records show that the haul truck was doing 23 MPH in 5th gear. There were no injuries.		



## 5.17.10 Fixed (non-mobile) Cranes





## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.1 Operator Qualifications

- Crane operators shall comply with site requirements to operate a crane.
- Crane operators who possess a nationally recognized license or certificate will be required to provide evidence of their training, qualifications and competence prior to arrival on site. In any case, the operator shall have current, applicable, written documentation of training for the category of equipment being operated.

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.1 Operator Qualifications

- Crane operators shall document a recent physical examination, including a vision test, prior to applying for a project crane operator license. (Note: The D.O.T. Physical forms meet the above requirements and may be used as a guideline.)



## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.1 Operator Qualifications

In order to receive a project crane operator license, an applicant must be able to pass a written test that includes, at minimum, the following elements:

- Crane Set-up
- Reading Load Charts
- Calculating capacities at a given radius
- Calculating deductions for rigging, block, jib, etc.
- Proper Crane Operation
- Rigging and Rigging Inspection
- Evaluating Site Conditions
- Pre-Operations Inspection

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.1 Operator Qualifications

Potential candidates for crane operator shall be able to pass a “hands on” test that includes the following skills:

- Perform Pre-Operation inspection
- Set crane up for a lift
- Inspect rigging
- Operate crane and show ability to follow hand signals (i.e., swing boom, place hook, etc.)
- Ability to read load chart and calculate load
- Perform a test lift
- The “hands on” test shall be documented and results made available upon request.

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.2 Operating Procedures

- The operator shall not engage in any practice that may divert his or her attention while engaged in crane operations, and **will never leave the controls when there is a load on the hook.**
- The operator shall not operate the crane if physically or mentally unfit, or if taking prescription drugs which may affect judgment.
- **The operator shall not respond to any signal that is unclear or is given by anyone other than the appointed signal person (with the exception of a stop signal given by anyone).**

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.2 Operating Procedures

- The operator shall have final responsibility and control over the crane operations. When there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle the loads until safety has been assured. Any manager, supervisor or person attempting to bypass the crane operator's authority on this issue will be removed immediately from the site.
- The load shall be attached to the hook by means of slings or other approved devices, and no open hooks shall be used. Hooks shall have functional safety latches.
- A shackle shall be used to retain two or more choker eyes in the hook.

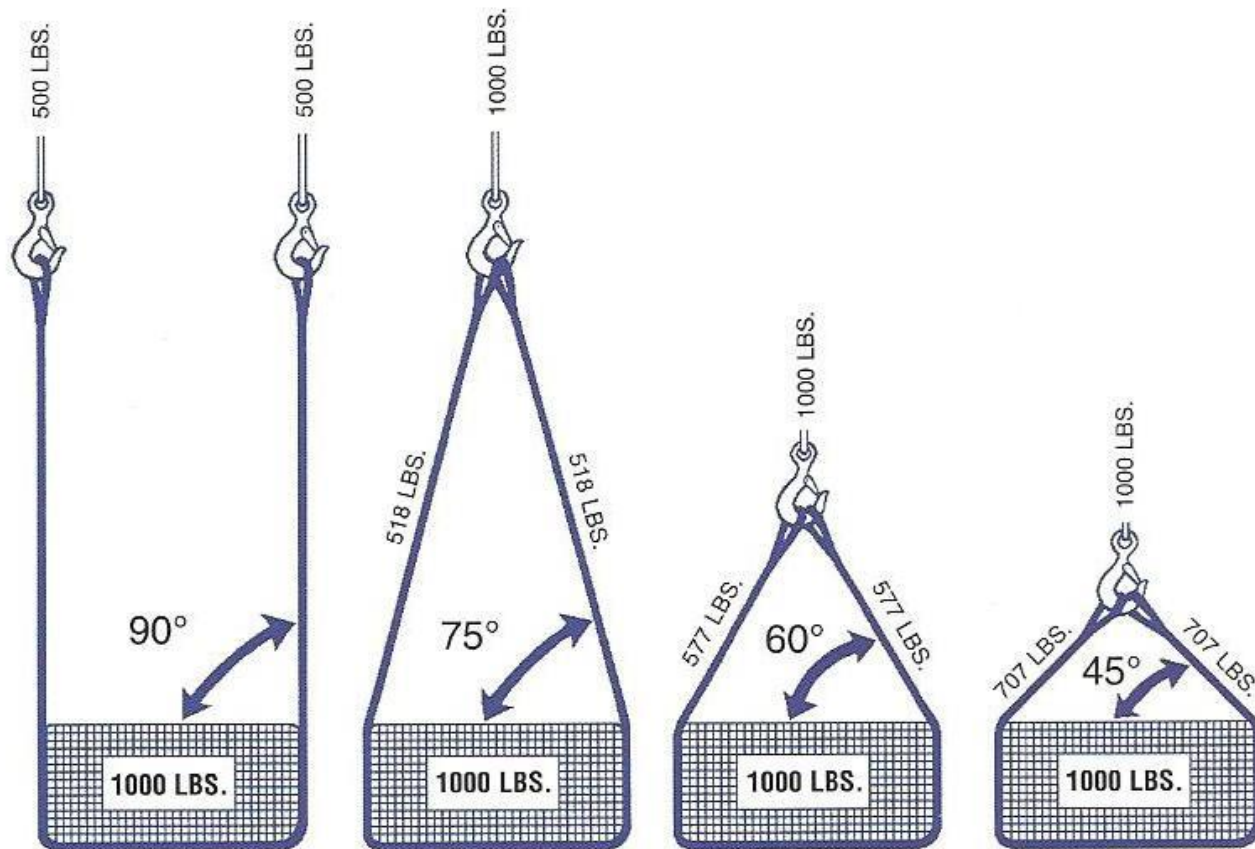
## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.2 Operating Procedures

- Hooks shall not be changed, defaced or deformed in any manner. Hooks that have been exposed to excessive heat such as welding, burning, grinding, etc. will not be allowed on-site.
- The operator shall position the hook over the load in a manner to prevent load swing.
- The operator shall determine that the rope is properly seated in the drum and in the sheaves; the load line is not kinked; and multiple part lines are not twisted around each other.
- Shake out hooks will be used only for shaking out materials.
- During hoisting, the operator shall not suddenly accelerate/decelerate a moving load; allow the load to contact any obstructions; swing loads over personnel; or allow side loading or load dragging.
- All load rigging equipment shall be appropriately rated. Ratings shall be displayed on the device.

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.3 Rigging Requirements





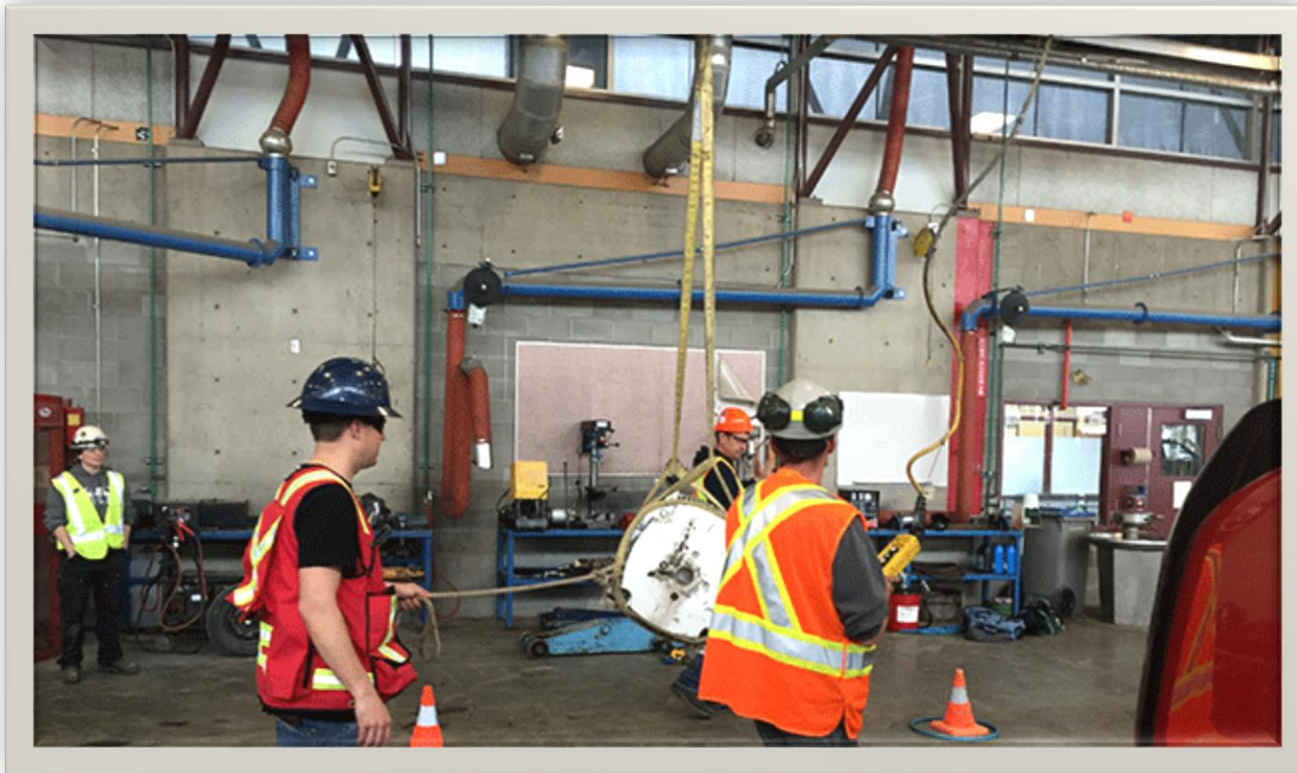
## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.3 Rigging Requirements

- Rigging will only be completed by competent individuals who have received **training** on proper rigging techniques. **Evidence of such training must remain with riggers during working hours.**
- All rigging equipment shall be inspected prior to each use. Damaged or defective slings shall be immediately removed from service and destroyed.
- “Shop-made” grabs, hooks, clamps or other lifting devices are prohibited.
- **All rigging equipment shall have a safety factor of five.**

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.4 Safe Operating Practices



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### 5.17.10.4 Safe Operating Practices

- Slings shall not be shortened by knots, bolts or other makeshift devices.
- Wire rope slings shall be padded or softeners used to protect against damage due to sharp corners.
- Slings used in a basket hitch shall have the loads balanced to prevent slippage.
- Loads handled by slings shall be landed on cribbing or dunnage so that slings will not be pulled from under or crushed by the load.

## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.4 Safe Operating Practices

- Slings subjected to shock loading shall be immediately removed from use and destroyed.
- Tag lines will be used with all lifting operations.
- Repair to rigging equipment is prohibited. It shall be removed from service and destroyed or sent to the manufacturer for repair.



## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.5 Inspections and Recordkeeping

- A thorough **written inspection** of slings, ropes and chains in use shall be made on a regular basis, but **not less frequently than six months**.
- A record of inspections shall be maintained.





## 5.17.10 Fixed (non-mobile) Cranes

### 5.17.10.6 Work Platforms Suspended from Cranes

A permit is required prior to using a crane for lifting personnel in a suspended platform. The platform must be certified by a professional engineer. The permit will be issued by the contractor when it is determined that the use of the platform is the only feasible method of accomplishing the task. The safety checklist included with the permit will be utilized prior to hoisting personnel. A pre-lift meeting must take place prior to the lift and be documented. Fall protection must be in place according to regulatory and FCX Fall Protection standards. Personnel and materials cannot be lifted together.

**2018 Contractor Monthly Safety Meeting Schedule**  
**Freeport Morenci**

<b>Meeting Dates</b>	<b>1/8/2018</b>	<b>2/12/2018</b>	<b>3/12/2018</b>	<b>4/10/2018</b>	<b>5/1/2018</b>	<b>6/12/2018</b>	<b>7/10/2018</b>	<b>8/14/2018</b>	<b>9/11/2018</b>	<b>10/9/2018</b>	<b>11/13/2018</b>	<b>12/11/2018</b>
<b>Time</b>	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am	10am to 11am
<b>Place</b>	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall	Morenci Club Hall