

DRIVEN BY VALUE



Monthly Contractor Safety Meeting

April 2018

INTRODUCTION

- Facilities
- Emergency Exits/Meeting Point
- Cell Phones
- Safety Share
- This months focus
 - Special Presentation
 - Deborah Ferguson from Riley Industrial
 - Environmental Share
 - Branch Safety Performance
 - Safety Notice
 - Contractors Safety Manual
 - 5.17 thru 5.17.8 Crane Safety

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.



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

Asbestos & Lead — Rob Walker — 928-215-6422

Air Quality — Shanna Holguin — (928) 965-0245, Bobby Scott — (928) 965-1770, Waleed Sunna — (928) 215-5695



Environmental ISO 14001 & Product Approvals — Ruth Chismar — (928) 215-9312 — Jonathan Anderson (928) 215-2730

Water Quality & Wild Life — James Hogan — (928) 965-0061, Dee Broadwell — (928) 965-3142, SWPPP — Jamie Aberle — (928) 215-0667

Asset Recovery & Morenci Transfer Station — Bryan Taylor — (928) 965-2777

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



Environmental Share Spill Notification Hotline (928) 865-7745 (SPIL)



- The Spill Hotline is located at the mine gate shack
- Give all information regarding the spill including:
 - Location
 - Type of spill
 - Quantity
 - Copper and acid content if applicable
 - Contact name and phone number
- The mine gate attendant will notify the environmental on-call personnel with information given to the mine gate
- Caller of the spill will receive a call from environmental regarding the spill and the steps to be taken



*For more information refer to BMP 400: Spill Notification & Proper Reporting and
BMP 402: Clean Up Procedures*

February 2018

April 2018 Environmental Share

Spring is here and the local wildlife are beginning to emerge!



It is nesting season, birds are building nests and laying eggs. To discourage birds from nesting in production areas, empty nests may be removed before eggs or babies are present.

Active nests (nests with eggs or babies) cannot be touched!

Notify Environmental Services immediately if there is an active nest in a production/work area.

Snakes are beginning to become active. Be cautious and look for snakes in your work area. Snakes should be reported to Security for trained personnel to safely remove the snake.



Bees and wasps are common during the spring and summer months. If you have bees in your area, please contact Security to have hives removed or have your work area treated for insects/pests.

Good housekeeping can help reduce the occurrence of insects/mice in shop and office areas.

Please Contact Environmental Services regarding any wildlife questions.
Important Phone Numbers: Spill Hotline 928-865-7745 Environmental Services 928-865-6000

Safety Performance

DRIVEN BY VALUE

4/2/2018



Day of the Year 84	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				
	3,422	3,417	3,412				

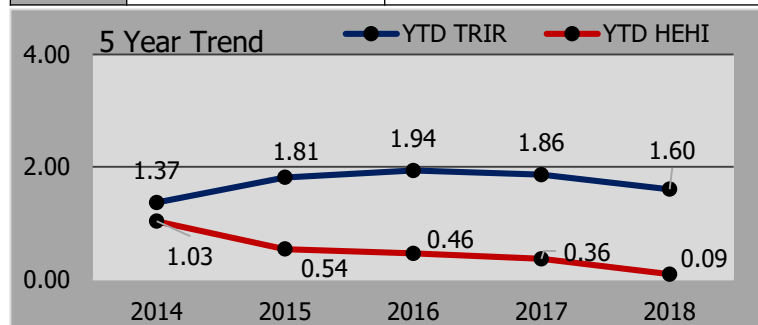
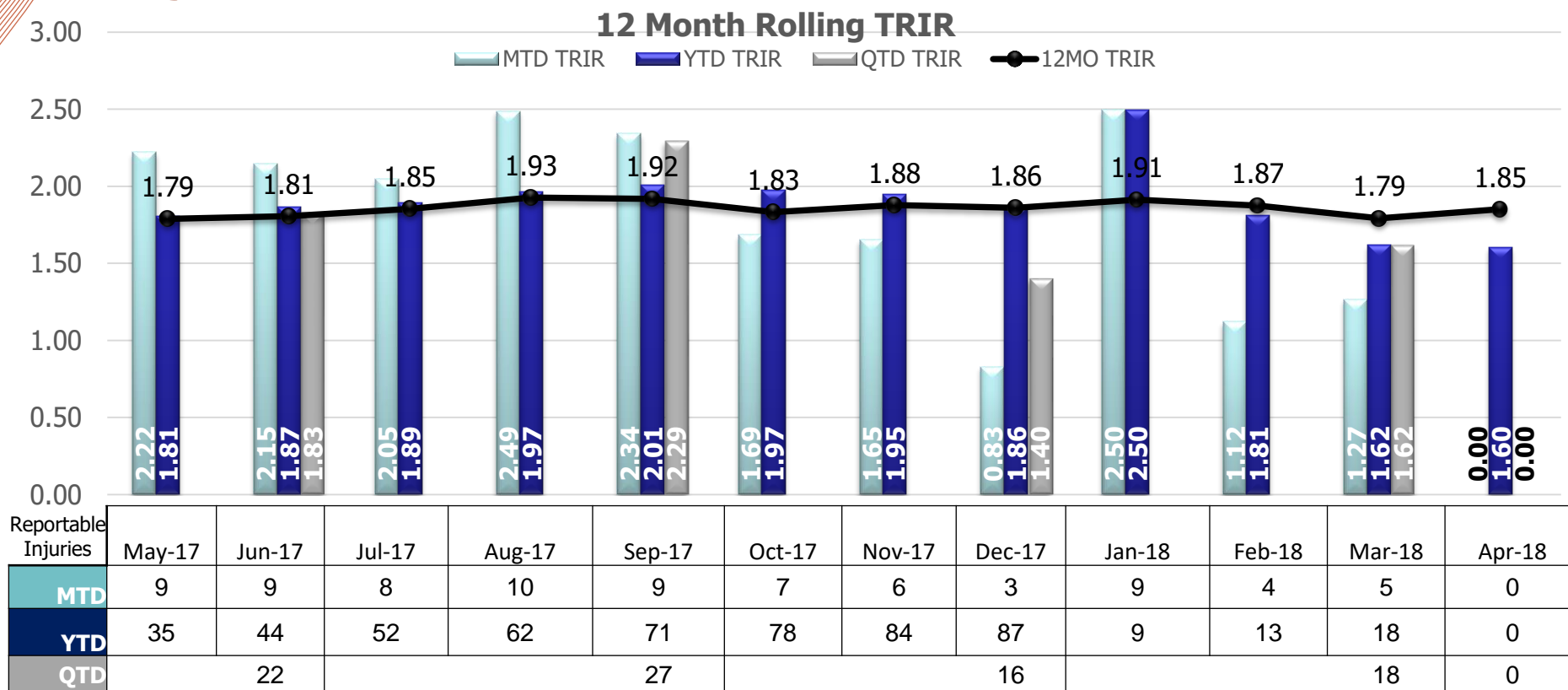
REPORTABLE INJURY RATE TRIR				Lost Time Injury Rate LTIR				Property Damage Rate PDIR				High Energy High Impact HEHI Events			
MTD	YTD	QTD	Target	MTD	YTD	QTD	Target	MTD	YTD	QTD	Target	MTD	YTD	QTD	Target
5	18	18	1.86	0	1	1	0.45	54	158	156	13.29	0	1	1	0.36
1.27	1.60	1.62		0.00	0.09	0.09		13.68	14.05	14.03		0.00	0.09	0.09	

As of 3/31/2018

62 Total Injuries

18 Reportable Injury

Safety Dashboard as of 4/1/2018

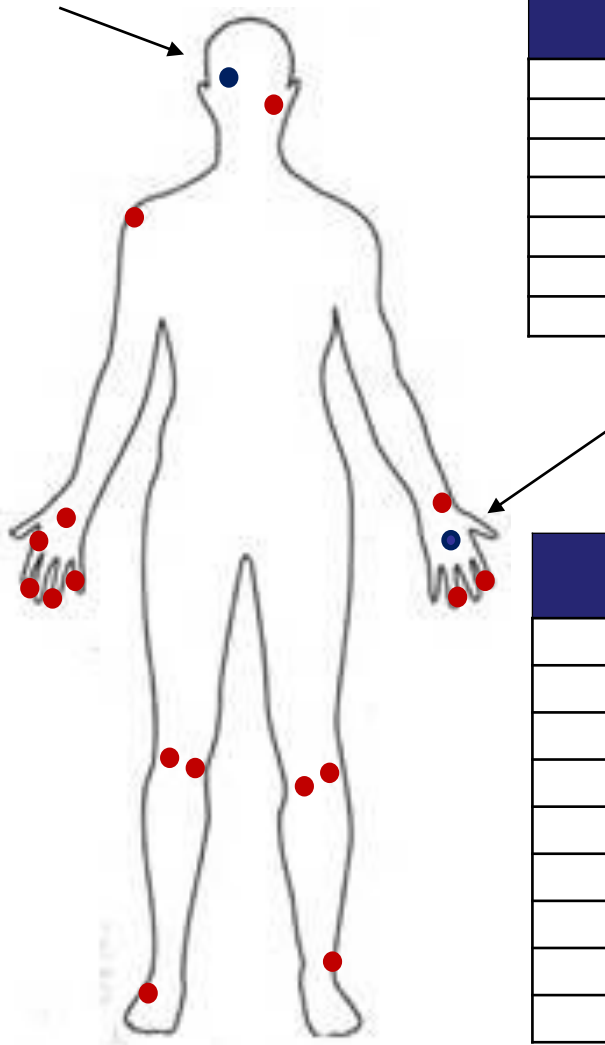


Injury Report

Incident Date	Incident Type	Organization/ Division	Short Description
3/22/2018	First Aid	Contractor Morenci Concentrator	A Riley employee was pulling flex from a confined space and had wet lime get in their eye.
3/23/2018	First Aid	Mine Mine Maintenance	An employee rolled up sleeves and noticed blood on their arm. No lacerations to clothing were noted.
3/22/2018	Medical Treatment	Contractor Hydromet	A Western Industrial employee got dirt in their eye after an air chisel was being moved and blew dust. *Reclassified on 3/26/2018*
3/23/2018	First Aid	Processing Morenci Concentrator	Employee was at the wash rack with a co-worker when a gust of wind blew causing the co-worker to loose control of the water hose and striking the employee in the shoulder.
3/25/2018	First Aid	Mine Haulage	The operator of the 25RTD hit a pothole causing the CAT to bounce and the operator to feel pain.
3/28/2018	Medical Treatment	Mine Mine Maintenance	A mechanic reached under the seat of a boom truck, grabbing the adjusting handle, and received a laceration to the hand.
3/20/2018	First Aid	Processing Hydromet	On 3/30/2018, an employee reported that on 3/20/2018 they were removing a cell from the cell line and they felt pain in their back.

Reportable Injuries – Top Injuries

Nature of Injury	Total No. of Injuries		Medical Treatment	Restricted Duty	Lost Time
Sprain/Strain	6	33%		5	1
Cut/Laceration	6	33%	4	2	
Fracture	2	11%	1	1	
Abrasion	1	6%	1		
Amputation	1	6%	1		
Avulsion	1	6%		1	
Irritation	1	6%	1		



● = Last two week's injuries

● = Year to date injuries.

Part of Body by Classification of Injury	Total No. of Injuries		Medical Treatment	Restricted Duty	Lost Time
Finger	4	22%	3	1	
Knee	4	22%		3	1
Hand	4	22%	2	2	
Face	1	6%	1		
Foot	1	6%	1		
Shoulder	1	6%		1	
Wrist	1	6%		1	
Ankle	1	6%		1	
Eye	1	6%	1		

Near Miss

Incident Detail

Date 03.25.2018
Organization Mine
Division Fragmentation – Loading/ Support

Potential Risk	3	2	6 - Monitor
	Consequence	Likelihood	Potential Risk

Brief Description

A rock landed near the S43 in Western Copper (~100' away) after a blast on Phase 14 which is about 1800' above. The 43 Shovel below was still in operation and actively loading a haul truck on the left side when the rock was seen in the rear view camera. It seems to have been dislodged from the high wall, but how far it fell is unknown. There is a 300' step out two double benches up from the S43 and the rock went past it. Slope monitoring did not detect the rock (it is small relative to the slope).



Property Damage

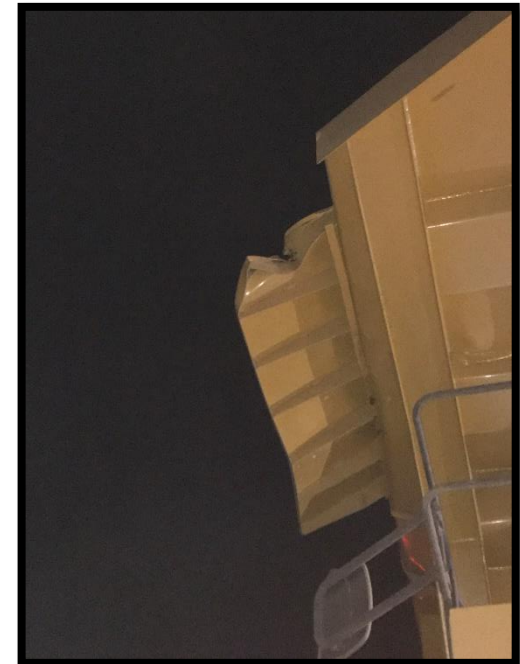
Incident Detail

Date 03.27.2018 (night shift 03.26.2018)
Organization Mine
Division Haulage

Potential Risk	2	3	6 - Medium
	Consequence	Likelihood	Potential Risk

Brief Description

The operator of the 537HT was traveling loaded up the NW ramp when the driver fell asleep and went into oncoming traffic. At the same time the 576 was traveling empty down the ramp and saw the 537 come into his lane. He was able to get the 576 stopped but the 537 still kept going up the ramp making contact with the 576. It bent the rock guards on both trucks.



Contractor On-Boarding and Up-Dating

- Bryon Wiley – Safety
- Christina Seballos – Environmental
- Dusty Gatlin – Training
- Victoria Broz – Contract Administration
- Gay Cole – Contracts Management

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 –**Bryon Wiley (Temporary Coverage)**
928-965-3540
- Maintenance Services – **Deborah Kamba**
928-965-4035
- Leaching – **John Koon**
928-215-0547

FMMO Safety Departments/Contacts

Administration

- All Administration/Including Town-Site –
Estevan Varela

928-965-0542

- 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

The Work We Do... (2018)

A	<i>1 per month - HIRA Workshops; Include front line employee (SME)</i>
---	--

B	<i>Divisions will use data from Safety Performance results to reduce incidents by developing division specific safety plan.</i>
---	---

C	<i>Safety Action Items resulting from Critical Control Audits/PFEs/SA/Workplace Exams or GSR Gap Analysis will generate a Work Order and/or be placed in the Action Item Tracking System.</i>
---	---

D	<i>New GSRs, PFE Advisories, and Safety Alerts will be provided to Management and shared with employees.</i>
---	--

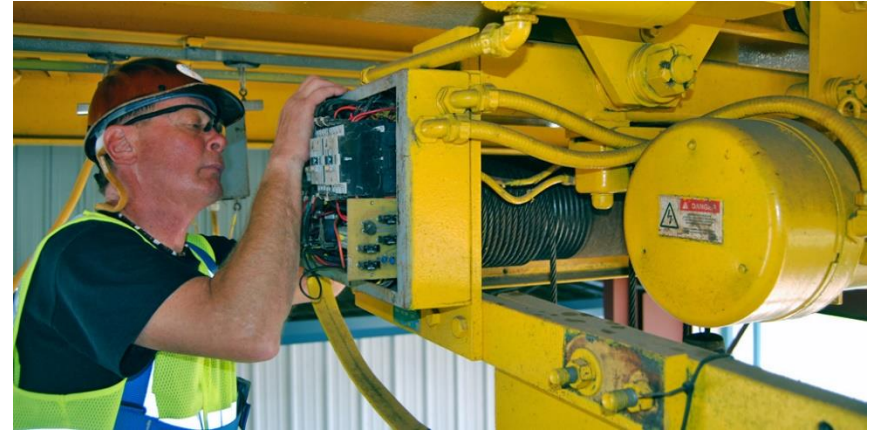
E	<i>The Safety/Training Departments will roll out the improved Fatal Risk Monitoring program to the site.</i>
---	--

5.17 Crane Safety



5.17 Crane Safety

- All cranes shall have a current **annual certification by an accredited third party.** This shall be done prior to working and shall maintain a current annual inspection for the duration of the work.
- Worn or damaged wire rope shall be a cause for taking the equipment out of service while being replaced.



5.17 Crane Safety

- Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or other moving parts or equipment shall be guarded **if such parts are exposed to contact by employees or otherwise create a hazard.**
- Guarding shall meet the regulatory or recognized national standard.

5.17 Crane Safety

- Contractors shall maintain on-site documentation of an annual certification for each crane and associated rigging equipment. Certification must be kept current; re-certification will occur if the crane is damaged or the 12-month certification period is exceeded. It must be brought onto the site.

APPENDIX 3

SAMPLE CHECKLIST FOR TOWER CRANE

This checklist provides an overview of the basic requirements to be checked which would help to ensure that a tower crane is safe for use. Tower crane users should consult manufacturers, suppliers and owners to check on minimum requirements and address any concerns before using the equipment. These items in this checklist are non-exhaustive and users are recommended to make the necessary modification and customisation to suit your work processes and conditions at the workplace.

S/N	Items		Remarks
A. Tower Crane Approved For Use			
1.	The Tower Crane is of type-approved by MOM	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.	The Tower Crane has a valid Lifting Machine (LM) certificate (issued less than 12 months ago).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
B. General Requirements			
3.	The Tower Crane is provided with markings of the Safe Working Load, Tower Crane serial number and LM number.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.	Proper and safe access and egress (with proper foot and hand holds/ supports) are provided to the crane operator.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5.	A load capacity chart is displayed in the operator cabin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6.	Operator crane cabin is provided with a locking mechanism so as to prevent unauthorised entry.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7.	A safety bar is fitted across the operator's cabin window where there is likelihood of the operator falling through it.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8.	An approved fire extinguisher is provided in the operator cabin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9.	An Operation and Maintenance log book is available in the operator cabin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10.	A Manufacturer Operating Manual and Maintenance Manual are made available.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11.	Crane hook is provided with a safety catch to prevent displacement of the sling or load from the hook.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12.	Wire ropes are well lubricated and that there are no visible defects such as broken wires, kinks, excess wear, crushing etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
C. Safety and Operational Devices			
13.	A load radius indicator with warning alarm is installed.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14.	A Jib angle indicator is provided (for Luffing Jib Tower Crane)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15.	An emergency stop button, which will terminate the operation of the crane engine, is installed in the operator cabin and correctly identified.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

5.17 Crane Safety

- The crane's operator, or other Qualified Person, shall conduct a daily inspection of the crane, prior to use, to ensure that the crane is safe for operation. This inspection shall be documented and available for examination at any time.

5.17 Crane Safety

- Under no circumstances will anyone be allowed to ride the suspended load, hook or ball.
- Under no circumstances will anyone be allowed to conduct work, or walk, beneath a suspended load.
- Operators shall be certified by a recognized authority
- There shall be an alternate means of communication between operator and signalman when line of sight is not visible.

5.17.1 Mobile Crane - Crane Setup

The operator shall be responsible for:

- Proper placement of the crane in relationship to the load to be handled and the landing area so as to obtain the best rated lift capacity
- Proper placement and use of outriggers for all lifts except where the manufacturer allows otherwise

5.17.1 Mobile Crane - Crane Setup

The operator shall be responsible for:

- Determining the stability of the ground or footing
- The installation and maintenance of crane swing radius protection
- Ensuring anti-two-block devices are installed on all cranes
- The installation of a boom angle indicator on cranes that is readily visible to the operator



5.17.2 Load Ratings Determination

- The weight of all auxiliary handling devices such as hoist blocks, headaches balls, hooks and rigging shall be considered as part of the total load, in addition to the weight of all items added at the site.
- The operator shall be provided with a copy of the bill of lading with the item weight clearly legible. No crane will be loaded beyond its rated capacity or used for other than its designated purpose.
- A legible capacity chart specific for each individual crane, and easily visible to the operator, shall be located in the crane during operation.

5.17.3 Crane Inspection

- Cranes shall be inspected after setup, prior to the initial lift and before each shift.



5.17.3 Crane Inspection

- Daily crane inspections will be performed and documented in writing to check the following by each operator:
 - All control mechanisms for maladjustment, excessive wear or contamination
 - All safety devices
 - Deterioration of air-hydraulic systems

5.17.3 Crane Inspection

- Daily crane inspections will be performed and documented in writing to check the following by each operator:
 - Crane hooks, chokers and slings for damage
 - Electrical apparatus for malfunctioning, signs of excess wear, dirt and moisture accumulation
 - There shall be a means of communication (horn, whistle, etc.) to alert workers in the immediate vicinity of a left/overhead hazard.

5.17.4 Recordkeeping for Cranes

All inspections shall be documented and maintained on-site, available for inspection and review.

MOBILE CRANE PRESTART CHECK LIST										0001	
OPERATOR'S NAME: _____ DATE: _____ SHIFT: DS / NS / AS UNIT No.: _____ HRS/KMS: _____											
Ensure that all boxes are marked, e.g. <input checked="" type="checkbox"/> for OK, <input checked="" type="checkbox"/> defect found.											
Category 'A' faults: The machine MUST NOT be operated until fault is rectified. NOTIFY supervisor immediately.											
Wire Rope Condition	<input type="checkbox"/>	ACTION	INITIAL	Load Indicator (if fitted)	<input type="checkbox"/>	ACTION	INITIAL	Operation of Controls	<input type="checkbox"/>	ACTION	INITIAL
Sheaves	<input type="checkbox"/>			Anti-Two Block Indicator	<input type="checkbox"/>			Slew (if applicable)	<input type="checkbox"/>		
Hook Safety Catch	<input type="checkbox"/>			Park Brake - Note Test in 2nd gear or drive	<input type="checkbox"/>			Boom Raising & Lowering	<input type="checkbox"/>		
Fire Extinguisher & Shake	<input type="checkbox"/>			Seat Belt	<input type="checkbox"/>			Boom Extension & Retraction	<input type="checkbox"/>		
Engine Oil Level	<input type="checkbox"/>			Rims & Wheel Nuts	<input type="checkbox"/>			Outriggers	<input type="checkbox"/>		
Engine Coolant Level	<input type="checkbox"/>										
Category 'B' faults: The machine MUST NOT be operated unless fault is rectified or operation is APPROVED and INITIALLED by the competent person.											
Hydraulic Level	<input type="checkbox"/>	ACTION	INITIAL	Drain Air Tank	<input type="checkbox"/>	ACTION	INITIAL	Oil Leaks	<input type="checkbox"/>	ACTION	INITIAL
Fuel Level	<input type="checkbox"/>			Horn	<input type="checkbox"/>			Hydraulic Cylinder Hose & Fittings	<input type="checkbox"/>		
Drive Belt Tensions	<input type="checkbox"/>			Lights & Flashing Light	<input type="checkbox"/>			Electric Cables	<input type="checkbox"/>		
Air Cleaner	<input type="checkbox"/>			Gauges & Warning Lights	<input type="checkbox"/>			Windscreen	<input type="checkbox"/>		
Tyres	<input type="checkbox"/>										
Category 'C' faults: Machine MAY be operated. Corrective action is required. Report it to your Supervisor.											
Batteries & Terminals	<input type="checkbox"/>	ACTION	INITIAL	Damage (General-Body)	<input type="checkbox"/>	ACTION	INITIAL	Other Fluid Leaks	<input type="checkbox"/>	ACTION	INITIAL
Mirrors	<input type="checkbox"/>										
NOTE: These are intended as a minimum standard and should not over-ride specific plant requirements. NOTE: If a man basket is required a separate inspection is to be carried out (ref: A 55947)											
OTHER FAULTS: _____											
Operator's Signature: _____											
(This sheet to be passed to supervisor once completed)											
*Basket must comply with KM standard											
Any faults found not listed in the above categories and affects the safe operation of the machine must be reported to the supervisor immediately.											
TUFFA products. SUPPLIED BY TUFFA PRODUCTS WWW.TUFFAPRODUCTS.COM.AU 02 6895 3347											
TUFFA PRODUCTS ACCEPTS NO RESPONSIBILITY FOR THE USE OF THIS DOCUMENT, IT IS THE USER'S RESPONSIBILITY TO ENSURE THAT IT IS SUITABLE FOR THE APPLICATION.											

5.17.5 Crane Maintenance

All maintenance will be performed in accordance with manufacturer's recommendations.

5.17.6 Crane Setup Ground Stability

For maximum capacity, the crane must be level, and the ground surface must be adequate to support the dynamic load of a working crane.

5.17.7 Calculating Load-Bearing Pressures

Only knowledgeable and certified crane operators will calculate load-bearing pressures. Crane usage beyond rated load-bearing pressures is not allowed.



5.17.8 Soil Stability

Different type soils will give different load-bearing pressure. When setting up a crane, the qualified person must be able to distinguish between the three groups of soil, the appropriate mixture of each, their moisture content and their depth.

Factors such as water tables and distance to excavation that affect the soil's ability to withstand the pressure without collapsing also must be considered by the qualified person.

NEXT MONTH – Mobile Cranes Cont.



2018 Contractor Monthly Safety Meeting Schedule Freeport Morenci

[illegible]

Living the Vision

- **Positive Recognition**
- **Thanks again to Riley Industrial Services for todays presentation**
- **Velocity Builders is set to conduct the May Special Presentation.**
- **H&S Field Services will do the June presentation**
- **Southwest Energy will do the July**
- **Who want's to do the August Special Presentation?**