

DRIVEN BY VALUE



Monthly Contractor Safety Meeting

March 2018

INTRODUCTION

- Facilities
- Emergency Exits/Meeting Point
- Cell Phones
- Safety Share
- This months focus
 - Special Presentation
 - Rodolfo Hernandez from Advanced Lining
 - Environmental
GreenShare
 - Branch Safety Performance
 - Safety Notice – Hot Work
 - Contractors Safety Manual Section 5.16 Fire Protection



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 **Environmental Share**



Spill Prevention *Preventive Maintenance, Use Secondary Containments, Frequent Inspections*

Things you can do to prevent spills:

- Always use containers in good condition
 - Do not leave containers open
 - Check equipment before using it
- Empty secondary containments after spills*
*Contact Environmental Services for petroleum tank secondary containments
- Do not operate/drive leaking equipment
 - Be alert when refueling
 - Good Housekeeping
- Conduct RCAs and follow up on results

Transfers

- Ensure valves are closed.
- Verify that the container that will receive the product has enough capacity.
- Visually monitor the product level.

*If you find a spill contact the
Spill Hotline 865-SPIL (7745), or Security on-call.*

March 2018

Safety Performance

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3/5/2018



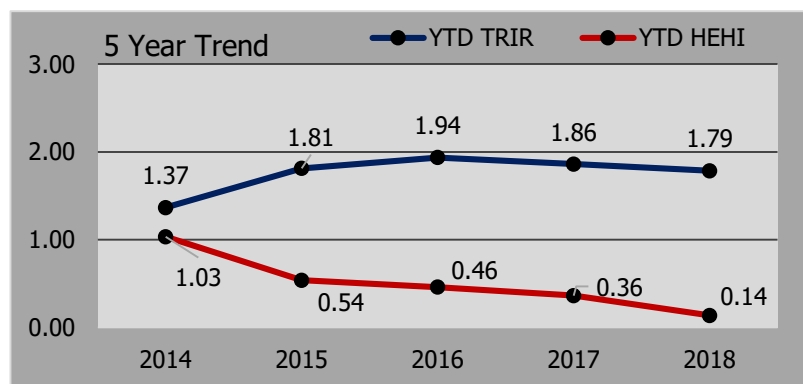
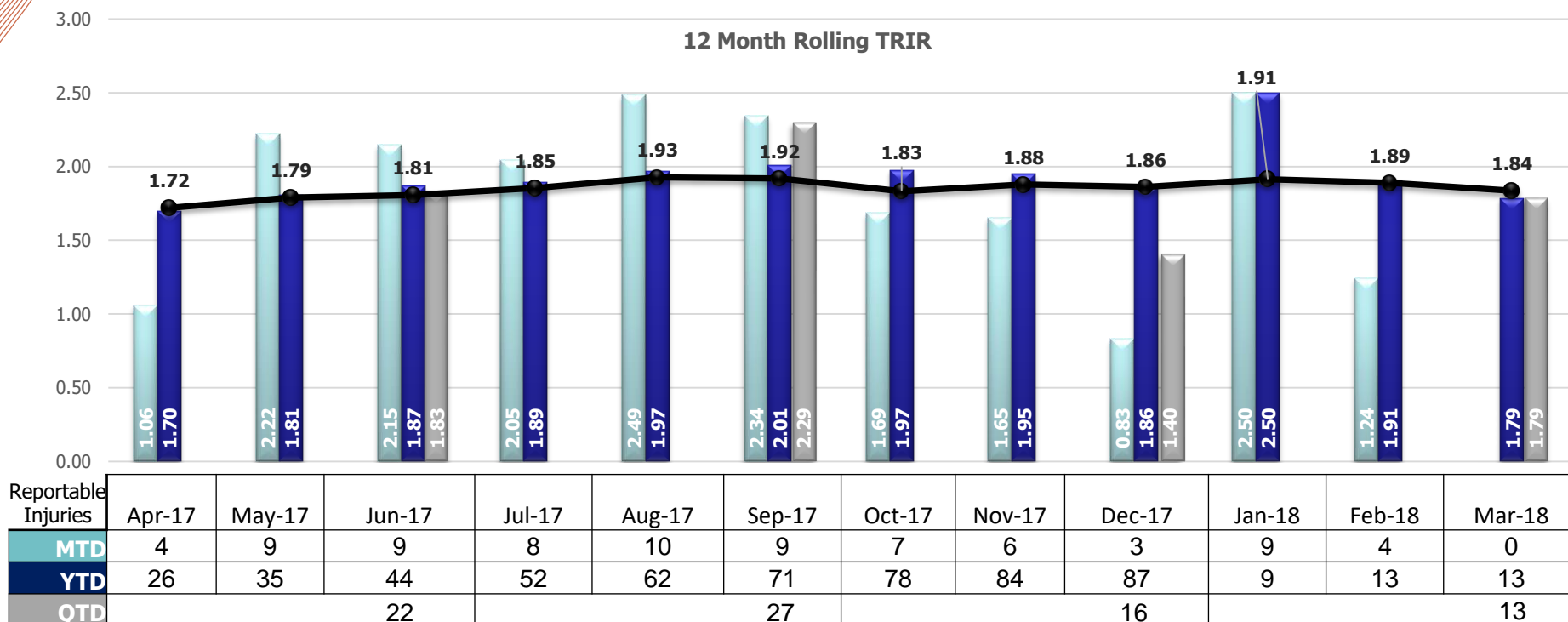
Day of the Year 63	FMMO Employees working Safely (Reportable Injuries Only)			Days w/o Lost Time Injury	Hours w/o Lost Time Injury	Days w/o Reportable Injury (MT/RD)	Hours w/o Reportable Injury (MT/RD)
	TOTAL	MTD	YTD				
	3,422	3,422	3,413				

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
0	13	13	1.86	0	1	1	0.45	10	112	112	13.29	0	1	1	0.36
0.00	1.79	1.79		0.00	0.14	0.14		21.76	15.38	15.38		0.00	0.14	0.14	

42 Total Injuries

13 Reportable Injury

Safety Dashboard as of 3/4/2018



Injury Report

Incident Date	Incident Type	Organization/ Division	Short Description
2/19/2018	First Aid	Mine Mine Maintenance	An employee was using a breaker bar to loosen bolts on a haul truck when they felt a twinge in their neck.
2/19/2018	First Aid	Mine Mine Maintenance	An employee picked up a chair to move to another spot. As the employee set the chair down they felt pain in their back.
2/20/2018	First Aid	Processing Morenci Concentrator	An employee bent over to pick up air hose in walkway and hit their forehead on a beam.
2/23/2018	First Aid	Processing Morenci Concentrator	While cleaning a chute, buildup dropped and struck the pry bar causing the employee's finger to be pinched between the conduit and the pry bar.
2/24/2018	Restricted Duty	Mine Mine Maintenance	An employee was dismounting the bus when their knee locked up and popped causing them to fall to the ground.
2/25/2018	First Aid	Mine Haulage	While being loaded the second dipper load causing the windshield to crack and the truck driver to feel pain in their back.
2/25/2018	First Aid	Mine Frag-Loading/ Support	The operator of the 81 Blade was refueling when they felt a shock to the hand.
2/26/2018	First Aid	Processing Morenci Concentrator	An employee was walking down the stairs and felt pain in their right knee.
2/26/2018	First Aid	Processing Crush & Convey	An employee was repositioning a de-energized pothead when they felt a shock on the hand.
2/28/2018	First Aid	Processing Hydromet	An employee received a shock to the hand while performing maintenance on an inlet ball valve at Central Tank House.
3/2/2018	First Aid	Mine Mine Maintenance	An employee was repairing hinges on the right front utility toolbox door when the door fell approximately 24" landing on their foot.

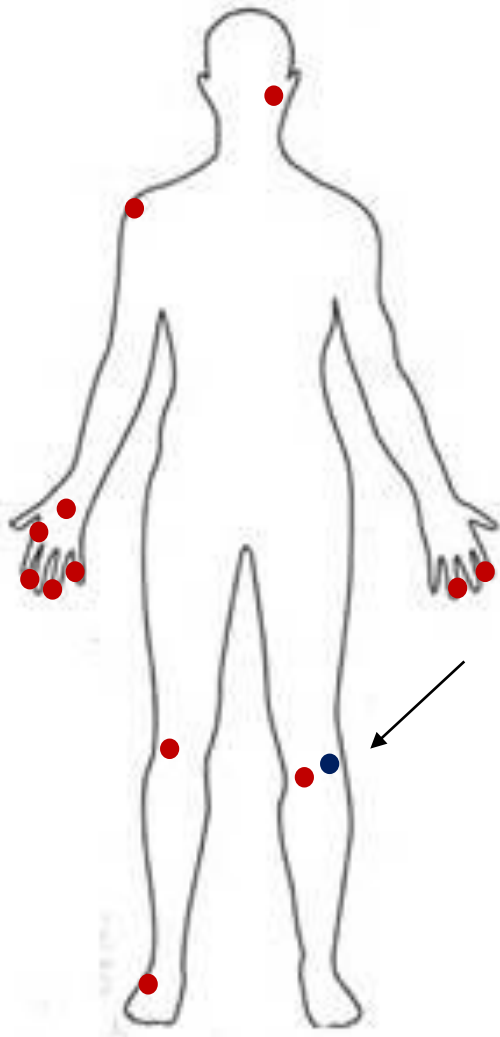
Reportable Injuries – Top Injuries

Nature of Injury	Total No. of Injuries		Medical Treatment	Restricted Duty	Lost Time
Cut/Laceration	5	38%	3	2	
Sprain/Strain	4	31%		4	
Abrasion	1	8%	1		
Amputation	1	8%	1		
Avulsion	1	8%		1	
Fracture	1	8%	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	31%	3	1	
Hand	3	23%	1	2	
Face	3	23%		3	
Foot	1	8%	1		
Knee	1	8%	1		
Shoulder	1	8%		1	



As it stands...

<i>Division</i>	<i>FMI Date of Last Rep. Injury</i>	<i>FMI # of Days without Rep. Injury</i>	<i>Contractor Date of Last Rep. Injury</i>	<i>Contractor # of Days without Rep. Injury</i>	<i>Date of Last HEHI Event</i>	<i># of Days without a HEHI Event</i>
MAINTENANCE SERVICES	9/6/2017	179	4/22/2017	316	1/31/2018	32
PROCESS CONTROL	8/1/2008	3502	N/A	N/A	1/1/2014	1523
HYDROMET & CLP	11/15/2017	109	10/11/2017	144	6/29/2016	613
LEACHING	2/13/2018	19	7/23/2016	589	2/25/2015	1103
MORENCI CONCENTRATOR	11/11/2017	113	10/23/2017	132	6/6/2017	271
METCALF CONCENTRATOR	11/21/2017	103	10/4/2017	151	3/12/2016	722
CRUSH & CONVEY	1/18/2018	45	1/15/2018	48	5/18/2017	290
MINE MAINTENANCE	2/24/2018	8	11/22/2017	102	3/19/2016	715
FRAGMENTATION/LOADING/SUPPORT	10/12/2017	143	4/19/2012	2145	11/22/2017	102
HAULAGE	1/10/2018	53	8/1/2008	3502	12/17/2017	77
RESOURCE MANAGEMENT	10/11/2017	144	7/31/2017	216	1/5/2016	789
ADMINISTRATION	5/19/2017	289	2/7/2018	25	1/1/2014	1523
MERCANTILE	3/15/2017	354	6/20/2017	257	1/1/2014	1523
CONTRACTORS	-	-	-	-	6/7/2017	270

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– **Deborah Kamba**
928-965-4035
- Hydromet – **James Giacoletti**
928-965-5677
- C&C – **Frank Maldonado**
928-965-0219
- Maintenance Services – **George Connell**
928-965-2047

■ Processing Cont.

- Administration – **Estevan Varela**
928-965-0542
- Leaching – **Jessica Rodriguez**
928-965-6104

FMMO Safety Departments/Contacts

■ Mine

- Haulage/Resource Management – **Danny Leyvas**
928-965-0292
- Mine Shops – **Garrit Culver**
928-965-4890
- Fragmentation & Loading – **John Koon**
928-215-0547



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>
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B	<i>Divisions will use data from Safety Performance results to reduce incidents by developing division specific safety plan.</i>
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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>
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D	<i>New GSRs, PFE Advisories, and Safety Alerts will be provided to Management and shared with employees.</i>
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E	<i>The Safety/Training Departments will roll out the improved Fatal Risk Monitoring program to the site.</i>
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Contractors Safety Manual

Section 5.16 Fire Protection



Section 5.16 Fire Protection

Fire safety shall be a key component of the contractor safety plan. Requirements include:

- The operation and maintenance of temporary heating equipment shall create no fire hazards. The use of solid fuel salamanders shall be prohibited. Clothing may not be dried by placing on or near heaters. Only smokeless fuels shall be used for heating purposes.



Section 5.16 Fire Protection

- All flammable and combustible materials shall be stored and handled with due regard to their fire characteristics.
- Flammable liquids shall be stored in an approved manner and dispensed only in approved self-venting metal safety containers with flash screen.
- **All containers must be labeled with the name of the contents and with the hazard class.**
- Welding gases shall be stored in isolated areas and segregated by type of gas.
- Lumber shall be stored as far as possible from any source of ignition. Grounding shall be installed for storage tanks or skids.
- **Where equipment is refueled at storage tanks or skids, bonding straps shall be provided, and the equipment and the fuel tank shall be physically bonded during the refuel process.**

Section 5.16 Fire Protection

- Access to the work area and its perimeter shall be maintained for use by heavy fire-fighting equipment.
- **Open fires or sources of ignition shall not be allowed within 50 feet of the storage or use locations of flammable or combustible materials.**
- All heaters shall be in proper working order, supervised by properly trained personnel, and UL-listed or equivalent. A tip-over shut-off device shall be included for space heating equipment.

Section 5.16 Fire Protection

- All electric power tools, devices (portable heaters), etc., shall be inspected prior to use on site to include insulation, grounding, plugs, casings, etc., and shall be marked according to site protocols to indicate a current inspection for use.
- Fire protection equipment will be provided in all areas where combustible materials are present. Only trained personnel will be allowed to use fire protection equipment if the need arises.



Section 5.16 Fire Protection

- Temporary fire-fighting or fire protection equipment shall be replaced immediately after use and shall be removed upon completion of the project.
- Fire extinguishers will be visually inspected and documented monthly. Defective units are to be taken out of service. A current inspection tag will be displayed on each extinguisher. Each extinguisher will have an annual inspection and certification by a qualified individual.



5.16.1 Specific Fire Prevention Guidelines

- Smoking or open flames are prohibited in locations where flammable or combustible materials are stored or dispensed, such as paint shops, fuel stations, carpenter shops, fuel trucks and other restricted areas.
- No Smoking or Open Flames within 50 feet signs will be posted in these areas, visible from all sides.



5.16.1 Specific Fire Prevention Guidelines

- Flammable and combustible materials will be separately and properly stored in approved safety containers. All such storage containers will be clearly identified with proper labeling.
- Refueling of gasoline or liquid propane equipment while the motor is running is prohibited.
- Safety waste cans with lids shall be provided for disposal of oily rags or other combustible materials.



5.16.1 Specific Fire Prevention Guidelines

- All welding and cutting operations shall have fire extinguishers in the immediate area and shall be continually watched during and for 30 minutes after, the completion of the task. Incompatible materials shall not be stored in proximity. The degree of separation must be sufficient to prevent contact with each other under spill or release conditions.
- The contractor shall determine the need to have and use intrinsically safe tools, equipment, or devices where they may serve as a source of ignition for flammable or combustible materials. Conditions evaluated should include both normal and non-normal situations.

5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

It is required that all contractors comply with the following specifications for tank construction and design when using this equipment:”

Metal tanks must be UL-approved, or equivalent, by a recognized agency as a flammable liquid storage tank and meet requirements of NFPA, or equivalent, The Flammable Liquids Code.

Key provisions of this code include: Tank Size: Minimum 61 gallons, maximum 600 gallons.

5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

Vents:

- At least one vent having a minimum size of 1-1/4 inch inside diameter is required.
- The automatic vent shall be set to open at 5 psi and have the capacity of limiting internal tank pressure to 10 psi.

5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

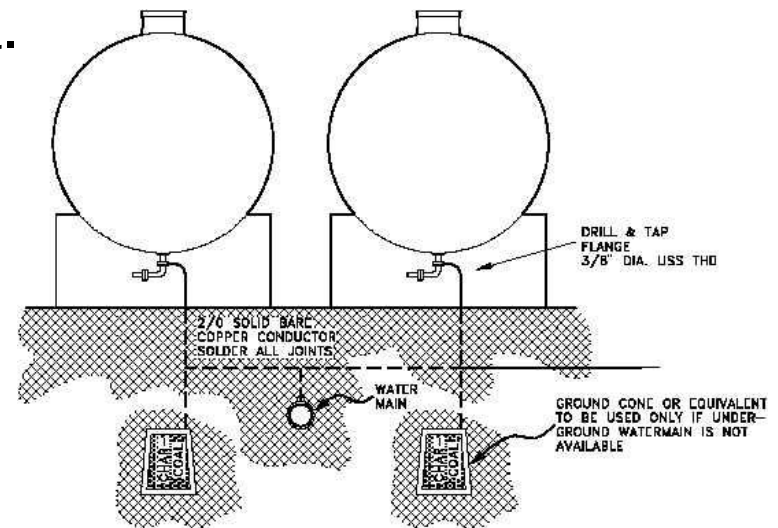
Outlet Valves, Nozzles, Hoses:

- Outlet valves, nozzles and hoses must be UL-listed, or equivalent, and of the automatic self-closing nozzle type that can be padlocked to its hanger to prevent tampering.
- A bottom draw-off gravity flow tank shall be equipped with a valve located on the tank discharge pipe ahead of the hose (preferably fusible link valve).
- A top dispensing tank shall be equipped with a UL-listed, or equivalent, antisiphoning pump.

5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

Grounding and Bonding:

- The tank shall be grounded by a metallic grounding cable with an electric resistance not to exceed 1,000,000 ohms. It must be permanently bonded.
- Top dispensing tanks shall be mounted at least 6 inches above the ground.
- Bottom gravity flow tank supports shall be made of steel and have a maximum height of 7 feet.



5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

Labeling:

- All tanks shall be properly labeled to identify the contents and hazard class.
- Tanks shall be located at a minimum distance of 50 feet from any facilities, major equipment or other materials.



5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

Diking:

- Dike shall be of sufficient size to contain 125% of the capacity of largest tank, and dike shall be lined with impermeable material. o **Note:** Double-walled tanks do not require diking. o The minimum distance between the tank and toe of the dike shall be 5 feet.
- Storage of combustible materials, empty or full drums or barrels, in the diked area, is prohibited.

5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

Diking:

- The fuel tanks may not be located under power lines.
- Electrical equipment within 20 feet of dispensing locations shall be rated as a NFPA/NEC Class I, Group D location, or equivalent. o "No Smoking" or "Open Flame" signs must be displayed within 50 feet of the area.

5.16.2 Use of Temporary Portable Atmospheric Pressure Fuel Tanks

- **Diking:**
- At a minimum, one 20-pound ABC fire extinguisher shall be provided within 25 feet of the storage tank. They shall be protected from weather, mounted and labeled.
- The storage vessels shall be protected from being hit, struck, or tipped over by barricades, balusters or similar sturdy devices.

2018 Contractor Monthly Safety Meeting Schedule Freeport Morenci

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Living the Vision

- Positive Recognition
- Who want's next month's Special Presentation?

