

## **WELCOME!**

Contractor Safety Meeting November 14, 2023









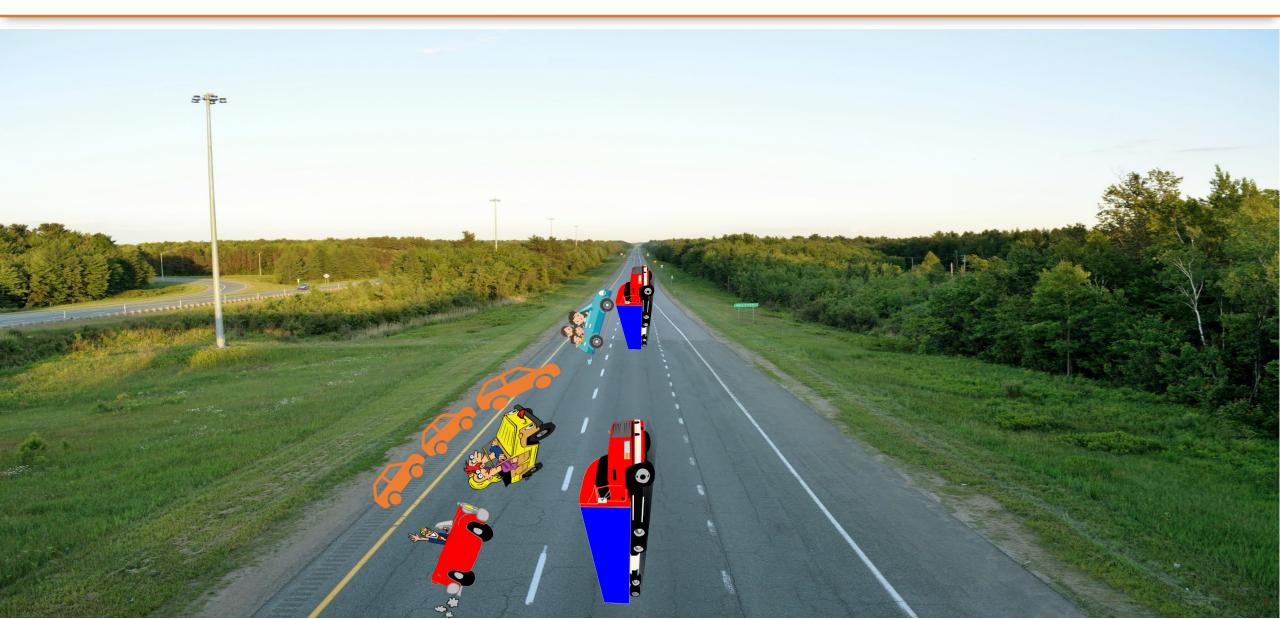
# **Agenda**



- Safety Share
- Environmental Share
- Safety Stats
- PFEs, Incidents, and Alerts
- Safety Topics
  - Brahma FLARE Cards
  - Hamilton/PVB Safety Incident
  - JRAs
- Site Updates / Training / GSC

# **Safety Share**







## **Environmental Share**

**Stormwater Management** 



- Stormwater runoff is managed through administrative & physical controls to ensure that all discharging surface
  water is authorized per Morenci's Stormwater Plan and will not cause or contribute to an exceedance of
  applicable water quality standards.
- ALL stormwater that is impacted is contained within Morenci's Hydrologic Boundary (Zero Discharge Boundary)

#### Things to look out for in the field:

- Erosion and sediment controls
  - Gabion baskets, wattles, riprap,
     basins, water bars, etc.
- Road Placement/Blading
  - Roads can impact stormwater flow
  - Be mindful of low points & sloping



Notify Environmental Services if you plan to disturb any controls or are beginning any land disturbing activities near the perimeters of the property.



# **Safety Stats**



# **Safety Stats**





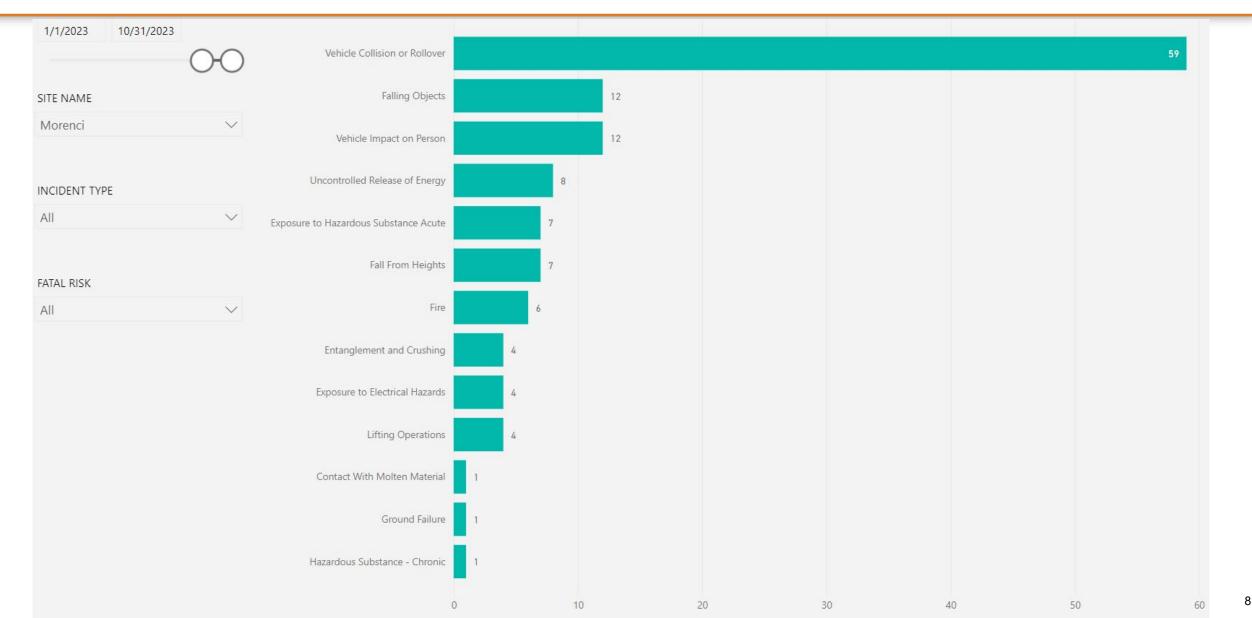
# **Morenci Contractor Reportables**



Incident Date	Incident Type	Incident Full Description	Incident Responsible Department	Incident Risk Level
10/03/2023	First Aid	Employee working in cell 7, pulling mantos felt pain in lower back.  Because of pain he couldent stand and went to his knees stopped work.	Processing>Hydrometalurgical>Leach ing Dumps	Low
10/02/2023	First Aid	Helper was sitting on tailgate of truck, got off the tailgate when the semi arrived. When he stepped off, he stepped into a small "dip" (hole left from a small rock in the ground). This caused him to twist his ankle. He stopped to see if he could walk on it, he could. The helper continued working the rest of his shift. He did not report this incident to the driller or supervisor at the time of the incident. He did contact the supervisor around 8:00 pm that evening.	Mine>Mine Technical>Mine Engineering and Geology	Low
10/04/2023	First Aid	Mechanics were called to look at the 45 shovel because the air compressor was having issue. A Contractor was standing by the air compressor watching the air build up and that's when a compressor line came loose, and oil was sprayed on the mechanics face he immediately started flushing his eyes with water till the EMT'S showed up.	Mine>Mine Maintenance>Mine Maintenance	Low
10/10/2023	First Aid	Contractor was working on Ball Mill Crane. He was climbing the ladder that leads up to crane, when he hit a protruding bolt with his right knee.	Administration>Administration>Global Supply	Low
10/11/2023	Medical Treatment	A driller's assistant was performing his duties and reported that something went into his eye at sometime during the shift. He tried washing it out but it remained lodged in his eye.	Administration>Administration Technical>Plant Engineering	Low
10/16/2023	First Aid	At approximately 09:05 a contract employee reported they had slipped and hurt their knee when removing handrail on the P-10 tail to clear out the dirt underneath	Processing>Crush & Convey Operations Crushed Leach>Crush and Convey MFL	Low
10/26/2023	First Aid	Employee was putting up gantry and forgot to lock gantry lock. The gantry swung back and made contact with employee's right forearm.	Administration>Administration>Global Supply	Low

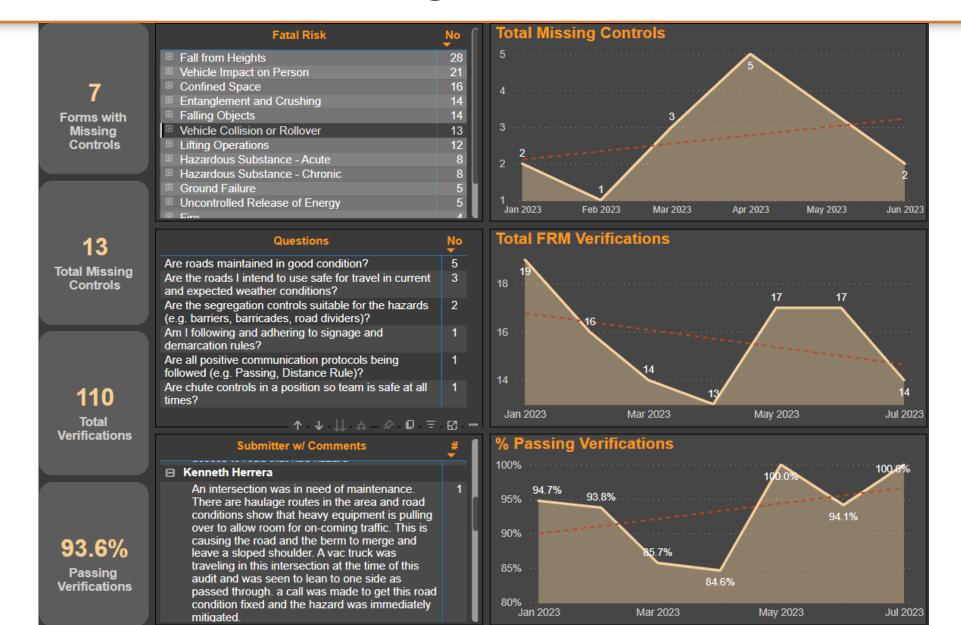
# YTD Incidents by Fatal Risk





# Related Fatal Risk Management Audits







# Freeport PFEs, High-Risk Incidents, & Alerts





#### Potential Fatal Event: Contact with Live Power Line

FREEPORT- MCMORAN

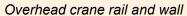
PFE # 2023-23

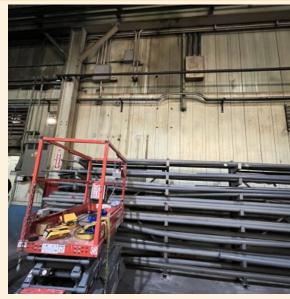
Event ID # 20010240

	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	<ul> <li>Contractors proceeded with work in an area outside the original scope of work and did not lockout, assuming the crane rail was de-energized.</li> </ul>
Applicable Policies / Procedures	FCX – HS04 Control of Hazardous Energy/Job Risk     Assessment
Employee Condition	No injuries
Contact	Alejandro Valadez, Rod Mill Manager

#### **Photos / Links**







Contractors were installing conduit using scissor lift



Conduit that contacted the 480v line



#### Potential Fatal Event: Falling Rebar Mat

	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	<ul><li>Insufficient rebar ties</li><li>Inadequate rigging</li></ul>
Applicable Policies / Procedures	<ul><li>Rigging/Signaling</li><li>Strength calculations for load prior to lift</li></ul>
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

#### **Photos / Links**



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

	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	<ul> <li>Chain guards not used</li> <li>Hard barricade and flagging not used</li> <li>Failure to initiate correct action to close hatch door before proceeding</li> </ul>					
Applicable Policies / Procedures	FCX-HS02 Working at Heights					
Employee Condition	<ul> <li>Worker sustained abrasions and contusions along left arm and leg. Released to full duty after evaluation at the local emergency room.</li> </ul>					
Contact	Cameron Coon, Senior Supervisor-Health and Safety					

#### **Photos / Links**



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



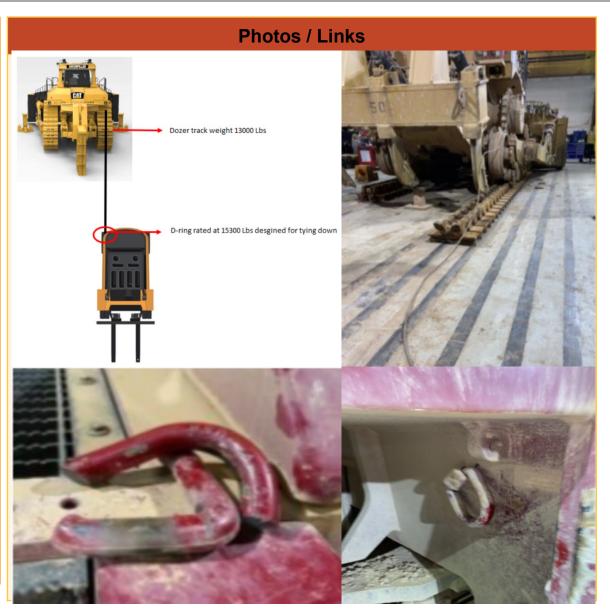
An example of how the catwalk with hatch and chains are to be used when the hatch is open.



## High Risk Event: D-Ring Failure

Event ID #20010111

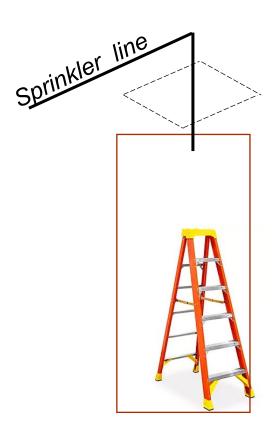
	Incident Details	
Operation	Morenci	
Date / Time	September 29, 2023 / 10:30 p.m.	
Туре	Near Miss	
Summary	While rigging up the cable to the D-rings on the back of the FL090A Forklift for a track change, the operators put tension to the track for installation of the track and the D-ring on the right side 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) <b>NOT A PFE</b>	
Absent / Insufficient Controls	<ul> <li>The wire rope sling was connected to the forklift D- ring that is not designed for pulling or lifting.</li> </ul>	
Applicable Policies / Procedures	SOP – Changing a Bulldozer Track	
Employee Condition	No Injury	
Contact	Joseph Rodriquez, Superintendent Mine Maintenance	



## **Recent Events**



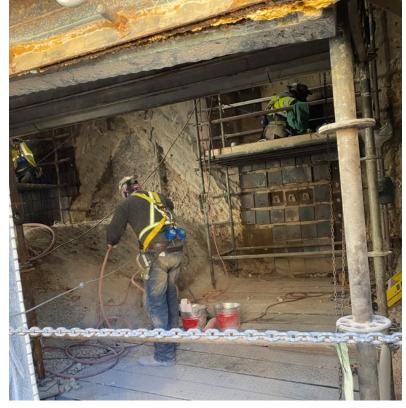
Townsite ladder issue



Tie off Climbing off top rung

#### Liner event at Metcalf Mill Shutdown





Working off a ladder removing liners, an adjacent liner displaced of wall and fell below decking through a gap

# **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





# **Safety Updates**



### Job Risk Assessment -Front Page



FREEPORT-McMoRAN	Job Risk	Asses	sment	Date:	Shift:
Identify & evaluate job risks, exposu	re, harands & potentia	d energy, the	n mitigate them th	rough the hier	archy of control.
Complete this form at the job site wit					
quipment #:	Work Area:				
ob Description:	•				
/O #:					
Routine   Non-Routine   Is th	ere an SOP for the Jo		No D Wast		wed? Yes 🗆 No
	Fatal Risk N	lanagem	ent Circle those t	hat apply	
Blasting Blasting	Confined Space	<u></u>	Contact with Elect	sein 🛕	Drowning
Č		œ.			3
Entanglement and Crushing	Hazardous Substance - Acute	A C	Hazardous Substan Chronic	DE-	Fall from Heights
		7		7	
Falling Objects	Fire		Ground Failure	<u>( 46</u>	Lifting Operations
Rail Collision	Rail Impact on Person		Uncontrolled relea	se of 🛕	Vehicle Collision or Rollover
		(4)	Energy	4.00p	MOROVER
Vehicle Impact on Persons					
	Addistanti	d 1d			
	Additional H	azard Id			
Work Environmen			-	gy Source	
Are there any elements or condition		Have all			at may injure you o
environment that could injure yo				een identifi	
Illumination / Visibility		☐ Electrici ☐ Hydraul		□ Radi	
Highwalls / Slopes		□ Pneuma		□ Grav	
Water 🗆 Dust		☐ Thermal ☐ Stored / Under Pressure			
Atmosphere (H <sub>2</sub> S, CO <sub>2</sub> , air, mist etc.)		Chemica	d / Corrosive	Explo	sive
Other:		Other:			
Line of Fire			Person	al / Behav	ior
Will any proximity to work, movement,	release or change	What	personal condit	tions, action	s or thoughts like
in condition cause you or othe	rs injury?	compl	acency, could re	sult in injury	to you or others?
Overhead Work	el	□ Slips / Tr	rips / Falls	□ Hous	ekeeping
Power Lines / Cables   Arc Flash		□ Sprain/			ing / Competence
Material Handling Dijects			ng / Descending		munication
Trenching / Excavating Pipe Har	-		ints: Hand, Body		oment Interaction
☐ Tooling Failure ☐ Mobile I ☐ Constricted Work Area ☐ Congest		□ Footing	/ Uneven Ground	□ Fatig	
- Congest	and the state	- argunon		_ riyur	and the second
Other:		Other:			

Its not the paper, it's the actions from the assessment process that will keep us safe

#### Fatal Risk Management Icons

Reference the Fatal Risk Management Operator Reference Guide

This section is intended to identify other risks, hazards, secondary energy sources or conditions that may cause harm or injury

#### Job Risk Assessment – Back Page



	Hierarchy of Control		Contro	le Ston we	-l- :	fcontro	le are incus	ficient or missin	_
	Hierarchy of Control		LOTOTO	is stop wo			afety Devices	Rest / Breaks	E
	Elilillation		Access Co	ontrol/	_	venicies	arety Devices	Li Nest/ bleaks	
	Substitution		Barriers	•		Process/	SOP	□ Spotter / Signal Fire Watch /	l Person
	Engineering			/ Signage		-	/Isolation	□ Attendant ´	
	Administrative Behavior		Equipme Other:	nt/Tooling		Fire Supp	ression Systen	n □ Lights/Signals	
	PPE						*If a control cau	ses more of a hazard, a a variance	apply for
	Permits / Forms Proper execut	ion o	f a permi	t is the cont	rol,	not the p	paper		
	Hot Work		Critical Li			High Wal		□ Blasting	
	Blue Stake Other:		Confined	Space		Dump		□ HDPE	
	Behavior Individual willingness	& foc	us on saf	ety					
	Inspect Equipment/Tools		Consequ	ence Thinking		Pre/Post Houseke		☐ Fit for Duty	
	Work Place Examination Other:		Hand / Bo	ody Placemen	t 🗆	3 Points	of Contact	□ Communication	n
	PPE Beyond minimum required								
	,		Skin Prot	ection: Bugs,					
_	Fall Protection		Sun	_			uits: Acid, Rain		
	Arc Flash Clothing							, Radiation, etc.	
	Welding Gear					Gloves Su	Protection: Plu uitable for Job:	gs, Double Leather, Rubber, Ke	vlar
	Flotation Device		Clothing	for Weather					
	Other:  Fatal Risk Hazards List the main fat	al risk				Critical C	ontrols : List the	e main control for the h	azard
		al risk					ontrols : List the	e main control for the h	azard
	Fatal Risk Hazards List the main fat		s / hazards	5			ontrols <u>: List the</u>	e main control for the h	azard
	Fatal Risk Hazards List the main fat  Main Lockout Points/ Station/ Box 1. 2.		In case of Phone: d Radio: pr Evacuatic point:	f Emergency ial 865-6600 ess the ORAN	     	Critical C	all out "May Da	e main control for the h	
	Fatal Risk Hazards List the main fat  Main Lockout Points/ Station/ Box 1.		In case of Phone: d Radio: pri Evacuatic point: Fire	f Emergency ial 865-6600 ess the ORAN on extinguisher i	   GE k	Critical C	all out "May Da		у"
	Fatal Risk Hazards List the main fat  Main Lockout Points/ Station/ Box 1. 2. 3.		In case of Phone: di Radio: pri Evacuatic point: Fire  shore	f Emergency ial 865-6600 ess the ORAN on extinguisher i	   GE k	Critical C	all out "May Da area ea sponsible for my	ay, May Day, May Da	"y" SPIL (774:
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Back of Form is for identification of controls

How to integrate BEHAVIORS into process?

Transfer fatal risks identified and list critical controls identified on front page

What are gaps you have seen in review of risk assessments in your company?

How do you gauge a quality risk assessment?

#### The Form: Checking for quality.....



- 1. Writing is legible and information is accurate: Date, Area, Supervisor
- 2. "Job Description" is clearly understood
- 3. Permits listed match the task and are available to audit
- 4. Critical controls and hazards are listed and match task
- 5. It has been reviewed by team
- 6. Controls verified in place
- 7. Crew can explain hazards and controls
- 8. JRA demonstrates effective thought process



## **Brahma Share**



#### FLARE: Field Level Assessment of Risk in the Environment

Have your reviewer initial below:  nitials: Time: ocation:	BRAHMA.	BRAHMA GROUP, INC
ocation:	GROUP, INC.	SAFETY FIRST IT'S UP TO ME
bservations / Corrections:	As a valued employee of Brahma, you are required to comply with our Customer's Safety Rules and	
	Brahma's Code of Safe Practices.  You have the RESPONSIBILITY	Emergency phone number:
he Safety topic is:	and OBLIGATION to stop any work that does not comply with these safety rules.  There will be NO REPERCUSSIONS.  This is our commitment to you.	Project description:
**************************************	1110 10 001 001111111111111111111111111	Date:
	M. Anthony Curtis, CEO 801-521-5200	
rint Name:	MAN	

asks - What am I doing?	Recognize the <u>Hazards</u> - What could go wrong?	Eliminate / Control
ist the immediate tasks you will do on this job.	Be specific, how could this affect you and/or the environment?	List how you can eliminate and/or control the hazards in your work area.
re you fit for duty and ready to work today?  ☐ Yes ☐ No	Whose FLARE card did you look at yesterday?	Who is your work partner today?
f you answered no, then please talk to your supervisor.		

# **Training Department- Contractors**



- Contractors will be responsible for their own training.
- FMI will not be supplying books to every contactor group on property. That adds extreme costs to FMI Training department. Contractors will need to print out FMI provided PowerPoint for the training if they choose and handout training material to their workforce.
- Once contractors have people selected who will perform training, the training department can set up a session with our compliance group. FMI can mentor training classes with contractors and help them understand the training. The intent is to ensure good understanding of content and how we present it ourselves.



# GSC/Training/Security Updates





# Thank you, thank you very much!







