

DRIVEN BY VALUE



Contractor Safety Meeting

October 2017

INTRODUCTION

- Facilities
- Emergency Exits
- Cell Phones
- Safety Share
- This months focus
 - Branch Safety Performance
 - Contractors Safety Manual Section – 5.0

Special Presentation

SWAPP

Kari Swapp (Safety Rep)

A Clean Work area
is a *Safe Work area*



Property Damage

Incident Detail

Date 09.25.2017
Organization Mine
Division Mine Maintenance

Potential Risk	2	3	6
	Consequence	Likelihood	Potential Risk

Brief Description

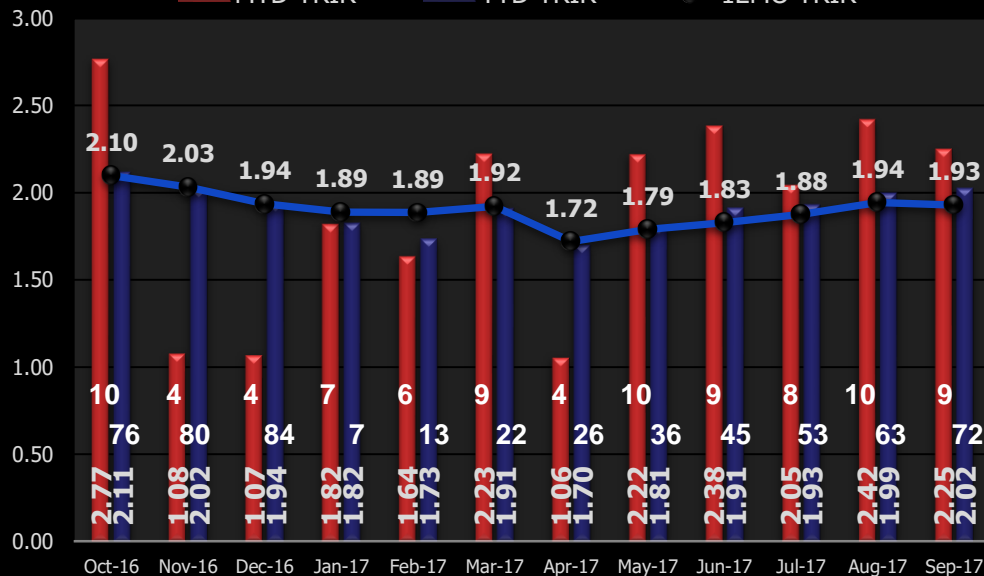
Two mine operations pickup truck were at a switch house parked in a "V" formation and had contacted a mine electrician to power up the 46 shovel. A mine electrician reported to the switch house and parked behind the operations truck at a 45 degree angle. The electrician dismounted his truck, and as he began removing end caps from the pothead, the mine supervisor, HS3, and the electrician heard the electrician truck contact the truck in front of it. The electrician's truck (LV012A) had moved forward approximately 20 feet and made contact with passenger door of mine operations pickup (LV006). There were no personnel in front of the truck that moved. The securement of the vehicle that moved is being investigated.



Safety Dashboard as of 9/30/2017

12 MONTH ROLLING TRIR

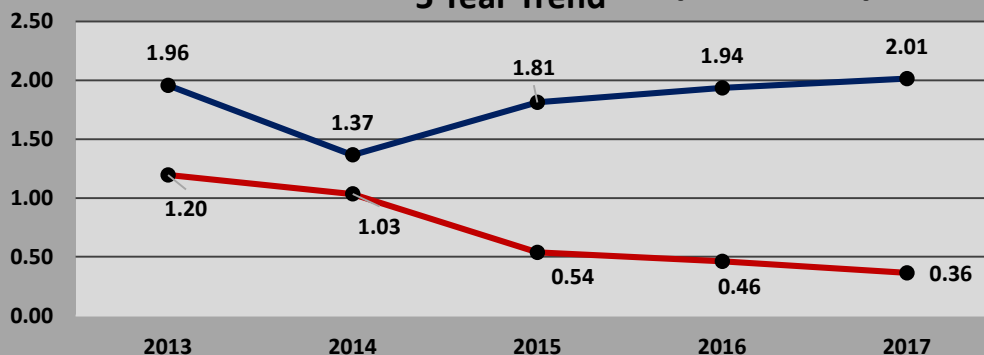
MTD TRIR YTD TRIR 12MO TRIR



Incident Date	Incident Type	Organization/ Division	Short Description
9/27/2017	First Aid	Mine Mine Maint.	An employee put on his fresh air welding hood and turned on the air pump, chalk came out of the hose and he inhaled it.
9/27/2017	First Aid	Mine Haulage	The 634HT became engulfed in flames and the operator sprained his ankle while dismounting the truck.
9/29/2017	Lost Time	Mine Haulage	An employee was walking down the step and slipped and fell.

5 Year Trend

YTD TRIR YTD HEHI



Safety Performance

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10/9/2017



Day of the Year	Employees working Safely (Reportable Injuries Only)			REPORTABLE INJURY RATE				LTIR			PROPERTY DAMAGE			MTD HEHI	YTD HEHI	YTD HEHI Rate	HEHI Target	DAYS W/O LTA	Hrs W/O LTA	Days W/O Rec.	Hrs W/O Rec.
	TOTAL	MTD	YTD	MTD	YTD	QTD	Target	MTD	YTD	Target	MTD	YTD	Target								
281																					
Number	3170	3170	3115	1	72	1	1.69	0	18	0.53	15	482	12.31	0	13	0.36	0.43	9	240780	4	107013
Rate				1.01	1.98	1.01		0.00	0.50		15.19	13.28									

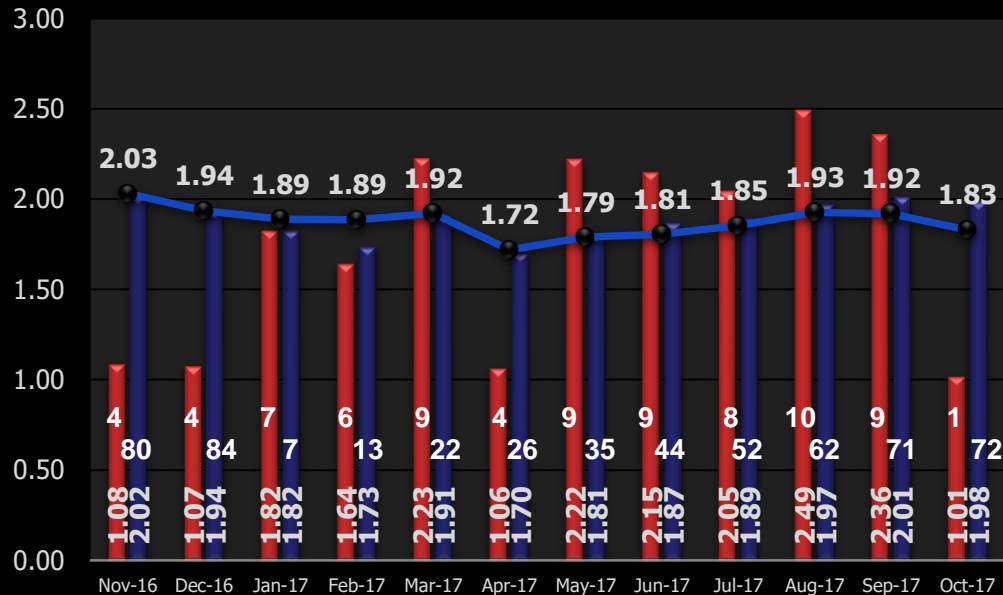
171 Total Injuries

72 Reportable Injury

Safety Dashboard as of 10/8/2017

12 MONTH ROLLING TRIR

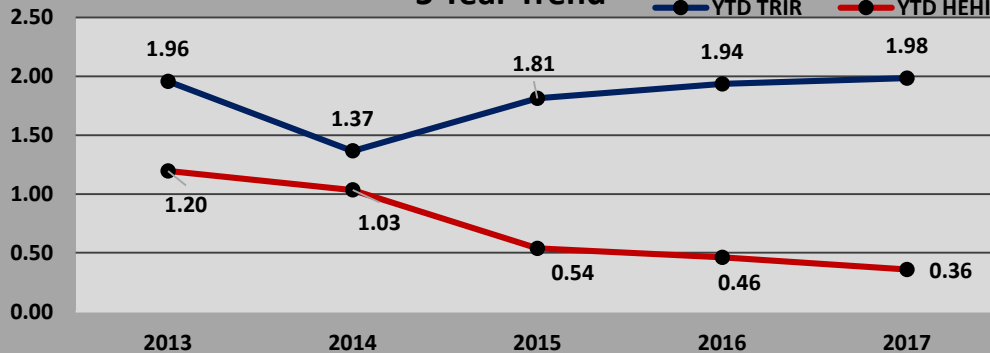
MTD TRIR YTD TRIR 12MO TRIR



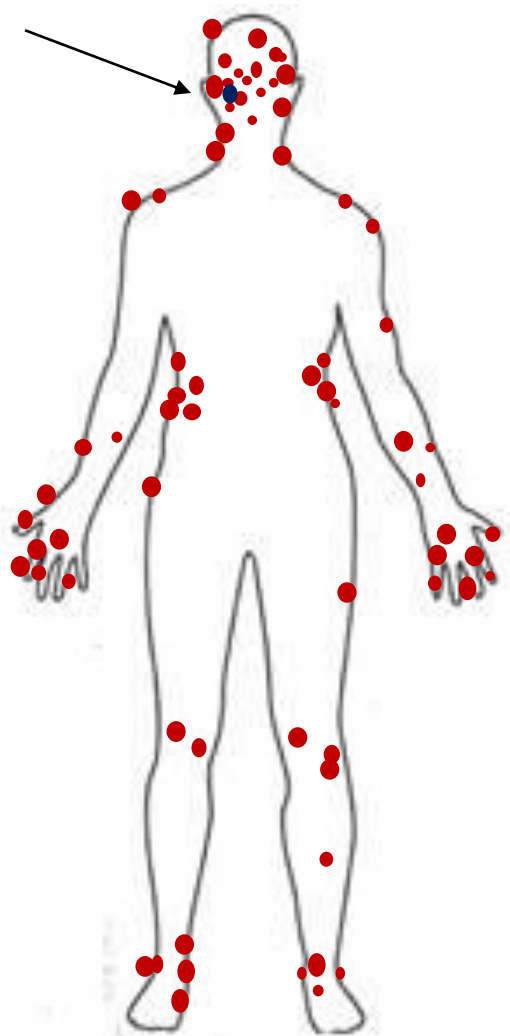
Incident Date	Incident Type	Organization/ Division	Short Description
10/03/2017	First Aid	Contractor Mercantile	An Geotemp employee was cooking and melted cheese splattered on her left hand.
10/04/2017	Medical Treatment	Contractor Metcalf Concentrator	A Brahma employee was installing liner when the porta-power gave way and struck him in the face.

5 Year Trend

YTD TRIR YTD HEHI



Reportable Injuries – Top 5 Injuries



Nature of Injury	Total No. of Injuries		Medical Treatment	Restricted Duty	Lost Time
Sprain/Strain	30	43%	0	19	11
Cut/Laceration	11	16%	11	0	0
Fracture	10	14%	2	3	5
Abrasion	6	9%	6	0	0
Foreign body loose	3	4%	3	0	0

● = Last week's injuries

● = Year to date injuries.

Part of Body by Classification of Injury	Total No. of Injuries		Medical Treatment	Restricted Duty	Lost Time
Eye	10	14%	10	0	0
Finger	10	14%	5	5	0
Ankle	7	10%	0	2	5
Lower Back	6	9%	0	3	3
Shoulder	6	9%	0	5	1
Neck	6	9%	0	3	3

As it stands...

<i>Division</i>	<i>Date of Last Rep. Injury (FMMO)</i>	<i># of Days w/o Rep. Injury (FMMO)</i>	<i>Date of Last Rep. Injury (Contractors)</i>	<i># of Days w/o Rep. Injury (Contractors)</i>	<i>Date of Last HEHI Event</i>	<i># of Days w/o a HEHI Event</i>
MAINTENANCE SERVICES	9/6/2017	32	4/22/17	169	7/1/2016	455
HYDROMET & CLP	6/15/2017	115	9/13/17	25	6/29/2016	466
LEACHING	2/17/2017	233	7/23/16	442	2/25/2015	895
MORENCI CONCENTRATOR	9/21/2017	17	7/15/16	450	6/6/2017	124
METCALF CONCENTRATOR	9/23/2017	15	10/4/17	4	3/12/2016	586
CRUSH & CONVEY	8/17/2017	52	1/11/17	270	5/18/2017	160
MINE MAINTENANCE	8/24/2017	45	9/13/16	390	3/19/2016	568
FRAGMENTATION/LOADING/SUPPORT	9/4/2017	34	4/19/12	2005	7/6/2017	94
HAULAGE	9/29/2017	9	8/1/2008	3567	9/8/2017	30
RESOURCE MANAGEMENT	5/22/2017	139	7/31/17	69	1/5/2016	642
ADMINISTRATION	5/19/2017	142	6/9/17	121	1/1/2014	1377
MERCANTILE	3/15/2017	207	6/20/17	110	1/1/2014	1377
CONTRACTORS	10/4/17	4	10/4/17	4	6/7/2017	123

Near Miss

Incident Detail

Date 10.02.2017
Organization Contractor
Division Metcalf Concentrator

Potential Risk	2	3	6
	Consequence	Likelihood	Potential Risk

Brief Description

Contractor employees were cutting off a 1' piece plate above the conveyor belt to access the bolts securing the liners so as to remove the liners. Fire blanket was in place while the cut was in progress and a fire watch was also designated for the job. Approximately fifty minutes after the cutting was completed, one of the employees smelled a burn and noticed that smoke was coming out of the fire blanket. He poured water on it to cool it down and removed the fire blanket only to realize that a small section of the skirting was melted.



Medical Treatment

Incident Detail

Date	10.04.2017		
Organization	Contractor		
Division	Metcalf Concentrator		
Potential Risk	3	2	6
	Consequence	Likelihood	Potential Risk
Brief Description	A Brahma employee was installing liners into the ball mill one upper feedbox. A porta power was being used to put pressure against the liner in order to tighten the bolts and align. As the employee was standing up right, the porta power gave way and knocked him in the face. The employee received 11 stitches and was sent home.		





Make Safety Personal...

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.1 Purpose

The purpose of these Safe Practices is to provide all employees with an awareness of workplace safety and how to ensure their safety and that of their co-workers. Each employee must understand those safety practices that are applicable to the tasks they are assigned, and abide by them. Lack of understanding or familiarity with safety rules is not an acceptable reason for a safety rule violation. Employees violating safety rules may be subject to disciplinary action up to and including permanent removal from all Freeport-McMoRan properties in accordance with the provisions of a management review. Contractor management is responsible for the enforcement of all rules.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.2 Code of Conduct

All contract employees are responsible and accountable for working safely and productively, while remaining aware of the hazards of their jobs and following recognized safe job procedures. Specifically, employees will:



CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

- Comply with all health and safety rules, departmental standard operating procedures, and regulations as outlined in this Code
- Report to work physically fit and mentally alert for duty
- Report any dangerous or potentially dangerous condition to supervision
- Stop any unsafe job or task immediately upon observing it and find a way to make it safe before continuing
- Not engage in horseplay

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

- Not use cell phones while operating mobile equipment or vehicles
- Not tamper with any emergency medical supplies or emergency vehicles
- Not interfere with any radio communications
- Not interfere or disable remote control, automatic equipment, safety interlocks or warning systems or guards that could contribute to a safety event

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

- Not tamper with the scene of a safety event
- Not engage in distracting activities while operating a company vehicle or a piece of equipment



CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.3 Housekeeping

Work areas, passageways and stairs in and around the buildings and structures shall be kept clear of debris. Project materials shall be stored in an orderly manner. Storage areas and walkways on the site shall be maintained free of dangerous depressions, obstructions, trash and debris. Equipment/tools shall be stored or placed in an orderly manner.

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- All temporary and permanent electrical work, installation, and wire capacities shall conform to the current National Electrical Code in addition to all applicable federal, regional, local codes.
- Only qualified electricians trained in electrical safety familiar with federal, regional, local codes and standards shall be allowed to perform electrical work, including repairs to electrical equipment.

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- No employee shall be allowed to work close to unprotected electrical power circuits unless the area has been barricaded off or the employee is protected against electrical shock by de-energizing the circuit, grounding it, locking out, tagging the device, and “trying out” the system, and protecting the individual by effective insulation or providing protection by other means.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- All switches shall be enclosed and grounded. Panel boards shall have provisions for closing and locking the main switch and fuse box compartment.
- Extension cords used with portable electric tools and appliances shall be heavy duty (no less than 12 gauge conductors), of the three wire grounding type, and conform to the type and configuration required by federal, regional, local electrical standards. No flat-type electrical cords will be allowed on-site.

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- Suitable means shall be provided for identifying all electrical equipment and circuits, especially when two or more voltages are used on the same job. All circuits shall be marked for the voltage and the area of service they provide.



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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- Electrical cords and trailing cables shall be covered, elevated or otherwise protected from damage which could create a hazard to employees or other persons in the area. In areas where cables or cords enter or pass through walls, panels or boxes, appropriate bushings/sleeves shall be used. Electrical cords shall not be repaired, but removed from place when worn or frayed

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- Temporary lighting will be equipped with guards to protect the bulb and wiring and will be equipped with three-wire insulated cable.
- The use of extension cords shall be temporary and limited as much as possible. These shall not be used in areas where they can be run over or damaged by equipment, where there is potential for contact with water, or in any manner that can cause damage or failure of the insulation (such as passing through a doorway or window).

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- All electrical grounding systems (buildings, conveyors, portable generators, equipment, magazines, etc.) must be tested for continuity and resistance immediately after installation, repair and modification, and annually thereafter. Test documentation, with OHMS reading, must be kept on-site for review by compliance officers and safety personnel for one year.



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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- All electrical equipment (including hand tools and extension cords) must be visually inspected prior to use and monthly to ensure proper operation and free of electrical shock hazard. This shall be done by visual inspection, resistance and continuity checks. All inspections and checks must be documented and the equipment identified. Equipment with defects shall be removed from service until repaired.

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- All temporary electrical tools and cords shall be properly protected by ground fault circuit interrupters (GFCI) throughout all phases of the project. This includes appliances such as refrigerators, microwaves, toasters, etc. Electrical equipment capable of holding a charge (such as capacitors or transformers) shall be deenergized and tested by a qualified person to confirm an absence of residual charge.

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PART ONE (Section 5.0 Safe Practices)

5.4 Electrical Safety

- The following standards shall be referenced and followed. Federal, regional, and local standards shall be followed as minimally acceptable practices.
 - NEC and NFPA 70E (U.S., México, Costa Rica, Venezuela, Columbia)
 - British Standards BS 76 6064/60298 (EU) o RGIE (Belgium)
 - NFC 15-100 (France for low voltage only)

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PART ONE (Section 5.0 Safe Practices)

5.4.1 Training Requirements

Contract electricians who work in energized electrical rooms or near energized electrical installations will be required to attend NFPA 70E Training and wear the appropriate Arc Rated PPE. These requirements shall be followed when working near energized circuits within an electrical room or work area; it is not intended for work performed on de-energized equipment. De-energized circuits shall be “locked, tagged and tried out” (LOTOTO) per local site safety policy. Contract employers are responsible for ensuring that all contract employees assigned to work on the facility follow the electrical safety rules and requirements required by the host employer. Additional training requirements can be found in the 2015 NFPA Guidelines.

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PART ONE (Section 5.0 Safe Practices)

5.5 Compressed Gas Cylinders

All compressed gas cylinders shall be clearly marked, with contents and hazard identified. Cylinders shall not be accepted on sites that are not properly labeled as to contents.



CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- When compressed gas cylinders are hoisted, they shall be secured on a cradle, cylinder truck, sling board or pallet.
- At no time may cylinders be hoisted with choker chains nor shall cylinders be hoisted by hooking or strapping onto the cylinder cap. **Cylinders shall be secured in a vertical position when moved with power vehicles.**

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Regulators and gauges must be either protected from damage or dislocation with a cover/collar or be removed and cylinders capped whenever not in use or when the equipment is being moved. Never transport cylinders unless regulators have been removed. Cylinders shall not be rolled along the length of their axis.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Cylinders shall be secured in an upright position, except when being hoisted or moved.
- Cylinders shall be placed where they cannot become part of an electrical circuit and shall be kept away from piping systems and layout tables that may be used for grounding electrical circuits.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- When in use, cylinders shall be placed with the valve up, and properly secured (to prevent them from being knocked over, tipping or falling over).
- Cylinders shall not be placed where they are, or can be, exposed to open flames, hot metal, or other sources of heat, **including the sun.**

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

Cylinders containing acetylene, propane, butane, oxygen or inert gases such as argon, nitrogen, etc. shall not be placed in confined areas or enclosed storage areas and shall be stored away from combustible/flammable materials. Cylinders shall not be stored, placed, or kept next to or adjacent to exits or in a manner that blocks or obstructs walk-ways or exits.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- A suitable cylinder truck with chain or other secure form of securing shall be used to keep cylinders from being knocked over while in use.



CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Cylinders of oxygen shall not be stored close to cylinders of acetylene or other fuel gas (connection to hoses for standard use configuration is accepted). They shall be separated by a minimum of 20 feet or by a non-combustible barrier, at least five -5 feet high with at least a half-hour fire rating. Cylinders are considered to be in service (that is, not stored) if they are equipped with a regulator. Additionally, this restriction does not apply to gas cylinders of oxygen and fuel gas (acetylene for example) if the capacity is 120 cubic feet or less (per cylinder).

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PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Oxygen cylinders, cylinder valves, couplings, regulators, hose, and apparatus shall be kept free from oil and grease, since oil and grease in the presence of oxygen under pressure may ignite violently. Employees shall be prohibited from handling oxygen cylinders or apparatus with oily hands or gloves.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Cylinders in storage should be kept away from sources of heat and **shall always be shielded from the direct rays of the sun.**
- Empty cylinders shall have their valves closed. Valve protection caps shall always be in place except where cylinders are in use or connected for use.

CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Gauges shall be removed and bottles capped while being transported; this includes welding trucks and service vehicles.
- Compressed gas cylinders shall be stored only in properly constructed storage racks, properly secured at all times, in properly ventilated areas.



CONTRACTOR HEALTH AND SAFETY MANUAL

PART ONE (Section 5.0 Safe Practices)

5.5.1 Cylinder Management

- Compressed gas cylinders, empty or full, shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried. Empty cylinders shall be marked “Empty.” If a cylinder is not equipped with a valve wheel, a key will be kept on the valve stem while in use.

Open Discussion

- Positive Recognition
 - Living the VISION

