

<b>SAFETY ALERT NOTIFICATION</b>		Safety Alert #	SA – 2018 - 3
  <h2 style="margin: 0;">Hotwork/Fire Risk</h2>	IMS #		
	OPERATION:		
	INCIDENT DATE:	Click here to enter a date.	
	TIME:		
	TYPE:	Choose an item.	
Issued By: <b>DOHS</b>	Contact For Additional Details: <b>Mitch Kruger</b>		

**This is NOT an investigation report. It is a NOTIFICATION of a Significant Incident that has taken place at a Freeport-McMoRan location. The information below is a preliminary assessment and not a formal investigation.**

### INCIDENT DESCRIPTION

Hot work continues to be a leading cause of industrial fires, consistently in the top five across all industries, and it has been responsible for many of industry's most severe fire losses. While processes and procedures are in place, our company continues to have fire events associated with hot work. It is critical to ensure that all controls that are put into place to control fire risks are appropriate, effective, and monitored correctly. Due to the fact that hot work is a common practice that occurs on a daily basis across the company, it is important to remain vigilant when assessing and controlling risk associated with this hazard.

Below are a few recent examples of events involving hot work in which procedures were being followed, however issues still occurred:

10/21/17 – After air arcing was completed, and fire watch stayed 30 minutes to ensure no fires had ignited during the task of arcing through the floor of an electric shovel, the crew working on that task took a break. Approximately 25 minutes after the fire watch was cleared, mechanics below the shovel working on side frame and idlers noticed smoke coming from underneath the shovel; crater grease on this lower level had caught fire. The mechanics tried to use fire extinguishers pointed into the holes of the floor to extinguish the fire but decided that it was safer to evacuate the area and notify supervision.

10/2/17 – Contractor employees were cutting off a one foot piece plate above a conveyor belt to access the bolts securing the liners. A fire blanket was in place while the cutting was in progress and a fire watch was also designated for the job. Approximately 50 minutes after the cutting was completed, one of the employees smelled something burning 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 and found a small section of the skirting was melted.

10/2/17 – A maintenance crew was performing a gear box change on a secondary crusher scalping screen. Bolts, which hold the gearbox to the frame, were cut off with an oxygen/acetylene torch. Nomex fire blankets were placed on the screen deck below prior to cutting the bolts. At some point during the job, hot metal/slag fell down through the secondary crusher onto the secondary discharge screen (two floors below), catching the screen deck on fire. After an unknown time, the secondary discharge screen caught fire. The fire spread to the crusher, scalping screen, feeder belt and dust collector of the secondary crushing line.

#### FATAL RISKS

**Fire**

#### HEALTH AND SAFETY POLICIES

Hot Work

Choose an item.

Choose an item.

Choose an item.

Choose an item.

**OTHER SIGNIFICANT RISK (specific to site or task not categorized as global)**

**PROBABLE DIRECT CAUSES**

- Lack of understanding of potential risks involving hot work.
- Welding/cutting slag, sparks and cut bolts contacting combustible and/or flammable materials.
- Improper segregation of combustible and/or flammable materials

**IMMEDIATE CORRECTIVE ACTION(S)**

- Evaluate Hotwork methods and practices.
- Ensure combustible and flammable materials are properly segregated.
- Consider materials below the work area and in surrounding areas.

**REQUIRED ACTION(S)**

- Focus on eliminating hot work when possible (i.e. sometimes bolts/nuts are cut with a cutting torch instead of using mechanical tools).
  - Utilize appropriate tools or a nut splitter/breaker (where applicable) to prevent the use of hot work methods.
  - Evaluate air tools (impact wrench) and ensure proper plant air is provided to meet the tool requirements for operation.
  - Identify tool availability- are cutting torches easier to obtain compared to 'coldwork' methods?
- Evaluate site hot work procedures and verify employees understand potential risks associated with hot work, fires, etc..
- Evaluate fire suppression systems (portable or fixed) and ensure employees are trained to operate systems.
- Evaluate post hot work 'fire watch' practices.
- Audit employee knowledge of the hotwork permit process.

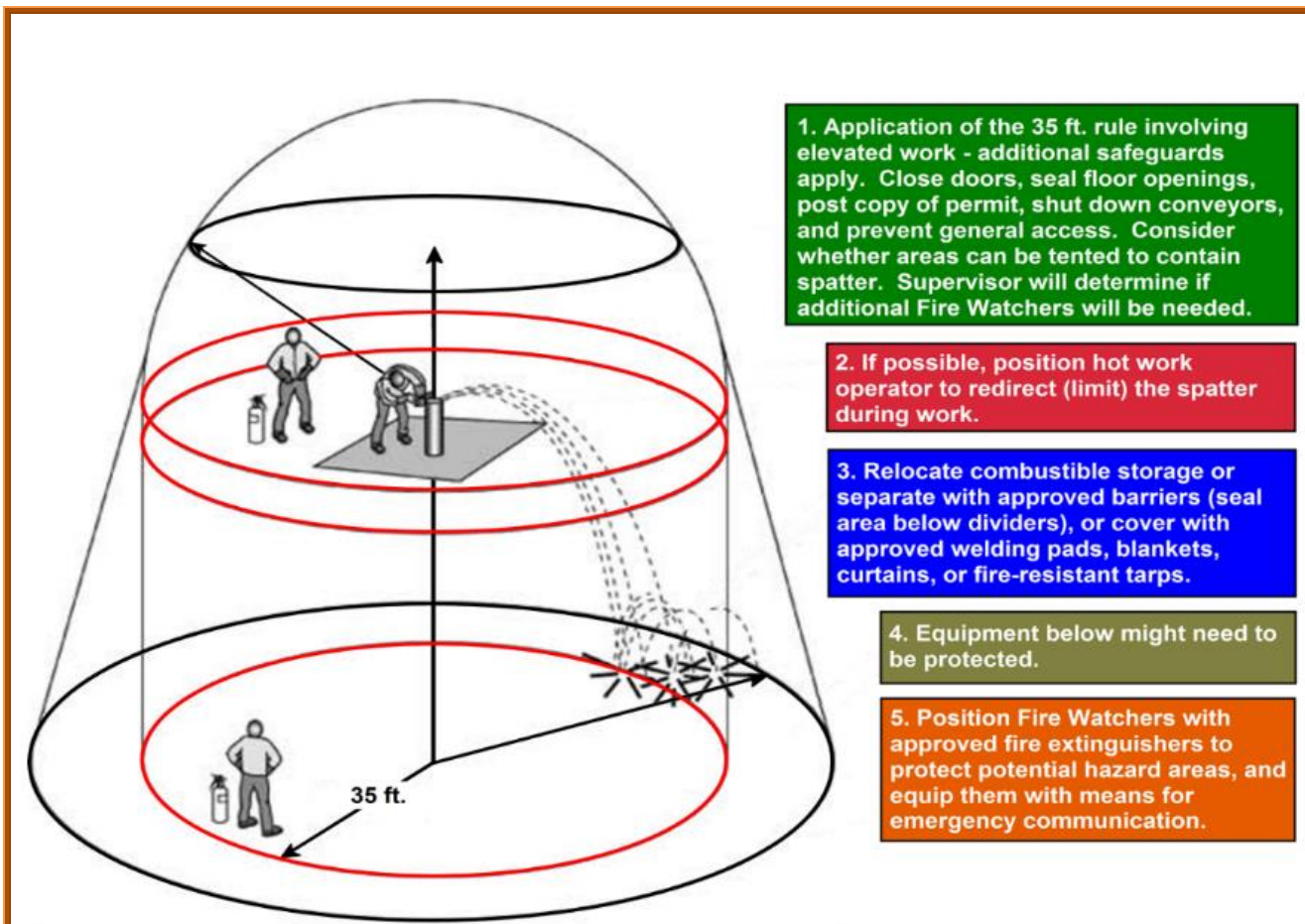


Figure 1 This is intended to provide guidance for evaluating the work area where hot work will be performed.

This is NOT an investigation report. It is a NOTIFICATION of a Significant Incident that has taken place at a Freeport-McMoRan operation and is being communicated to enhance safety awareness should a similar situation exist. The information above is a preliminary assessment of the event and is not a formal investigation.