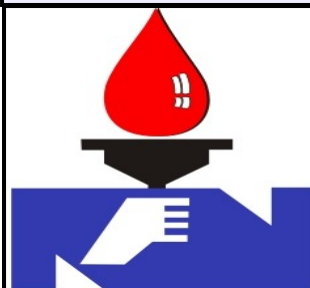


# NATIONAL REFINERY LIMITED



## HSE NEWS LETTER

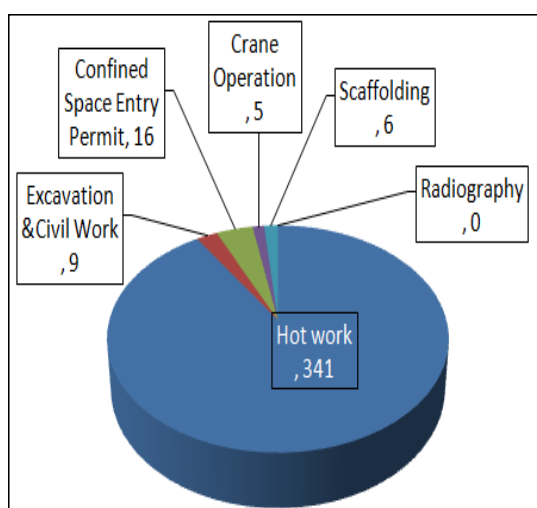
February—2019

### HSE Newsletter Contents:

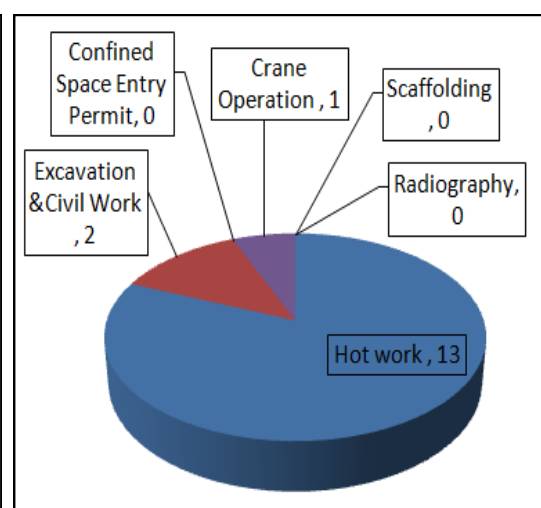
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## Permit to Work System at NRL Korangi & K.T

Permit is regarded as a written agreement between the person authorizing the work and the person receiving the permit to work. Following Permit to Work were issued in the Month of **February 2019** at Korangi & K.T.



Korangi Refinery



Keamari Terminal

## Safe Man Hours

NRL Safety Board is updated by second week of every month. Safety Board shows the number of Safe Man-hours worked by NRL MPT and Non MPT Staff. By the Grace of Al Mighty Allah and joint efforts by all of us, we have achieved **30.942216** millions safe man-hours with out Lost Time Injury as on **February 28<sup>th</sup>, 2019**. Let us all give top priority towards safety, as there is no job, which cannot be done in a safer way.

Question or concerns regarding this news letter may be directed to:

Manager HSE  
National Refinery  
Limited (NRL), 7-B,  
Korangi Industrial  
Zone, Karachi-74900,  
Pakistan.  
Email:



**30.94 Million Safe  
Man Hours Till February  
28th, 2019**

## What is ISO 22301 Business Continuity Management?

ISO 22301 is the international standard for business continuity management, and builds on the success of British Standard BS 25999 and other regional standards. It's designed to protect your business from potential disruption. This includes extreme weather, fire, flood, natural disaster, theft, IT outage, staff illness or terrorist attack. The ISO 22301 management system lets you identify threats relevant to your business and the critical business functions they could impact. And it allows you to put plans in place ahead of time to ensure your business doesn't come to a standstill.

### **Benefits of Business Continuity Management:**

- Identify and manage current and future threats to your business.
- Take a proactive approach to minimizing the impact of incidents.
- Keep critical functions up and running during times of crises.
- Minimize downtime during incidents and improve recovery time.

### **Drills Conducted by Fire Protection Department :**

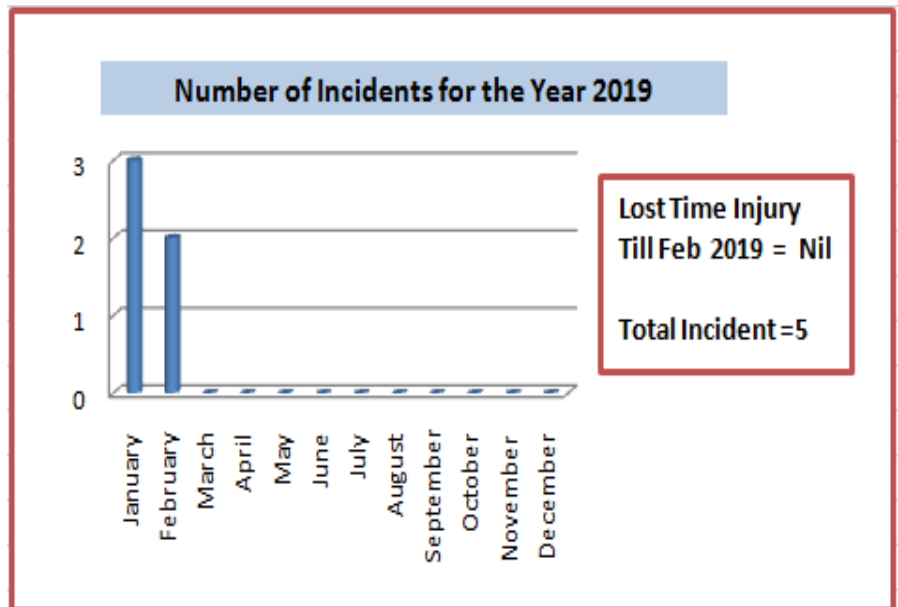






## INCIDENT / ILL HEALTH AND LOSS TIME INJURY

|                               |  |
|-------------------------------|--|
| <b>Near miss</b>              | A near miss describes incident where no property was damaged and no personal Injury sustained, but when given a slight shift in time or position, damage and / or injury easily could have occurred. |
| <b>Incident</b>               | An incident is an unplanned, undesired event that adversely affects completion of a task.  |
| <b>Accident</b>               | An accident is an undesired event that results in personal injury, property damage and equipment damage.   |
| <b>Loss Time injury (LTI)</b> | If any NRL employee on duty had on the job accident, which render the employee medically unfit to resume of his duty next 24 hours is considered to be lost time injury (LTI).                       |



## INTERNAL / EXTERNAL MONITORING CONDUCTED BY HSE DEPARTEMENT



**Ambient Air Monitoring**



**Drinking Water Sampling**



**ETP water sampling**



**Stack Emission Testing**



**Noise Monitoring in Plant**

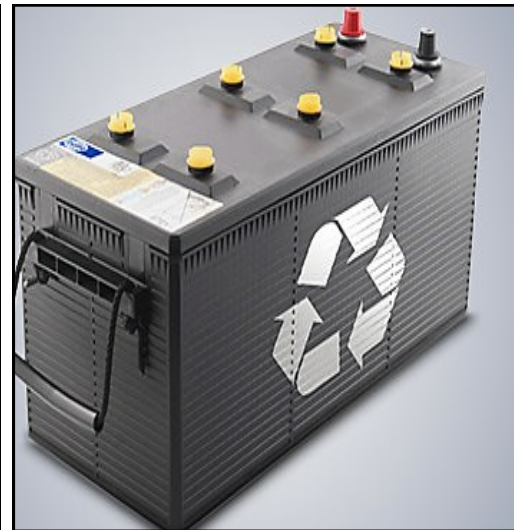


**H2S and Noise Monitoring in plant area**

## **Safety Article : Battery Hazards And Controls Measures**

### **Battery:**

Batteries are groups of electrochemical cells connected in **series** or in **parallel**. Batteries are self-contained chemical reactors capable of transforming chemical energy into electrical energy on demand. The chemicals used in batteries are corrosive and toxic and may cause personal injuries or equipment damage if they escape from any battery. Most of the batteries available in regular commerce are quite abuse resistant and effectively contain the corrosive and toxic substances under normal user conditions. The escape of the battery contents, if it occurs, is generally caused by inadvertent or deliberate abuse or some form of mishandling. Battery defects introduced by poorly controlled manufacturing operations may also lead to containment problems.



### **Risks associated with Batteries:**

There are several risk factors that may increase the occurrence of injuries to Eyes and Skin .These factors are related to the different characteristics .The task and organization of the work, the work environment and the worker.

- ◆ Avoid flame or sparks that could ignite the hydrogen gas produced by the battery and cause an explosion.
- ◆ Injuries to eyes and skin from acid contamination.
- ◆ Injuries to eyes and skin from explosion.
- ◆ Electrocution & Burns.

### **For Required PPEs:**

Always take :

- ◆ Eye protection/face mask
- ◆ Safety footwear
- ◆ Suitable overalls
- ◆ Suitable apron
- ◆ Suitable gloves

### **Key Hazards:**

- ◆ Explosion.
- ◆ Environmental conditions. High ambient temperatures. Lack of cooling.
- ◆ Overcharging
- ◆ Toxic and harmful products
- ◆ Electrocution.
- ◆ Fire caused by direct Shorting of leads or terminals

### **Safe Operations & Recommendations:**

- ◆ Ensure only competent trained personnel undertake these tasks.
- ◆ Charge batteries in an adequately signed and ventilated area.
- ◆ Check levels of electrolyte and ensure adequate venting of cells by loosening the caps/covers on the batteries.
- ◆ Do not overcharge the battery to keep the battery life long-lasting,
- ◆ Ensure that any equipment in charging area (i.e. fan in ventilation system) is maintained sufficiently and is intrinsically safe i.e. will not cause a spark.
- ◆ Switch charger off before disconnecting
- ◆ Use anti-spark discharge testers MOBILE CHARGING/JUMP STARTING
- ◆ Ensure that correct voltage is used for battery to be boosted i.e. equivalent battery / setting on booster.