## NATIONAL REFINERY LIMITED



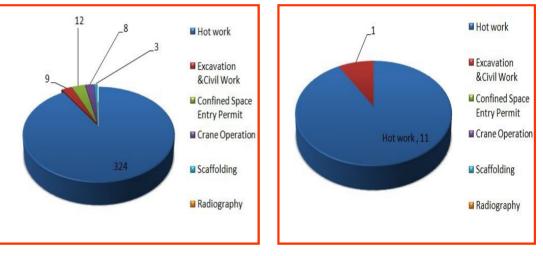
#### HSE NEWS LETTER

#### November-2019



## 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 **Nov 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 AI Mighty Allah and joint efforts by all of us, we have achieved **32.6661 millions** safe man-hours with out Lost Time Injury as on **30th Nov 2019** Let us all give top priority towards safety, as there is no job, which cannot be done in a safer way.



# Coordination Meeting with M/s HUALU Safety Team during TSDU Revamp



Tool Box Talk Conducted by NRL HSE Department during TSDU Revamp











#### **INCIDENT / ILL HEALTH AND LOSS TIME INJURY**

Incident	An incident is an unplanned, undesired event that adversely affects completion of a task.	Number of Incidents for the Year 2019
Near miss	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	3 2 3 4 4 4 5 1 1 0 4 1 1 1 1 1 1 1 1 1 1 1 1 1
Accident	An accident is an undesired event that results in personal injury, property damage and equipment damage.	
Loss Time injury (LTI)	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



Stack Emission Testing



Drinking Water Sampling



Noise Monitoring in Plant



Vehicle Emission Monitoring



NRL In-house / Internal Monitoring

#### Safety Article: Safety Considerations During a Shutdown or Turnaround

Ensuring workplace safety for employees, contractors, and visitors is the leading priority for a shutdown or turnaround. These can present numerous challenges for safety and involve workers carrying out many tasks which are not routine and may be being performed for the first time. Additionally, a significant number of contractors may be working on site that have never visited before and have little knowledge of the layout of equipment and processes.

**Challenging environments** – No plant is ideal, and this is a major safety consideration during a shutdown or turnaround. For example, tasks such as cleaning, repairs, and inspections must often be done in isolation and can involve confined spaces, climbing to certain distances, roof access, basement access, etc.

1. **Exposure –** Especially in the case of Oil Refinery & chemical plant shutdowns and turnaround, exposure to toxic gases and chemicals is a serious safety consideration. These can include acidic ones, flammable gases and liquids, toxic fumes, and other contaminants. Plants that use or may have certified hazardous materials such as lead, mercury, and catalyst handling should have the corresponding teams on hand to see to them.

2. Equipment collapse – Shutdowns often happen because a piece of equipment has shown to be defective. For example, a piece of equipment that has been leaking may have its structural integrity and can collapse in an attempt to move it.

3. Electrical hazards – Similar to the above, a piece of defective equipment may pose a risk if it is electrically malfunctioning, which is why electrical equipment should be inspected and disconnected from a power source before work is done on it.

4. **Collisions –** During shutdowns, heavy machinery may be brought in to transport equipment. It is essential that this machinery be operated by qualified personnel and that they receive guidance from someone outside the vehicle when moving equipment that can obstruct their view.

5. **Proper storage –** During a plant shutdown, all hazardous and dangerous materials should be properly stored and kept out of the work area. Every air and gas cylinder should have its main valves closed when not being used. Cylinders should be securely stored with regulators removed and safety caps installed at the end of each shift.

6. **Slip and falls –** This is the accident most cited by OSHA in the workplace and is more likely to happen during a shutdown. Due to the haste and demanding schedule of the turnaround, workers are both more likely to spill slip hazards and be slower to identify or address them.

Shutdowns and turnarounds are expensive enough when they run smoothly. It is essential to keep safety in mind in order to perform an efficient operation, as well as keep workers safe. counsel concerning safety issues.



