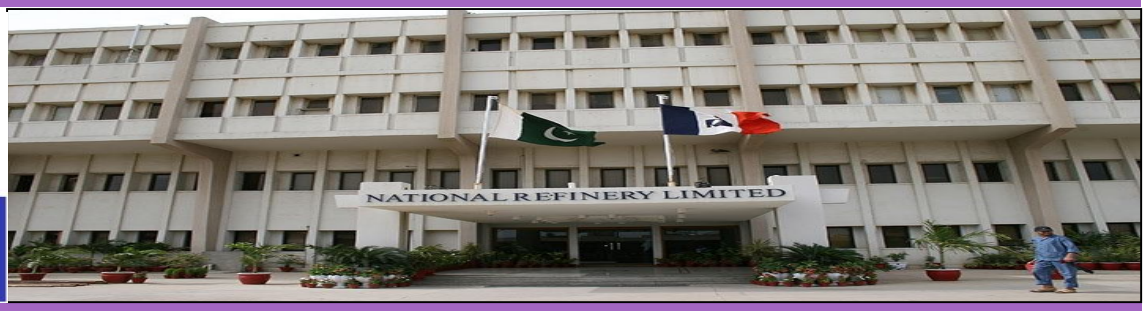
NATIONAL REFINERY LIMITED



HSE NEWS LETTER **November — 2017**

HSE Newsletter Contents:

Permit to Work System at NRL Korangi & K.T

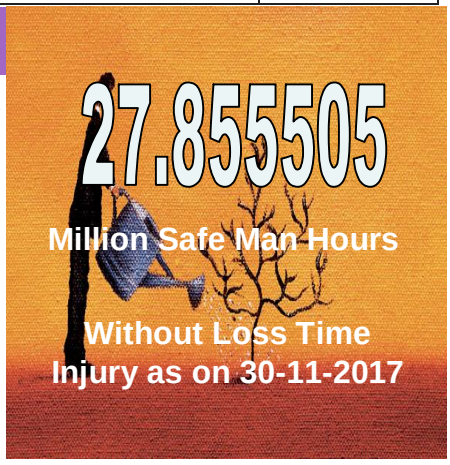
Permit is regarded as a written agreement between the person authorizing the work and the person receiving the permit to work. During working days in the morning several naked flame hot work permits were audited before issuance of various jobs at different locations inside Refinery by Sr. Engineer, Engineer and HSE / Fire Protection Officers along with respective area custodians. Following Permit to Work were issued in the Month of **November 2017** at Korangi & K.T.

KORANGI REFINERY	
PERMITS	**TOTAL QUANTITY (NOs.)**
Hot Work Permit	314
Confined Space Entry Permit	09
Excavation / Civil Work	05
Radiography Permit	—
Crane Operation	01
Cold Work Permit	—
Scaffolding Permit	01

KEAMARI TERMINAL	
PERMITS	**TOTAL QUANTITY (NOs.)**
Hot Work Permit	15
Confined Space Entry Permit	—
Excavation / Civil Work	03
Radiography Permit	—
Crane Operation	—
Cold Work Permit	—
Scaffolding Permit	—

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 **27.855505** millions safe man-hours with out Lost Time Injury as on **November 30th, 2017**. 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: mgrhse@nrlpak.com

Fire Drill at NRL Korangi & KT

Live Fire / Dry drill is carried out every Thursday at 1000 hrs. sharp at NRL Korangi Refinery & Dry Drill is carried out every Wednesday at 1530 hrs. sharp at NRL Keamari Terminal. This drill helps in checking the fitness of fire fighting equipment & imparting training to Auxiliary Staffs as describe in Procedure to gain experience for combating / catering of live fire fighting. HSE department observes the response time during fire drill. Following are the status of Drills practices which were carried out in the month of **November 2017.**

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees	Type of Drill	Response Time (min: sec)
Korangi Refinery						
01.	02-11-2017	Mr. Khan Mohammad	11	02	Live	03 min 40 sec
02.	09-11-2017	Mr. Khalid Hussain	13	—-	Live	02 min 50 sec
03.	16-11-2017	Mr. Jamil Ahmed	12	01	Dry	——
04.	23-11-2017	Mr. Muhammad Riaz	13	—-	Dry	——
05.	30-11-2017	Mr. Muhammad Riaz	12	01	Dry	——
Keamari Terminal (K.T)						
01.	01-11-2017	Mr. Ibrahim Bozdar	07	——	Dry	——
02.	08-11-2017	Mr. Asif Bhatti	07	——	Dry	——
03.	15-11-2017	Mr. Asif Bhatti	07	——	Dry	——
04.	22-11-2017	Mr. Shafique Ansari	07	——	Dry	——
05.	29-11-2017	Mr. Shafique Ansari	07	——	Dry	——

Hose Handling Drill Korangi

Hose handling drill is carried out every Tuesday at 1000 hrs. sharp at Fire station NRL Korangi Refinery. This drill helps in handling of fire fighting equipment to Auxiliary Staffs from Productions, Security, Quality Control and Oil movement departments to handle / cater emergency situation. Following are the status of Hose Handling Drills practices which were carried out in the month of **November 2017.**

S. No	Date	Team Leader	Nos. of Participant	Nos. of Absentees
01.	07-11-2017	Mr. Ali Muhammad	11	02
02.	14-11-2017	Mr. Muhammad Riaz	11	02
03.	21-11-2017	Mr. Azam Baig	11	02
04.	28-11-2017	Mr. Azam Baig	12	01

Illumination Monitoring Report Korangi

HSE department monitor the Illumination intensity at various Rooms, corridor & Control rooms which include Admin Block, Operation Block, all three Refineries, Canteen, Fire station, Security, Shipping office, Oil movement office, Quality Control, Workshop Hall, Ware house office and Dispensary office for the month of **November 2017** on **3rd November 2017**. The results was reported to all stake holders.

INCIDENT / ILL HEALTH AND LOSS TIME INJURY

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.
Incident	An incident is an unplanned, undesired event that adversely affects completion of a task.
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).

MONTHWISE STATUS OF INCIDENT & LOSS TIME INJURIES

Sr. No.	MONTH	INCIDENTS	LOSS TIME INJURIES
01.	January 2017	00	Nil
02.	February 2017	00	Nil
03.	March 2017	01	Nil
04.	April 2017	00	Nil
05.	May 2017	01	Nil
06.	June 2017	00	Nil
07.	July 2017	04	Nil
08.	August 2017	00	Nil
09.	September 2017	00	Nil
10.	October 2017	00	Nil
11.	November 2017	00	Nil
Total		**06**	**Nil**

Noise Survey Report Korangi

HSE department recorded the noise level reading at various location i.e., Lube-I, Lube-II, Fuel Refinery, Utilities, Oil Movement, R.O, Power Generation, Workshop, Warehouse, Quality control, Fire Protection, Shipping and Security department for the month of **November 2017** on **3rd November 2017**. Boiler # 7 was not in operation. The results of noise level reading was reported to all stakeholders.

H_2S & VOCs Monitoring Korangi

HSE department monitors the Hydrogen Sulphide (H_2S) & Volatile Organic Compounds (VOCs) which are being toxic in nature to the human beings and pollution to the environment. The results of H_2S & VOCs recorded at more than **80 different locations in Refinery** for the month of **November 2017** on **3rd November 2017**. Boiler VII was not in operation. The results was reported to all stake holders.

Safety Article : Confined Space: Is it Hazardous to Work in?

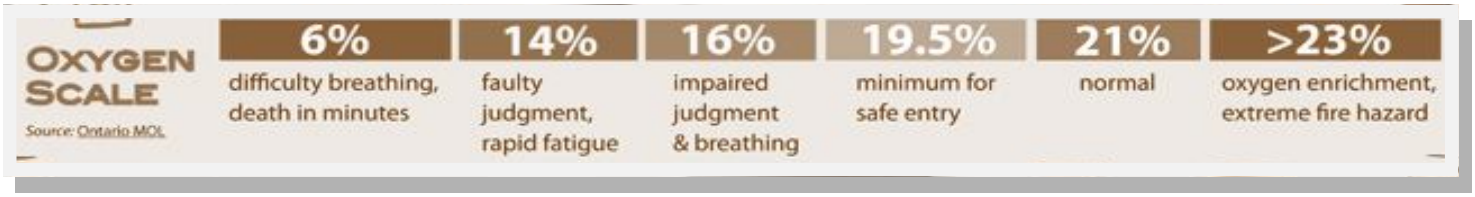
First, let me define a “confined space”. Generally speaking, a confined space is a partially enclosed or completely enclosed space.

- A confined space has a restricted entrance or exit due to location, size or means.
- A confined space is not designed for human occupancy.

A confined space can pose a risk for the health and safety of anyone who enters. This is because of the following:

- The design of the confined space
- The construction of the confined space
- The location of the confined space
- The atmospheric condition of the confined space

Confined spaces can be above or below the ground. Confined spaces can be found at many workplaces, if not all workplaces. A confined space is not just a small area. It can be a large structure such as a silo, tanks, etc.



WHAT ARE THE HAZARDS IN A CONFINED SPACE?

- Poor air quality: Insufficient oxygen
- Poisonous substances: Could cause illness and/or unconsciousness
- Poor ventilation: Natural ventilation is not always sufficient to provide breathable air.
- Chemical exposures: Skin contact or ingestion of certain chemicals could cause illness or death.
- Fire hazards: Explosive / flammable atmosphere due to flammable liquids or gases and combustible dust which if ignited could lead to death.
- Other hazards: Moving parts of equipment, structural collapse, slips, trips, falls, extreme temperatures, electrical shocks and poor visibility.

WHAT SHOULD BE DONE PRIOR TO ENTERING A CONFINED SPACE?

The important thing to do first is to determine if the area a worker is to enter is really a confined space. If it is determined a confined space be sure the confined space assessment and control program is followed. To determine this refer to the 29CFR 1926 OSHA regulations. Next, is it absolutely necessary that the work has to be done inside the confined space. In many cases the work can be accomplished outside of a confined space. Before entering a confined space a trained and experienced worker should identify all existing and potential hazards. The air inside the confined space should be tested from outside of a confined space using detection equipment with remote probes and sampling lines. This test should determine the following:

- The oxygen content is within safe limits—not too little or too much.
- A hazardous atmosphere is not present.
- Proper ventilation is introduced.

Results of these findings should be recorded on the entry permit along with the equipment and methods used to determine these tests.