

NATIONAL REFINERY LIMITED



HSE NEWS LETTER

September 2016

Permit to Work System at NRL Korangi & K.T

HSE Newsletter Contents:

Permit to Work	1
Safe Man Hours	1
Fire Drill at NRL & KT	2
Hose Handling Drill	2
H₂S & VOCs Monitoring Korangi	2
Incident / Ill health & Loss Time Injury	3
Illumination Monitoring	3
Noise Survey Report Korangi	3
Safety Article: Compressed Gas Cylinder Safety	4

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 (PTW) were issued in the Month of **September 2016** at Korangi & K.T.

KORANGI REFINERY		KEAMARI TERMINAL	
PERMITS	TOTAL QUANTITY (NOs.)	PERMITS	TOTAL QUANTITY (NOs.)
Hot Work Permit	212	Hot Work Permit	13
Confined Space Entry Permit	08	Confined Space Entry Permit	01
Excavation / Civil Work	05	Excavation / Civil Work	01
Radiography Permit	—	Radiography Permit	—
Crane Operation	Nil	Crane Operation	02
Cold Work Permit	—	Cold Work Permit	03
Scaffolding Permit	01	Scaffolding Permit	—

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

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 Staffs. By the Grace of Al Mighty Allah and joint efforts by all of us, we have achieved **24.874711** millions safe man-hours with out Lost Time Injury as on **September 30th, 2016**. Let us all give top priority towards safety, as there is no job, which cannot be done in a safer way.



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 **September 2016**.

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees	Type of Drill	Response Time (min & sec)
Korangi Refinery						
01	01-09-2016	Mr. Jamil Ahmed	13	Nil	Dry	—
02	08-09-2016	Mr. Khalid Hussain	13	Nil	Dry	—
03	15-09-2016	Mr. Azam Baig	12	01	Dry	—
04	22-09-2016	Mr. Khan Mohammad	13	Nil	Dry	—
05	29-09-2016	Mr. Furqan Ahmed	13	Nil	Dry	—
Keamari Terminal (K.T)						
01	07-09-2016	Mr. Asif Bhatti	07	—	Dry	—
02	21-09-2016	Mr. Shafiq Ansari	07	—	Dry	—
03	14-09-2016	Due to G.holiday (Eid-ul-Azha) Fire drill not carried out.				
04	28-09-2016	Mr. Ibrahim Bozdar	07	—	Dry	—

Hose Handling Drill

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 **September 2016**.

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees
01	06-09-2016	Mr. Azam Baig	13	Nil
02	13-09-2016	Due to G.holiday (Eid-ul-Azha) Hose drill not carried out .		
03	20-09-2016	Mr. Bilal M Khan	10	03
04	27-09-2016	Mr. Bilal M Khan	11	02
05	30-08-2016	Mr. Azam Baig	10	03

H₂S & VOCs Monitoring Korangi

HSE department monitors the Hydrogen Sulphide (H₂S) & Volatile Organic Compounds (VOCs) which are being toxic in nature to the human beings and pollution to the environment. The results of H₂S & VOCs recorded at more than **80 different locations in Refinery** for the month of **September 2016** on **27th September 2016**. 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).

MONTH-WISE STATUS OF INCIDENT & LOSS TIME INJURIES FOR THE YEAR

Sr. No.	MONTH	INCIDENTS	LOSS TIME INJURIES
01	January 2016	02	Nil
02	February 2016	00	Nil
03	March 2016	00	Nil
04	April 2016	00	Nil
05	May 2016	01	Nil
06	June 2016	01	Nil
07	July 2016	03	Nil
08	August 2016	02	Nil
09	September 2016	02	Nil
Year to Date (Total)		11	Nil

Illumination Monitoring Report

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 **September 2016** on **27th September 2016**. The results was reported to all stake holders.

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 **September 2016** on **27th September 2016**. 182 & 283 / 293 Pump house & Fire Pump house # 2 was not in operation. The results of noise level reading was reported to all stakeholders.

Safety Article: Compressed Gas Cylinder Safety

Gas cylinders have a special storage and handling precaution. Hazards associated with compressed gases include:

- ◆ Oxygen displacement.
- ◆ Toxic effects of some gases.
- ◆ Explosion hazards.
- ◆ Physical hazards due to a ruptured cylinder.

There are almost many different types of materials in gas cylinders:

- ◆ Atmospheric gases
- ◆ Poison gases
- ◆ Fuel gases
- ◆ Other miscellaneous gases
- ◆ Refrigerant gases

Compressed gases fall into different categories:

- ◆ Flammable gases
- ◆ Toxic gases
- ◆ Oxygen and oxidizing gases
- ◆ Cryogenic gases
- ◆ Acid and alkaline gases
- ◆ Inert gases



It is important to understand that a sudden release of these gases can cause a cylinder to become a dangerous missile-like projectile. It has been documented that a cylinder, under this condition, has penetrated a concrete block wall. Compressed gas cylinders must be identified properly for safety reasons. The contents should be clearly identified.

- ◆ A durable label should be on the cylinder that cannot be removed.
- ◆ No gas cylinder should be used that does not clearly identify its contents by name.
- ◆ Because suppliers vary with color-coding, color-coding is not a reliable means of identification.
- ◆ Labels on caps have no value for identification because cylinder caps are interchangeable.

Safety in transporting gas cylinders must be adhered to:

- ◆ Cylinders transported by trucks, trains or other motorized modes must be fastened securely in an upright position to prevent them from falling or striking each other.
- ◆ Cylinders should not be transported without caps screwed all the way down for a tight fit. Do not lift a cylinder by its cap. Do not transport gas cylinders with the regulator attached.
- ◆ Use a cylinder cart to manually move a gas cylinder. Refrain from sliding, dragging or rolling a gas cylinder.

Proper storage of compressed gas cylinders:

- ◆ Cylinders should be properly secured in an upright position at all times whether attached to a wall, cylinder truck, rack or post.
- ◆ Caps should be on and tightly secured when in storage.
- ◆ Cylinders should be stored in a well-ventilated area away from any type of an ignition source.
- ◆ Oxygen cylinders (empty or full) should be separated from fuel gas cylinders or combustible materials by a minimum distance of 20 feet or more or by a barrier at least 5 feet high with a fire resistance of at least one-half hour.
- ◆ Full and empty cylinders should be stored separately and labeled to prevent confusion.
- ◆ Cylinders may be stored outside but should be protected from the ground and direct sunlight.

Use of compressed gas cylinders:

- ◆ Know and understand the properties, uses and safety precautions of the gas being used from Material Safety Data Sheet (MSDS).
- ◆ Always use the proper regulator for the gas in the cylinder. Check the regulator prior to attaching it to the cylinder. Ensure the threads on the cylinder and the connection are of a type intended for the gas service.
- ◆ Do not permit oil or grease to come in contact with cylinders or their valves. Wipe the connections with a lint free cloth.
- ◆ Attach the regulator securely with a cylinder wrench or other tightly fitting wrenches.
- ◆ Open the valve slowly and do not use a wrench to open the valve.
- ◆ Do not attempt to repair any cylinder valve or regulator. Put a tag on the defective part stating the defect and immediately remove it from service.