

# NATIONAL REFINERY LIMITED



## HSE NEWS LETTER

December 2016

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

### HSE Newsletter Contents:

<a href="#">Permit to Work</a>	1
<a href="#">Safe Man Hours</a>	1
<a href="#">Fire Drill at NRL &amp; KT</a>	2
<a href="#">Hose Handling Drill</a>	2
<a href="#">H<sub>2</sub>S &amp; VOCs Monitoring Korangi</a>	2
<a href="#">Incident / Ill health &amp; Loss Time Injury</a>	3
<a href="#">Illumination Monitoring</a>	3
<a href="#">Noise Survey Report Korangi</a>	3
<a href="#">Safety Article: Types of Fire &amp; How to Extinguish Them?</a>	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 **December 2016** at Korangi & K.T.

KORANGI REFINERY		KEAMARI TERMINAL	
PERMITS	TOTAL QUANTITY (NOs.)	PERMITS	TOTAL QUANTITY (NOs.)
Hot Work Permit	363	Hot Work Permit	22
Confined Space Entry Permit	24	Confined Space Entry Permit	—
Excavation / Civil Work	182	Excavation / Civil Work	—
Radiography Permit	—	Radiography Permit	—
Crane Operation	20	Crane Operation	02
Cold Work Permit	—	Cold Work Permit	—
Scaffolding Permit	03	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](mailto: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 Staff. By the Grace of Al Mighty Allah and joint efforts by all of us, we have achieved **25.468692** millions safe man-hours with out Lost Time Injury as on **December 31<sup>st</sup>, 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 **December 2016**.

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees	Type of Drill	Response Time (min & sec)
<b>Korangi Refinery</b>						
01.	01-12-2016	Mr. Furqan Ahmed	13	Nil	Dry	—
02.	08-12-2016	Mr. Bilal M. Khan	13	Nil	Dry	—
03.	15-12-2016	Mr. Bilal M. Khan	13	Nil	Dry	—
04.	22-12-2016	Mr. Jamil Ahmed	13	Nil	Dry	—
05.	29-12-2016	Mr. Khan Mohammad	13	Nil	Dry	—
<b>Keamari Terminal (K.T)</b>						
01.	07-12-2016	Mr. Ibrahim Bozdar	07	—	Dry	—
02.	14-12-2016	Mr. Agha Munawar	07	—	Dry	—
03.	21-12-2016	Mr. Asif Bhatti	07	—	Dry	—
04.	28-12-2016	Mr. Mohammad Zaman	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 **December 2016**.

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees
01.	06-12-2016	Mr. Mohammad Arshad	11	02
02.	13-12-2016	Mr. Jamil Ahmed	09	04
03.	20-12-2016	Mr. Khan Mohammad	13	—
04.	27-12-2016	Mr. Jamil Ahmed	12	01

## H<sub>2</sub>S & VOCs Monitoring Korangi

HSE department monitors the Hydrogen Sulphide (H<sub>2</sub>S) & Volatile Organic Compounds (VOCs) which are being toxic in nature to the human beings and pollution to the environment. The results of H<sub>2</sub>S & VOCs recorded at more than **80 different locations in Refinery** for the month of **December 2016** on **8<sup>th</sup> December 2016**. Boiler VII was not in operation. 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 — 2016

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
10.	October 2016	00	Nil
11..	November 2016	00	Nil
12.	December 2016	01	Nil
<b>Year to Date (Total)</b>		<b>12</b>	<b>Nil</b>

## 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 **December 2016** on **8<sup>th</sup> December 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 **December 2016** on **8<sup>th</sup> December 2016**. Boiler # 7 was not in operation. The results of noise level reading was reported to all stakeholders.

# Safety Article: Types of Fire & How to Extinguish Them?

Fires are classified by the types of fuel they burn and there are different mediums to extinguish different fires.

The types of fire are:

◆ **Class A:**

Class A Fires consist of ordinary combustibles such as wood, paper, trash or anything else that leaves an ash. Water works best to extinguish a Class A fire.

◆ **Class B:**

Class B Fires are fueled by flammable or combustible liquids, which include oil, gasoline, and other similar materials. Smothering effects which deplete the oxygen supply work best to extinguish Class B fires. Therefore, Class B fires are Extinguished by using Foam Fire Extinguishers, DCP and CO<sub>2</sub> Fire Extinguishers.

◆ **Class C:**

Energized Electrical Fires are known as Class C fires. Always de-energize the circuit then use a non-conductive extinguishing agent. Such as Carbon dioxide to extinguish the Fire.

◆ **Class D:**

Class D Fires are combustible metal fires. Magnesium and Titanium are the most common types of metal fires. Once a metal ignites do not use water in an attempt to extinguish it. Only use a Dry Powder extinguishing agent. Dry powder agents work by smothering and heat absorption.

◆ **Class K:**

Class K Fires are fires that involve cooking oils, grease or animal fat and can be extinguished using Purple K, the typical agent found in kitchen or galley extinguishers.

## TYPES OF FIRE EXTINGUISHERS

Which Type Of Extinguisher To Use?

CAUTION	CAUTION	CAUTION	CAUTION	CAUTION	CAUTION	
WHICH EXTINGUISHER TO USE?	CLASS A WOOD PAPER TEXTILES FABRIC	CLASS B PETROL DIESEL OILS LIQUIDS	CLASS C GAS BUTANE METHANE ETC.	CLASS D METALS MAGNESIUM SWARF ETC.	ELECTRICS COMPUTERS MACHINERY ETC.	CLASS F COOKING OIL DEEP FAT FRYERS ETC.
WATER	✓					
HYDROSPRAY (WATER ADDITIVE)	✓					
CO <sub>2</sub> (CARBON DIOXIDE)			✓		✓	
FOAM (AFFF)	✓	✓				
POWDER	✓	✓	✓		✓	
METAL POWDER (M28 AND L2)				✓		
MONNEX POWDER				✓	✓	✓
WET CHEMICAL		✓				✓
HOSE REEL	✓					
CAUTION	CAUTION	CAUTION	CAUTION	CAUTION	CAUTION	

### KNOW YOUR FIRE EXTINGUISHER CODE

CO <sub>2</sub>	DRY POWDER	AFFF FOAM	WATER	VAPOURISING LIQUIDS
FOR USE ON: Flammable Liquids	FOR USE ON: Wood, Paper and Textiles	FOR USE ON: Wood, Paper and Textiles	FOR USE ON: Wood, Paper and Textiles	FOR USE ON: Wood, Paper and Textiles
FOR USE ON: Live Electrical Equipment	FOR USE ON: Flammable Liquids	FOR USE ON: Flammable Liquids	DO NOT USE ON: Live Electrical Equipment	FOR USE ON: Flammable Liquids
DO NOT USE ON: Wood, Paper and Textiles	FOR USE ON: Gaseous Fires	DO NOT USE ON: Live Electrical Equipment	DO NOT USE ON: Flammable Liquids	FOR USE ON: Gaseous Fires
DO NOT Use in a confined space	FOR USE ON: Live Electrical Equipment	DO NOT USE ON: Flammable Metal Fires	DO NOT USE ON: Flammable Metal Fires	FOR USE ON: Live Electrical Equipment