

NATIONAL REFINERY LIMITED



HSE NEWS LETTER

June 2015

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

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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. 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 **June 2015** at Korangi & K.T.

KORANGI REFINERY		KEAMARI TERMINAL	
PERMITS	TOTAL QUANTITY (Nos.)	PERMITS	TOTAL QUANTITY (Nos.)
Welding cutting grinding	152	Welding cutting grinding	70
Sand blasting	05	Sand blasting	Nil
Hacksaw / Cold cutting	31	Hacksaw / Cold cutting	Nil
Excavation / Civil Work	49	Excavation / Civil Work	Nil
Crane Operation	09	Crane Operation	Nil
Liqua blaster	29	Liqua blaster	Nil
Flood light	11	Flood light	Nil
Fork Lifter	14	Cold Work Permit	Nil
Tractor Operation	15	Scaffolding Permit	Nil
Confined Space Entry	14	Confined Space Entry	Nil
Radiography	Nil	Radiography	Nil
Diesel Engine	41	Diesel Engine	Nil
Energizing of hand lamp	04	Energizing of hand lamp	02

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 **22.069088** millions safe man-hours with out Lost Time Injury as on **June 30, 2015**. 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 Live Fire Drills & Dry Fire Drills practices which were carried out in the month of **June 2015**.

S.No	Date	Team Leader	Nos. of Participant	Type of Drill	Response Time (min:sec)
Korangi Refinery					
01	04-06-2015	Mr. Ibrahim Bozdar	13	Dry Drill	—
02	11-06-2015	Mr. Muhammad Riaz	12	Dry Drill	—
03	18-06-2015	Mr. Shahid Mehmood	11	Dry Drill	—
04	25-06-2015	Mr. Touseef Iqbal	12	Dry Drill	—
Keamari Terminal (K.T)					
01	03-06-2015	Mr. Asif Bhatti	07	Dry Drill	—
02	10-06-2015	Mr. Munir Akhtert	07	Dry Drill	—
03	17-06-2015	Mr. Shafiq Ansari	07	Dry Drill	—
04	24-06-2015	Mr. Muhammad Zaman	07	Dry Drill	—

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 **June 2015**.

S.No	Date	Team Leader	Nos. of Participant
01	02-06-2015	Mr. Khalid Hussain	09
02	09-06-2015	Mr. Touseef Iqbal	11
03	16-06-2015	Mr. Saeed-ur-Rehman	11
04	23-06-2015	Mr. Muhammad Israr	09
05	30-06-2015	Mr. Muhammad Riaz	09

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 **75 different locations in Refinery** for the month of **June 2015** on **19th June 2015**. RO—III unit was not in operation. The results was reported to all stake holders.



INCIDENT / ILL HEALTH AND LOSSTIME 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 & LOSSTIME INJURIES

Sr. No.	MONTH	INCIDENTS	LOSS TIME INJURIES
01	January 2015	01	Nil
02	February 2015	01	Nil
03	March 2015	Nil	Nil
04	April 2015	Nil	Nil
05	May 2015	Nil	Nil
06	June 2015	02	Nil
Year to Date (Total)		04	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 **June 2015** on **19th June 2015**. Chief Medical Officer (CMO) and Senior Medical Officer (SMO) rooms were under repair and renovation so illumination monitoring to those area not carried out. 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 **June 2015** on **19th June 2015**. RO — III and Fire Water Pump House # 01 was not in operation. The results of noise level reading was reported to all stakeholders.

Safety Article: Protecting Workers from the Hazards of Abrasive Blasting Materials

Abrasive blasting uses compressed air or water to direct a high velocity stream of an abrasive material to clean an object or surface, remove burrs, apply a texture, or prepare a surface for the application of paint or other type of coating.

Abrasive Blasting Materials

The decision to use a certain type of abrasive material can depend on factors such as cost, job specifications, environment, and worker health. Commonly used abrasive materials:

- ◆ Silica sand (crystalline)
- ◆ Coal slag
- ◆ Garnet sand
- ◆ Glass (beads or crushed)
- ◆ Steel shot

Alternative, less toxic blasting materials include:

- ◆ Dry ice
- ◆ Sponge
- ◆ Sodium bicarbonate (baking soda)
- ◆ High pressure water

Health Hazards:

Abrasive blasting operations can create high levels of dust and noise. Abrasive material and the surface being blasted may contain toxic materials (e.g., lead paint, silica) that are hazardous to workers.

- ◆ Silica sand (crystalline) can cause silicosis, lung cancer, and breathing problems in exposed workers.
- ◆ Coal slag and garnet sand may cause lung damage similar to silica sand (based on preliminary animal testing).
- ◆ Slags can contain trace amounts of toxic metals such as arsenic, beryllium, and cadmium.

Engineering Controls

1. Substitution

- ◆ Use a less toxic abrasive blasting material.
- ◆ Use abrasives that can be delivered with water (slurry) to reduce dust.

2. Isolation and Containment

- ◆ Use barriers and curtain walls to isolate the blasting operation from other workers.
- ◆ Use blast rooms or blast cabinets for smaller operations.
- ◆ Use restricted areas for non-enclosed blasting operations.
- ◆ Keep coworkers away from the blaster.

3. Ventilation

- ◆ Use exhaust ventilation systems in containment structures to capture dust.

Administrative Controls

Perform routine cleanup using wet methods or filtered vacuuming to minimize the accumulation of toxic dusts.

- ◆ Do not use compressed air to clean as this will create dust in the air.
- ◆ Schedule blasting when the least number of workers are at the site.
- ◆ Avoid blasting in windy conditions to prevent the spread of any hazardous materials.

Personal Hygiene Practices

- ◆ Prohibit eating, drinking, or using tobacco products in blasting areas.
- ◆ Provide wash stations so workers can wash their hands and face routinely and before eating, drinking, or smoking.
- ◆ Vacuum or remove contaminated work clothes before eating, drinking or smoking.
- ◆ Provide accommodations for end-of-shift showers and change areas with separate storage facilities for street clothes, protective clothing and equipment.
- ◆ Keep contaminated clothing and equipment out of the clean change area.

Respiratory Protection

An abrasive-blasting respirator must cover the wearer's head, neck, and shoulders to protect the wearer from rebounding abrasive. Workers must use only respirators approved by safety officer to provide protection from dusts produced during abrasive-blasting operations.

Personal Protective Equipment

- ◆ Hearing protection
- ◆ Eye and face protection
- ◆ Leather gloves that protect to full forearm and aprons (or coveralls)
- ◆ Safety shoes or boots

