NATIONAL REFINERY LIMITED

HSE NEWS LETTER **August—2018**

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 **August 2018** at Korangi & K.T.

KORANGI REFINERY	
PERMITS	**TOTAL QUANTITY (NOs.)**
Hot Work Permit	424
Confined Space Entry Permit	13
Excavation / Civil Work	06
Radiography Permit	—
Crane Operation	14
Cold Work Permit	—
Scaffolding Permit	27

KEAMARI TERMINAL	
PERMITS	**TOTAL QUANTITY (NOs.)**
Hot Work Permit	16
Confined Space Entry Permit	—
Excavation / Civil Work	06
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 **29.754888** millions safe man-hours with out Lost Time Injury as on **August 31st , 2018**. 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 **August 2018.**

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees	Nature of Drill	Response Time (min: sec)
Korangi Refinery						
01.	02-08-2018	Mr.Khalid Hussain	13	—	Live	05 minutes 10 Sec
02.	09-08-2018	Mr.Iqbal Ali	13	—	Live	04 minutes 40 Sec
03.	16-08-2018	Mr. Khan Muhammad	11	02	Live	05 minutes
04.	30-08-2018	Mr. Muhammad Riaz	12	01	Live	04 minutes 50 sec
Keamari Terminal (K.T)						
01	01-08-2018	Mr.Muhammad Abid	04	—--	Dry	—-
02	08-08-2018	Mr.Kazim Raza	04	——	Dry	——
03	15-08-2018	Mr.Kazim Raza	04	——	Dry	——
04	29-08-2018	Mr.Furqan Ahmed	04	——	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 **August 2018.**

S. No	Date	Team Leader	Nos. of Participant Attended	Nos. of Absentees
01.	07-08-2018	Mr.Shahid Mehmood	12	01
02.	28-08-2018	Mr.Daulat Khan	10	03

Types Of Fire

Type (Fire / Extinguisher)	CLASS A Combustible materials (e.g. paper & wood)	CLASS B Flammable liquids (e.g. paint & petrol)	CLASS C Flammable gases (e.g. butane and methane)	CLASS D Flammable metals (e.g. lithium & potassium)	Electrical Electrical equipment (e.g. computers & generators)	CLASS F Deep fat fryers (e.g. chip pans)	Comments
Water	✓	✗	✗	✗	✗	✗	Do not use on liquid or electric fires
Foam	✓	✓	✗	✗	✗	✗	Not suited to domestic use
Dry Powder	✓	✓	✓	✓	✓	✗	Can be used safely up to 1000 volts
CO2	✗	✓	✗	✗	✓	✗	Safe on both high and low voltage
Wet Chemical	✓	✗	✗	✗	✗	✓	Use on extremely high temperatures

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 2018	01	Nil
02	February 2018	03	Nil
03	March 2018	01	Nil
04	April 2018	03	Nil
05	May 2018	03	Nil
06	June 2018	02	Nil
07	July 2018	03	Nil
08	August 2018	03	Nil
	Total No.	**19**	**Nil**

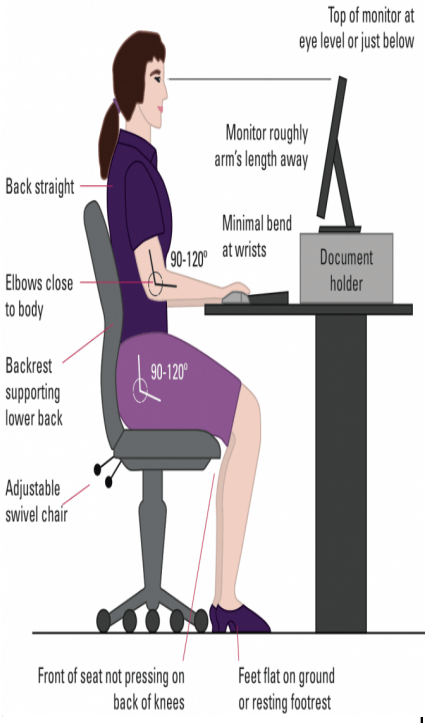
INTERNAL MONITORING CONDUCTED BY HSE DEPARTEMENT

S.#	Testing	Locations	Date (NRL)	Date (K.T)
1	H_2S and VOC	Plant area, Storage tanks, Flare area, Management block parking, Q.C,Gantries & terminals.	09th-August-2018	3rd–August-2018
2	Illumination	Control rooms, canteen & corridors.		
3	Noise Level	Plant area, Power generation & Pump house		
4	Rain Water Channel Monitoring	Inside NRL	8th-August-2018	—

Safety Article : Ergonomics at Workplace

Ergonomics:

Ergonomics is the process of designing and/or arranging workplace's products and systems to best fit the employees/persons who are using them.



Ergonomic Assessments:

Applying a scientific, evidence-based approach to your **ergonomics** process is important. The goal is to identify **ergonomic** risk factors, quantify them, and then make measurable improvements to the **workplace**, ensuring that jobs and tasks are within workers' capabilities and limitations.

Lighting:

Sufficient lighting improves concentration. The amount of light required depends on the type of work and the work space. Natural light is always preferred. Always adapt the light intensity to the work. The legislation also specifies a minimum level depending on the work. Both direct dazzle as well as light reflection must be avoided. Age and dirt can impact on artificial lighting.

Sound and vibrations:

Too high sound level can cause nausea, headaches or even gastric and bowel complaints. Furthermore it can be a hazard to communication. Exposure to hand-arm vibrations or body vibrations can also be stressful.

Climatic conditions:

It is important to aim for an ideal climate, not too hot and not too cold. In addition to temperature, radiant heat, humidity and air speed also affect climatic conditions. A humidity between 40 and 60 percent is recommended. In summer the air speed should not be higher than 0.25 m/s and during winter not higher than 0.15 m/s. Comfort levels are between 20 and 24 degrees Celsius. If it is not possible, additional measures are required. Work and break times must be adjusted, drink sufficiently and possibly wear appropriate clothing. Finally you must protect yourself against direct sunlight and avoid draughts.

Static strain:

Caused by the continual tensing of the body. Possible effects: restricting the flow of blood resulting in numbness in certain body parts, chronic fatigue, muscle ache and cramps.

Dynamic strain:

Caused by moving the muscles which alternately tense up and relax. Possible effects: fatigue, muscle ache, damage to the heart and blood vessels, damage and wearing of the joints.

Heavy work:

Caused by a combination of work posture, movement and using your strength. Breaks enable the muscles to recover and the blood circulation to calm down. During breaks try not to overuse those muscles that are used when performing heavy work duties .

Lifting loads:

Possible effects: back problems and physical complaints. Multiple factors such as load, dimensions, shape, centre of gravity, frequency, distances, the work environment (movement area, floor, height differences), and the person (training, fitting, sex,age…). Preventive measures: training in lifting techniques, implementing as many aids as possible to lift and move heavy loads and distributing lifting work to various workers.