

NATIONAL REFINERY LIMITED



HSE NEWS LETTER

December—2018

HSE Newsletter Contents:

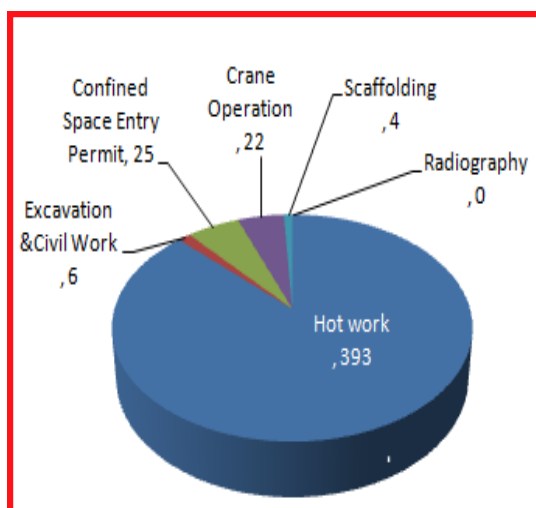
	Pg #
<u>Permit to Work</u>	1
<u>Safe Man Hours</u>	1
<u>NFPA Diamond</u>	2
<u>Fire Drill and Hose Handling Drill</u>	2
<u>Incident / Ill health & Loss Time Injury</u>	3
<u>Internal Monitoring Conducted By HSE Department</u>	3
<u>Safety Article: Hydrochloric Acid Hazards and Safety Tips</u>	4

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

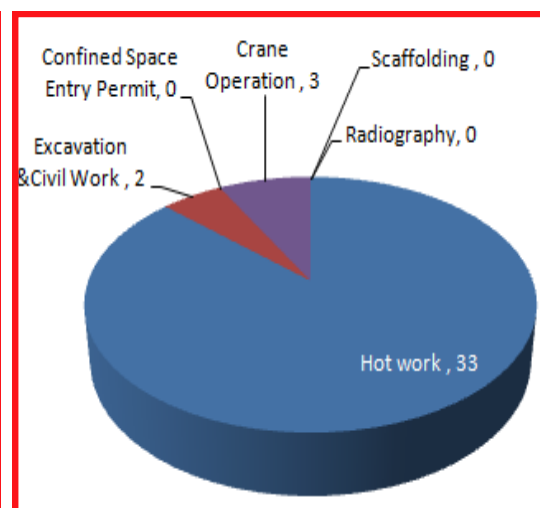
Manager HSE
National Refinery Limited (NRL), 7-B,
Korangi Industrial Zone,
Karachi - 74900,
Pakistan.
Email:
mgrhse@nrlpak.com

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. Following Permit to Work were issued in the Month of **December 2018** at Korangi & K.T.



Korangi Refinery



Keamari Terminal

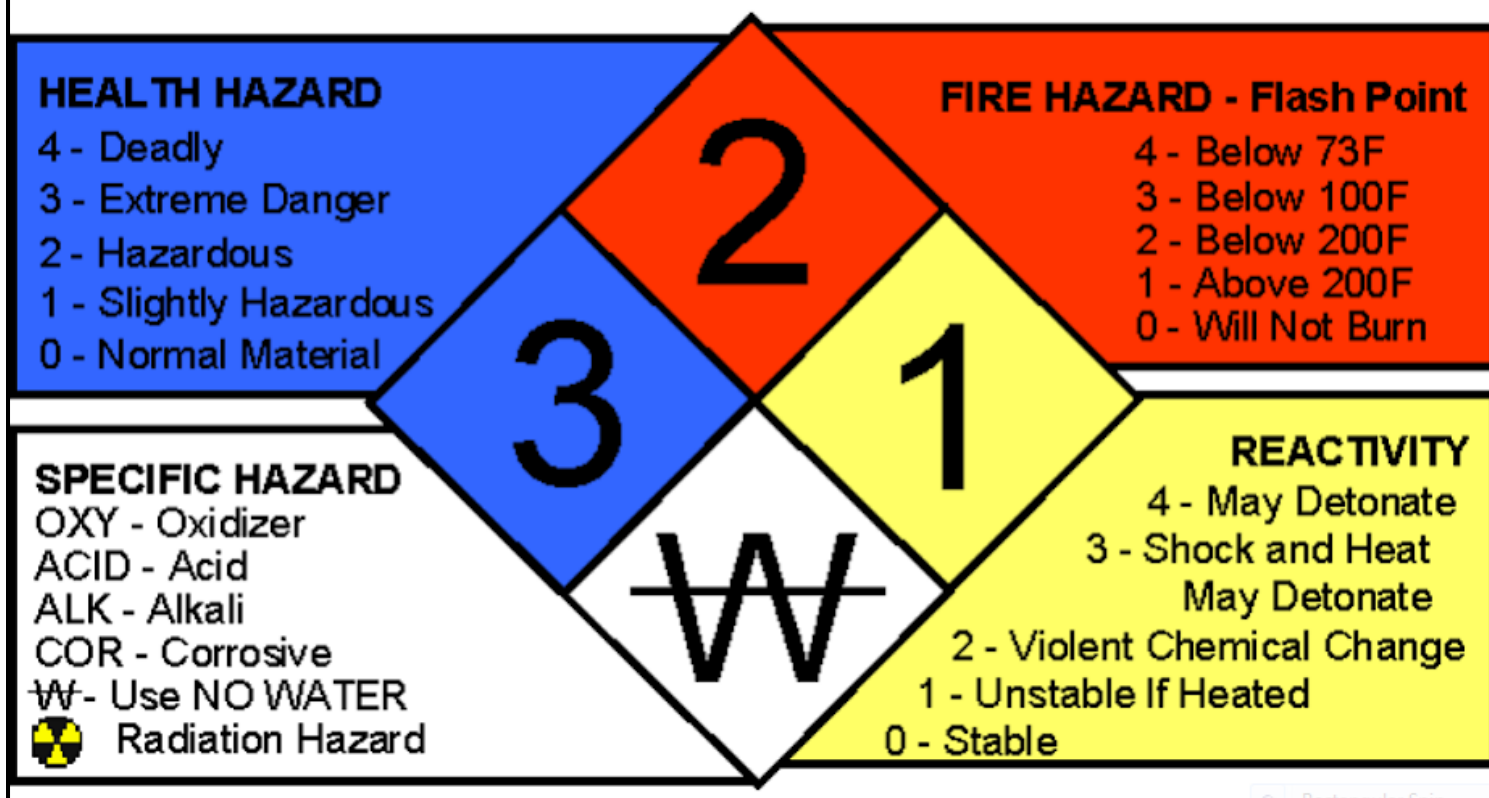
Safe Man Hours

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 **30.548088** millions safe man-hours with out Lost Time Injury as on **December 31st, 2018**. Let us all give top priority towards safety, as there is no job, which cannot be done in a safer way.

30.54 Million Safe Man Hours Till Dec 2018



NFPA Diamond



Fire Drill and Hose Handling Drill Conducted by Fire Protection Department





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.	<div><div><div><u>lost time Injury Till</u> <u>Dec 2018 =Nil</u></div><div><u>Total Incidents =30</u></div></div><div><table><thead><tr><th>Month</th><th>Incidents</th></tr></thead><tbody><tr><td>January</td><td>1</td></tr><tr><td>February</td><td>3</td></tr><tr><td>March</td><td>1</td></tr><tr><td>April</td><td>3</td></tr><tr><td>May</td><td>3</td></tr><tr><td>June</td><td>2</td></tr><tr><td>July</td><td>3</td></tr><tr><td>August</td><td>3</td></tr><tr><td>September</td><td>1</td></tr><tr><td>October</td><td>4</td></tr><tr><td>November</td><td>4</td></tr><tr><td>December</td><td>2</td></tr></tbody></table></div><div><u>Month Wise Incident Status of 2018</u></div></div>	Month	Incidents	January	1	February	3	March	1	April	3	May	3	June	2	July	3	August	3	September	1	October	4	November	4	December	2
Month	Incidents																											
January	1																											
February	3																											
March	1																											
April	3																											
May	3																											
June	2																											
July	3																											
August	3																											
September	1																											
October	4																											
November	4																											
December	2																											
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).																											

INTERNAL / EXTERNAL MONITORING CONDUCTED BY HSE DEPARTEMENT



Ambient Air Monitoring



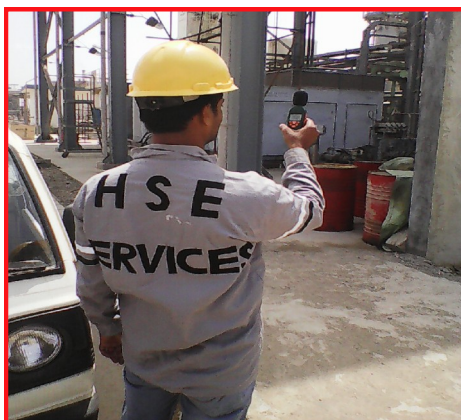
Drinking Water Sampling



ETP water sampling



Stack Emission Testing



Noise Monitoring in Plant



H2S and Noise Monitoring in plant area

SAFETY ARTICLE : HYDROCHLORIC ACID HAZARDS AND SAFETY TIPS

Safety & Health Hazards Associated with Hydrochloric

Hydrochloric acid is a hazardous liquid which must be used with care. The acid itself is corrosive, and concentrated forms release acidic mists that are also dangerous. If the acid or mist come into contact with the skin, eyes, or internal organs, the damage can be irreversible or even fatal in severe cases. The use of personal protective equipment is essential. It is also called **Muriatic acid; Hydrogen chloride, aqueous; Chlorohydric acid**

How to Handle Hydrochloric Acid

Safety is of utmost importance when handling dangerous chemicals like hydrochloric acid. The Environmental Protection Agency regulates hydrochloric acid as a toxic substance, and it should be treated as such. It is recommended that you wear the following protective equipment when using hydrochloric acid of any concentration:

- Vapor respirator
- Rubber gloves
- Boots
- Full suit

DANGER! Corrosive. Causes severe skin, eye, and digestive tract burns. Harmful if swallowed. Mist or vapor extremely irritating to eyes and respiratory tract.

Safety Ratings:

Health: 3, Severe Reactivity: 1, Slight
Flammability: 0, None Contact: 4, Extreme

Exposure Limits:

TWA = 0.3 ppm
Ceiling Limit = 2.0 ppm

Proper Care for Hydrochloric Acid Exposure

Depending on the concentration of the hydrochloric acid you are working with, accidental exposure can occur as skin contact, eye contact, ingestion or inhalation of acidic vapors. Each of these types of exposure can pose serious hazards to your health and should be managed immediately.

Skin Contact – If hydrochloric acid comes into contact with your skin, flush immediately with plenty of water for at least 15 minutes, and remove any contaminated clothing. In case of serious skin contact, use water, a disinfectant soap, and anti-bacterial cream. Seek immediate medical attention.

Eye Contact – If hydrochloric acid or acidic mists get into your eyes, immediately flush with plenty of water for at least 15 minutes. Seek immediate medical attention.

Ingestion – If swallowed, do not induce vomiting. Seek immediate medical attention.

Inhalation – If you inhale hydrochloric acid vapors or mists, seek fresh air and medical attention immediately.

Hydrochloric Acid Storage and Disposal

Hydrochloric acid should be stored in a cool, dry, well-ventilated area away from sources of moisture. Keep away from incompatible materials such as oxidizing agents, organic materials, metals and alkalis. Hydrochloric acid has the ability to corrode metallic surfaces. Keep container tightly closed and store in a safe place.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Appearance: Transparent	Color: Colorless	Odor: Pungent, irritating
Molecular Weight: 36.46	pH: 3.01	Specific Gravity: 1.18	Solubility: Miscible with water Vapor