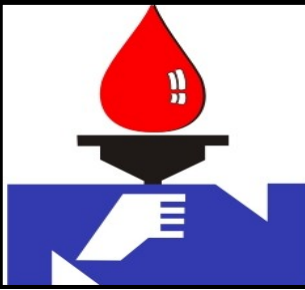


NATIONAL REFINERY LIMITED



HSE NEWS LETTER

January - 2021

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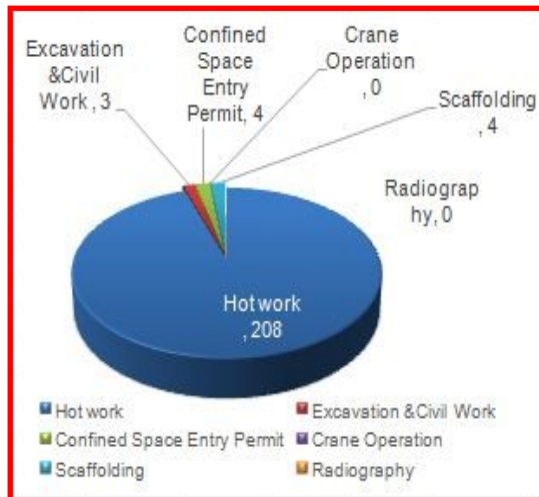
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Question or concerns regarding this news letter may be directed to:

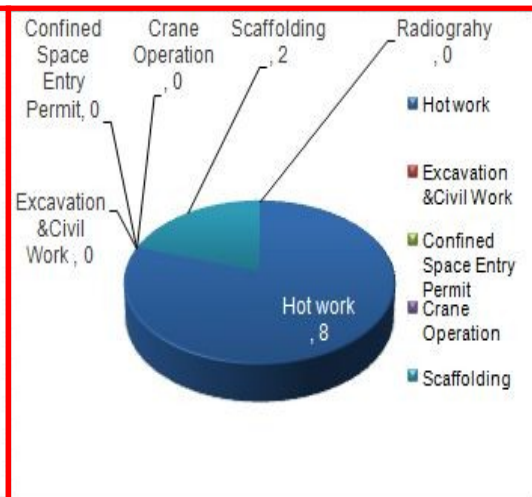
Manager HSE
National Refinery Limited (NRL), 7-B, Korangi Industrial Zone, Karachi - 74900, Pakistan.
Email: mgrhse@nrlpak.com

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 **January 2021** 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 **34.80455532 millions** safe man-hours without Lost Time Injury (LTI) as on **31st Jan 2021** Let us all give top priority towards safety, as there is no any job, which cannot be done in a safer way.

34.80 Million Safe man hours till 31st January 2021



SAFETY TRAINING SESSIONS AT HRDC

Safety Training Sessions conducted by **HSE Department** at **HRDC** on various topics like:

- ◆ HSE awareness inside refinery
- ◆ Advantages of housekeeping
- ◆ Process safety awareness
- ◆ Hazard Identification and risk assessment
- ◆ Incident Investigation
- ◆ Legal requirements related to HSE

Workplace safety training is a process that aims to provide workforce with knowledge and skills to perform work in a way that is safe for the person itself and other co-workers.



Fire Drills Conducted by Fire Department

◆ Fire Drill:

Every Thursday at 1000 hrs and Wednesday at 1530 hrs , planned fire drill conduct by the fire protection department at Korangi Refinery and Keamari terminal respectively, to check the preparedness or effectiveness of fire-fighting staff and firefighting equipment at the time of emergency. Also training regarding usage of fire fighting equipment is delivered to participant from different department in fire drill by the fire protection department.

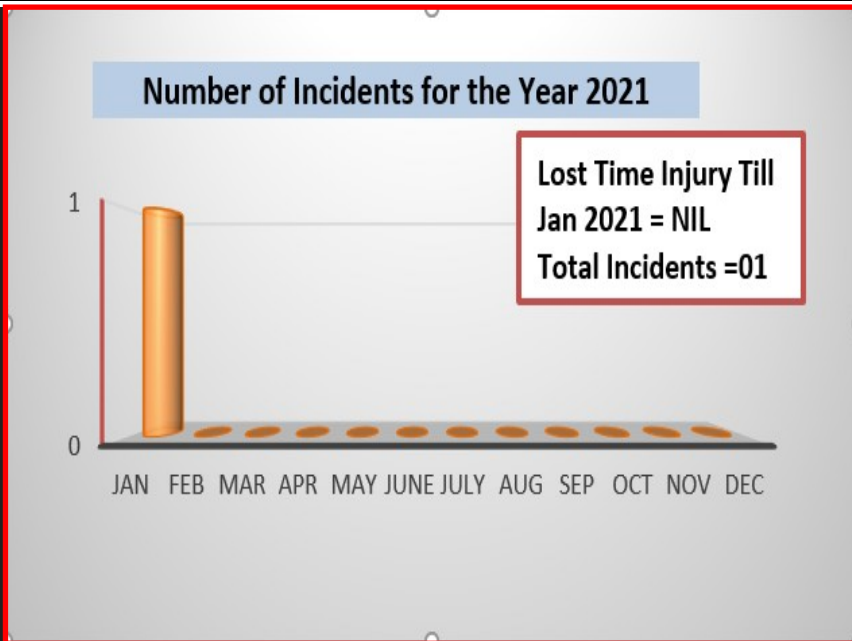


OUR AIM: NO ACCIDENTS



INCIDENT / ILL HEALTH AND LOSS TIME INJURY

| | |
|-------------------------------|--|
| Incident | An incident is an unplanned, undesired event that adversely affects completion of a task. |
| 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. |
| 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



Stack Emission Testing



Fugitive Emission Testing



Noise Monitoring in Plant



Vehicle Emission Monitoring

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.