

PATRON-IN-CHIEF:  
**Mr. Shahid  
Salim Khan**

EDITOR-IN-CHIEF:  
**Mr. Muhammad  
Mubashir Abbas**

SUB-EDITOR:  
**Mr. Muhammad  
Habib Akbar**

ADMINISTRATOR:  
**Mr. Mahmood UI  
Hassan Khan**

CONTRIBUTORS:  
**Corporate and  
Field HSE Teams**

A QUARTERLY PUBLICATION OF HSEQ DEPARTMENT



H

S

E

Q

APRIL-JUNE 2021

NEWSLETTER

OIL & GAS DEVELOPMENT COMPANY LIMITED

## A Message from Patron-In-Chief



### OGDCL Family,

As you might be aware that HSE related Leading and Lagging Indicators of OGDCL have been displaying a healthy picture over the years. Continual improvement in our HSE management system is also visible from the maturity witnessed from the development of Enterprise Risk Management Framework and Lifesaving Golden Rules which are at par with the international standards. However, in retrospective, this should not make us complacent due to the fact that we might have easily avoided few incidents in the recent past.

It is my conviction that HSE Department's fundamental functions are always there to facilitate line management in defining systems, imparting trainings, conducting audits across the organization and reporting HSE Performance. It is critical for the line management to step forward and take sincere ownership of HSE Management System and make OGDCL facilities better, safe and reliable.

HSEQ Newsletter would definitely provide you with informative reading material as well as learning opportunities as enough effort have been put together. Enjoy reading the new perspective look of HSEQ Newsletter and participate with even more zeal & zest next time. Lastly, let me share this year's HSE KPIs:

HSE Lagging Indicators FY (2020-21)	Target	Performance
Fatality index	0	0
LTIF	<1	0.15
TRICF	<1	0.30
TVIR	<1.5	0.18

**SHAHID SALIM KHAN**  
MANAGING DIRECTOR/CEO

The hardest part of any relationship is when it is time to say goodbye. As much as we might like things to stay the same, change is an inevitable part of life. On the eve of retirement (May 04, 2021) of Dr. Syed Ahmed Nadeem, HSEQ Team shared thoughts on the work association with him and wished him all the best for the post retirement era. HSE team members paid him rich tribute for his commendable service, positive attitude, cooperation, sense of responsibility and ready wit. Dr. Syed Ahmed Nadeem joined OGDCL in 1991. He held a PhD in Fuel Technology from the University of Leeds, U.K. and a Bachelors' Degree in Chemical Engineering with specialization from the University of Punjab Lahore. HSEQ Department presented him a shield and bouquet of flowers along with a souvenir package as a gift.

*Farewell*  
Dr. Syed Ahmad Nadeem



## AN EXCLUSIVE WORKSHOP ON ENTERPRISE RISK MANAGEMENT AND CRISIS MANAGEMENT CONDUCTED FOR OGDCL'S CORPORATE RISK MANAGEMENT TEAM (C-RMT) AND EMERGENCY MANAGEMENT TEAM (EMT)



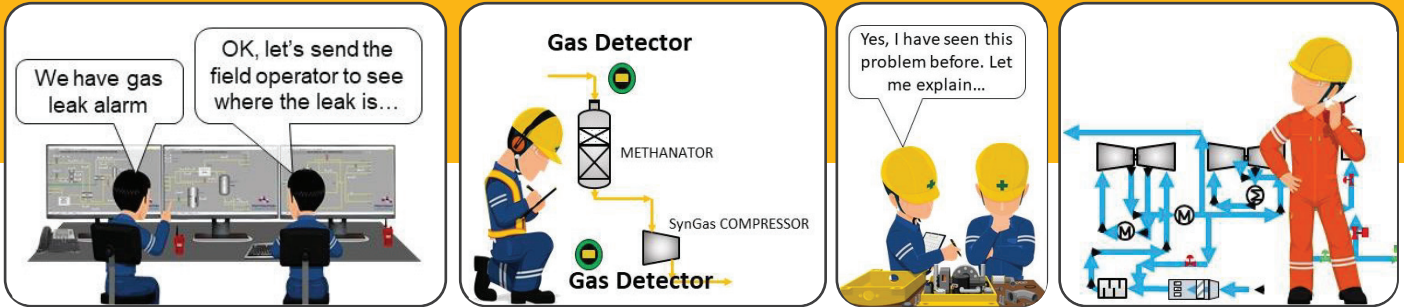
Corporate Risk Management Team (C-RMT) and Emergency Management Team (EMT) are teams that are responsible-entities within OGDCL for managing risks & crisis situations. However, there has been considerable difference in the working culture between the public sector and private sector organizations as far as true implementation of these roles is concerned. As per guidance of Board's Risk Management Committee (B-RMC) and MD/ CEO, HSEQ Department was assigned to bridge this gap through arranging awareness sessions for the top tier Management. HSEQ Department, subsequently, arranged a WORKSHOP from June 28 – July 02, 2021 at Main Conference Hall, OGDCL House, Islamabad, followed by a brainstorming session with the following key objectives:

- To harmonize understanding levels amongst Corporate Risk Management Team (RMT) to map Operational Risks with Strategic & External Risks for company's business continuity and growth;
- To enable the pragmatic roles of Emergency Management Team (EMT) during emergencies for business continuity and demonstrate preparedness level through an Interactive EMT-LMT Drill; and
- To learn devising a purposeful Risk Dashboard to be presentable to Board's Risk Management Committee (B-RMC) along with an Action Plan/ Roadmap for company's growth through risk aversion/ minimization strategies

Mr. Naeem Ahmed Subhani, Course Facilitator, ended the Workshop with a note of thanks after bestowing Certificates to the participants



## INOVO CONDUCTED HAZOP STUDY OF UCH GAS PLANT



Hazards Operability (HazOp) Study of Uch Gas Processing Plant was conducted in January 2021 by M/s INOVO Global USA at Dera Murad Jamali. Uch's multidisciplinary team managed the challenging task with the Consultant's professional guidance and concluded the study's entire scope within ten days during Ramadan 2021. Special thanks to the Team Lead HAZOP, Syed Javaid Akhtar - a senior HSE Consultant, Trainer, Auditor of Oil & Gas Sector with over 40 years working experience; including 26 years in Plant Process & Operations and 14 years in HSE Management. He has a good repute of conducting HAZOP studies as a Team Lead in various industries including ENI and Shell Pakistan.



2021/04/18 13:57

# CERTIFICATE LEVEL TRAINING ARRANGED FOR CRANE OPERATORS, SCAFFOLDERS, RIGGERS AND FORK LIFT OPERATORS

Third Party Certificate Level Training of Crane operators, Fork lift operators, Riggers and Scaffolders organized by HSEQ Department of Uch Gas Field. The field now has 02 Certified Scaffold Inspectors, 08 Certified Scaffolders, 06 certified Crane Operators and 06 Certified Fork Lift Operators; Overall 226 training man-hours delivered through multiple outsourced professional sessions.



## FIRST EVER CARBON FOOTPRINT STUDY OF QADIRPUR PLANT CARRIED OUT



A carbon footprint is defined as the total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide (CO<sub>2</sub>). In other words, when we consume electricity to light/ warm up our homes, or when we buy consumer products, we are actually contributing to our carbon footprints because the generation of electrical power and the production of consumer goods release some amount of carbon dioxide into the atmosphere. The equivalency scale allows comparison for different greenhouse gases (GHG) based on their global warming potentials (GWP). Carbon dioxide is released primarily from the combustion of fossil fuels. While in an oil and gas industry, methane emissions occur due to fugitive equipment leaks and process vents. Nitrous oxide is produced in trace amounts based on the type of fuel and equipment. HSEQ Department planned to conduct carbon footprint study employing internal resources and for that Qadirpur Gas Processing Plant was selected this year as a new case study. Carbon Footprint Study Team comprised of Mr. Muhammad Mubashir Abbas, A/Manager HSEQ (Team Lead), Mr. Ghulam Mohyuddin, Process Engineer (Team Member-1), Mr. Jamal Shahid, Environment Engineer (Team Member-2) and Mr. Saghar Mehboob, HSE Engineer (Team Member-3). The potential sources of emissions identified at the Qadirpur Plant were grouped into various categories and each category was then assessed for its potential GHG emissions. The methodology used for the estimation of carbon footprints was the fuel analysis approach. Based on the study results, the team recommended that a GHG Emissions Inventory should be developed and maintained at the plant. The potential GHG emissions sources should be identified and periodic monitoring may be done over a range of conditions. This can further be achieved by a) Installing continuous emissions monitoring system (CEMS), b) Investing in pollution control technologies and c) Using sophisticated equipment to control flare emissions and operate knock-outs. The operations in oil & gas industry often involve large number of processes and components including valves, flanges, connectors, sampling points, vessels, etc. The team also recommended that these can be a significant source of fugitive emissions if monitored over a long period of time. In-house fugitive emissions monitoring plans may be developed at site to identify the major and minor leakages. The final recommendation was that if the parameters like volume, pressure of the gas stream, temperature, operating flow rate, etc. are optimized according to the system capacity to yield better performance and fewer emissions. Routine checks and timely maintenance of the system must be ensured and where necessary, the old/ worn-out parts should be replaced with Original Equipment Manufacturer (OEM) specified spares in time.

sophisticated equipment to control flare emissions and operate knock-outs. The operations in oil & gas industry often involve large number of processes and components including valves, flanges, connectors, sampling points, vessels, etc. The team also recommended that these can be a significant source of fugitive emissions if monitored over a long period of time. In-house fugitive emissions monitoring plans may be developed at site to identify the major and minor leakages. The final recommendation was that if the parameters like volume, pressure of the gas stream, temperature, operating flow rate, etc. are optimized according to the system capacity to yield better performance and fewer emissions. Routine checks and timely maintenance of the system must be ensured and where necessary, the old/worn-out parts should be replaced with Original Equipment Manufacturer (OEM) specified spares in time.

# OGDCL House Gets HSE TOP Cards

## For Reporting Unsafe Behaviors and Unsafe Conditions

HSE TOP Intervention System has been introduced at OGDCL House. **IT IS A TOOL THAT GIVES EVERYONE THE AUTHORITY TO STEP IN AND STOP ONGOING WORK IF THEY FEEL THAT AN ACTION OR SITUATION IS UNSAFE FOR ONE OR MORE PERSONS, ASSETS OR THE ENVIRONMENT OR COULD LEAD TO AN ACCIDENT, PARTICIPATE IN ANALYZING THE PERCEIVED RISKS, HELP RESOLVE THE PROBLEM, IF DIRECTLY CONCERNED AND RESUME THE WORK AFTER ENSURING PRECAUTIONARY MEASURES.** Almost 40 Drop Boxes have been wall-mounted from Basement to 16th Floor so that everyone can be given means to intervene unsafe behaviors and unsafe conditions and encourage people to do so to improve safety. OGDCL believes that all accidents can be prevented through shared vigilance, for our own sake and that of our coworkers and for the sake of those around us.



## ANOTHER SUCCESS STORY

NATIONAL INSTITUTE FOR BIOTECHNOLOGY AND GENETIC ENGINEERING INSTALLED FLOATING TREATMENT WETLANDS (FTWS)-CONSTRUCTED WETLANDS (CWS) AT DAKHNI



National Institute for Biotechnology and Genetic Engineering (NIBGE) introduced an emerging technology called Floating Treatment Island/ Wetland (FTW) & Constructed Wetlands (CWs) which is a cost-effective, efficient and aesthetically pleasing `green` as a soil-less planting wastewater treatment technology. FTWs & CWs are man-made ecosystems that mimic natural wetlands. The concept of FTW convinced HSEQ Department to look into the option for produced water treatment/ disposal issues in Rajian Oil Field and after the success story there, contract was awarded on no-profit no-loss basis to NIBGE to neutralize Dakhni Plant's oily produced water in the contaminated

# HSEQ NEWSLETTER

National Institute for Biotechnology and Genetic Engineering (NIBGE) introduced an emerging technology called Floating Treatment Island/ Wetland (FTW) & Constructed Wetlands (CWs) which is a cost-effective, efficient and aesthetically pleasing 'green' as a soil-less planting wastewater treatment technology. FTWs & CWs are man-made ecosystems that mimic natural wetlands. The concept of FTW convinced HSEQ Department to look into the option for produced water treatment/ disposal issues in Rajian Oil Field and after the success story there, contract was awarded on no-profit no-loss basis to NIBGE to neutralize Dakhni Plant's oily produced water in the contaminated ponds/ pits. It was second of its kind of projects in Pakistan and was about five to ten times cheaper than the conventional solutions. The project has been successfully commissioned; the design of FTW adopted at Dakhni harbored specific plants capable of taking up organic and inorganic contaminants along with water through their natural processes in amounts that are significantly higher than what majority of the plants can tolerate. The project was being headed by Dr. Muhammad Afzal, who is Principal Scientist & Group Leader, Microbial Ecology/ Phytotechnology (AUS), Soil & Environmental Biotechnology Division, NIBGE. Later on, OGDCL's team comprising of Mr. Kamran Siddique, InCharge HSEQ Dakhni, Mr. Raja Anser Kiani, InCharge HSEQ Rajian and Mr. Muhammad Younas, HSEQ Rep., Head Office visited National Institute of Biotechnology and Genetic Engineering (NIBGE), Faisalabad to participate and avail a two days extensive learning opportunity. Different research and development prospects discussed to raise the capacity building for the bioremediation/ phytoremediation in-situ solutions for the wastewater and soil/ environmental monitoring labs in OGDCL. NIBGE ensured its full cooperation and support in every viable cost effective environmental intervention to transfer indigenous technologies to public sector organizations to handle the impact of climate change in Pakistan on sustainable basis.

## ISO 14001 AND ISO 45001 CERTIFICATIONS OF OGDCL HOUSE

SET AS  
CORPORATE  
TARGET FY  
2021-22

After the successful certifications of our major Dakhni, Nashpa, Qadirpur, KPD-TAY, Uch, Sinjhor, Chanda & Mela Fields against the ISO 14001 and ISO 45001 standards, MD/ CEO has picked OGDCL House as the next corporate target and approved a cross-functional team constituted of following Officials for the establishment and implementation of HSE System at OGDCL House, Islamabad:

- Muhammad Mubashir Abbas (AM HSEQ) ... ISO Project Coordinator
- Muhammad Nouman (CE HSEQ) ... Member-Risk/ERP
- Tariq Sharif (CE Mech.) ... Member-Admin/Maint./TPT
- Lt. Col. Darwaiz Khan (DC-Security) ... Member-Security
- Dr. Muhammad Ilyas (DC-Medical) ... Member-Medical/Hygiene
- Aamir Shehzad (DC-System) ... Member-IT/System/Comm.
- M. Sameem Hussain Kaisar (SO-HSEQ) ... Member-Training



This team has been made responsible to assist all concerned by arranging and coordinating specified training, awareness & consulting sessions and development of requisite work-products pertaining to OGDCL's Integrated HSE System Manual by utilizing company's own internal resources to make this project a success in the shortest possible time. Subsequently, to smoothly achieve this corporate milestone, HSEQ Department has devised a pragmatic Roadmap Program followed by an InHouse Gap Analysis Study before the engagement of Certification Body for Stage-I and Stage-II Audits.



"Exclusive Session on Fundamentals of OGDCL HSE Management System Arranged For Accomplishing ISO 45001 and ISO 14001 Certifications of OGDCL House"

## EMC CARRIED OUT INDOOR AND AMBIENT AIR QUALITY MONITORING OF OGDCL HOUSE ISLAMABAD

Internal air quality can be affected by microbial contaminants like mold and bacteria, gases, VOCs, particulates, or any mass or energy stressor that can induce adverse health conditions. Indoor air in high-rise-buildings is becoming an increasingly more concerning health hazard than outdoor air. Legionella bacteria, potential to affect respiratory system, may be detected in the environment, usually found in damp areas which grow best in warm water, HVAC system, cooling towers, hot water tanks, large plumbing systems, and reservoirs that are not properly maintained. HSEQ Department hired the services of an independent monitoring consultant (M/s EMC) to monitor employees' exposure to pollutants by collection of samples from occupants rooms/surfaces and conduct air/live monitoring (& lab. analysis); as well as noise & light intensity checking inside the building. In addition to the Indoor Air Quality Monitoring, Ambient Air Quality Monitoring also carried on in parallel. The study was carried out in two phases; First phase (Extreme Summer) and Second phase (Extreme Winter). Officers and workforce members present within the OGDCL House cooperated courteously with the visiting team members during sample-collection process, operating gadgets (live monitoring) and conducting survey on air quality assessment. Final report along with analytical findings and computer simulations has been handed over to Admin Department for compliance

### 6 SOLUTIONS TO REDUCE Indoor Air Pollution



**REGULAR MAINTENANCE**

To avoid excessive repairs or an expensive replacement air conditioning and/or heating unit, always keep up with routine maintenance and inspections.



**ROUTINE CLEAN**

It's recommended that you clean your air conditioning or heating unit filters once every four to six weeks to avoid indoor air pollution and impurities.



**IMPROVE VENTILATION**

Blocked air ducts, or gaps in ventilation system could allow unwanted debris, dust, and moisture to build up within HVAC unit causing indoor air pollution.



**CONTROL MOISTURE**

Moisture leads to more mold, odors, and respiratory issues caused by lack of indoor air quality. To improve these issues, you need to maintain proper moisture levels.



**USE NATURAL CLEANERS**


Sometimes the things we clean our homes with end up being the source of indoor air pollution. Household cleaners contain chemicals and toxins that are harmful to humans.



**ADD INDOOR PLANTS**


Indoor plants are a breath of fresh air. Fresh oxygen can be supplied to your home by incorporating household plants. Many house plants even filter the air.

Worried about the quality of your indoor air at home? Take these steps to improve indoor air quality. For more info visit:  
[HTTP://BLOOMFIELDCOOLING.COM/AIR-CONDITIONING-AC-REPAIR-SERVICE-PASSAIC-COUNTY-NJ/](http://bloomfieldcooling.com/air-conditioning-ac-repair-service-passaic-county-nj/)



OGDCL  
**SAFETY HANDBOOK**  
For Oil & Gas Development and Production Leases

MAY 2021



This handbook is intended as reference and may not be all encompassing. Ask your Location HSE Representative/Coordinator for any further information. The specific HSE Management System procedures are available in the latest revision of OGDCL's Integrated HSE System Manual.

Occupational Health, Safety, Environment & QA/QC Department



**REDUCE REUSE RECYCLE**

MAY 2021

**OIL & GAS DEVELOPMENT COMPANY LIMITED**  
**INTEGRATED WASTE MANAGEMENT HANDBOOK**



This handbook is principally based on the applicable guidelines and best practices followed by oil & gas exploration and production companies worldwide. Ask your Location HSE Representative / Coordinator for more specific information. This handbook corresponds to the procedures available in the latest revision of OGDCL's Integrated HSE System Manual.

Occupational Health, Safety, Environment & QA/QC Department

## OGDCL'S SAFETY HANDBOOK

FOR OIL AND GAS DEVELOPMENT & PRODUCTION LEASES

## INTEGRATED WASTE MANAGEMENT HANDBOOK PUBLISHED

**HSE RIG N-55 CONDUCTED AWARENESS SESSIONS ON PTW SYSTEM**

Two awareness sessions were conducted at Rig N-55 by InCharge HSEQ – 21st & 23rd June, 2021; the main points covered in the training sessions included types of work permits used at drilling sites; role of Permit Issuing & Permit Receiving Authorities; hierarchy of Controls & types of LOTO devices; rules for PTW System; site inspection; Gas Test (LEL, O2, CO & H2S); Pre-job safety meetings for hazard awareness/ communication; permit distribution and display; work supervision; work monitoring; simultaneous activities, permit validity; work delay/ stoppage/ suspension; PTW documentation; change of circumstances/ scope; and training and competence. 15 personnel (09 Officers & 06 Staff members) participated in the two sessions.



## DAKHNI & UCH SOUR FIELDS CONDUCTED FIREFIGHTING & RESCUE MOCKUP DRILL



Firefighting & Rescue Mockup Drills were conducted at Fire Section of Dakhni & Uch Fields. The drills covered basic awareness of fire and its classes, emergency response in case of Class A&B fires and rescue evacuation of an unconscious person due to toxic gases, operation of Self Contained Breathing Apparatus (SCBA), and lifting techniques of an unconscious/ injured person. Fire crew setup practical demonstration of firefighting response to assume Class-A&B Fire. Water showering was done to extinguish Class-A Fire using Fire Water Monitor. To control Class-B Fire, AFFF Foam was used along with Fire Water Monitor. Furthermore, Fire crew operated portable CO2 and DCP fire extinguishers to extinguish an assumed fire. After the firefighting demonstration, the drills concluded with clarification of various queries made by participants.



“Snapshot of EMT after participating in LMT-EMT Interactive Emergency Drill Level-4 (Critical) On Scenario Boiling Liquid Expanding Vapor Explosion (Bleve)”