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JULY-SEPT 2022

NEWSLETTER

OIL & GAS DEVELOPMENT COMPANY LIMITED

Motivational Speech

from MD/CEO to H S E Q Teams



Inspiring workforce as well as keeping them motivated is one of the most important attributes of a leader. It's not always easy to motivate public sector employees. But as a leader, it's the core job to do so-and MD/ CEO OGDCL never gives up on that mission. He defines HSE Excellence in a comprehensive view that encompasses the vision of what is desired along with the strategy, plan, and budget necessary to fulfill the ideal.

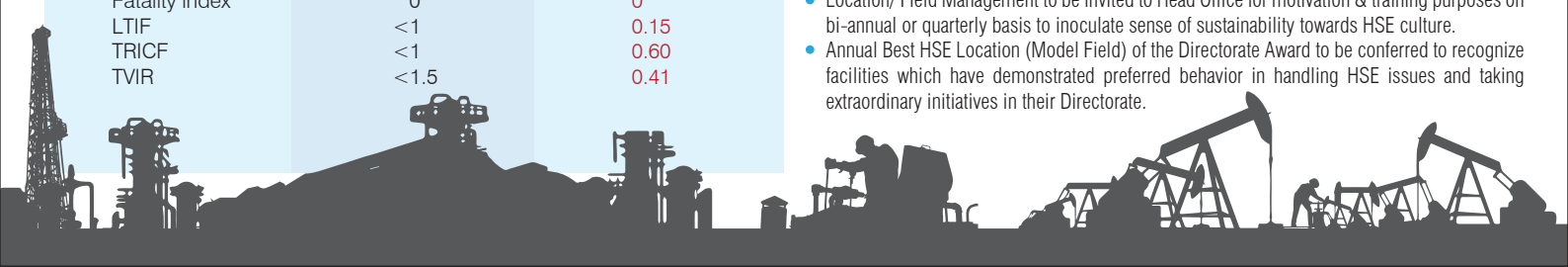
That's why he addressed the HSE Teams (Head Office and Field Level) on July 25, 2022 and enlightened on HSE cultural challenges and performance benchmarks; moreover, he shared his views as a way forward to improve the same. Building HSE culture of recognition is an effective means of motivating employees to regularly exceed their goals, he added. He stressed that by adopting the updated HSE knowledge, training programs proves vital to preventing unnecessary workplace injuries and hence lower chances of injuries keep workforce in good health to carry on with their duties.

He reiterated the crucial role of HSE teams as to advice & train line management and monitor & audit the compliance levels of HSE management system; but as a primary implementer-cum-follower of HSE system, Line Management needs to pledge its commitment. ED Exploration, ED Petroserv, ED Production, ED Services and ED HR-Admin also expressed their individual views for the betterment of HSE culture in the spellbinding session held in the Main Conference Room, GF HO, Islamabad.

Hurdles Impeding HSE Culture & Pragmatic Action Plan

- HSE Lagging Indicators (LTIs, RWIs, MTCs) perhaps are not religiously reported; Classification of injuries to be taken care by location/ field management in letter & spirit.
- UBUCs/ Near Misses/ Firs Aids reporting is taken as an attribution of deterrence by & large; these statistics be considered as opportunities for improvement by linking with reward & recognition system.
- Level of all-embracing Ownership by Line Management toward HSE still is the go-getter; Leading HSE KPIs (e.g. trainings/ toolbox talks/ emergency drills participation level; risk register reviews; audit findings closure rate; management walk around's/ HHP's observations closure rate; participation in HSE meetings, etc.) be made an essential fragment of area & location management's appraisals.
- Resource allocation (annual budget) for emergency response system, PPE, etc. to be made for each cost-centre proactively.
- Effectiveness of Participants in HSE Trainings need to be gauged w.r.t Skill-Knowledge-Attitude learning curve of individuals.
- Line management to take lead to ensure timely compliance on Action Plans w.r.t. HSE audits by imparting pertinent instructions on frequent basis to area/ location management.
- Management Walk Around (MWA) being a vital element of Management Safety Audits reflect management commitment & presence; therefore, MWA Plan to be improvised & recirculated when required.
- Location/ Field Management to be invited to Head Office for motivation & training purposes on bi-annual or quarterly basis to inoculate sense of sustainability towards HSE culture.
- Annual Best HSE Location (Model Field) of the Directorate Award to be conferred to recognize facilities which have demonstrated preferred behavior in handling HSE issues and taking extraordinary initiatives in their Directorate.

HSE KPI FY (2021-212)	Threshold	Performance
Lagging Indicators		
Fatality index	0	0
LTIF	<1	0.15
TRICF	<1	0.60
TVIR	<1.5	0.41





A FIELD TRIP TO DAKHNI GAS PROCESSING PLANT

On 29.08.2022, an educational delegation visited Dakhni Oil & Gas Processing Plant. HSE Orientation was given by Mr. Kamran Siddique, I/C HSEQ Dakhni. A profound presentation apropos of Floating Treatment Wetlands (FTWs) & Constructed Wetlands (CWs) and their application to treat hydrocarbons' based plant's wastewater, was delivered by Dr. Muhammad Afzal, Principal Scientist, National Institute of Biotechnology & Genetic Engineering (NIBGE), Faisalabad. Delegates were given opportunity to observe and cognize well-site, oil & gas processing plant areas and FTWs & CWs. From learning perspective, contribution of the participants was remarkable during discussions and guided tour. Queries with respect to emergency levels, ERP and the role of L-EMT were duly answered. During DKN Well-01 visit, questions regarding well flow & control procedure, firefighting arrangements and function of surface facilities, SSSV and line heater were responded. Delegates solicited how safety integrity levels are selected for the relative level of risk-reduction through a safety function and to specify a target level of risk reduction during the course of Plant Control Room visit w.r.t. F&G detectors, alarm system, emergency lights and shut down of system, which were professionally confronted and elaborated. Then the questions related to the functions of separators, flare stack, wind socks, SRU and dehydration process were answered. Moreover, the participants discussed different possibilities to manage hazards during routine activities in the perspective of hierarchy of hazards controls. Lastly, FTW technology related questions especially about the plant species, bacteria consortium, roots length, ponds specifications, wastewater contamination levels and source of wastewater were replied.





OIL & GAS TRAINING INSTITUTE
Train the HSE-Trainer
 August 15-17, 2022



A much needed critical Train-The-HSE-Trainer Workshop was organized by OGTI on August 15-17 2022. This course was made up of 24 guided learning hours and designed for all levels of training experience, with the primary aim of developing veteran-level ability of Field HSE Facilitators to conduct productive and exciting HSE courses.

The course was sketched and orchestrated by Muhammad Mubashir Abbas, Lead HSEQ Auditor/ Instructor (Manager InCharge HSEQ) and aimed to develop essential training skills and promote a clear understanding of effective teaching methods, leaving training delegates energized, motivated and well-equipped to deliver quality training sessions to get the best output from versatile audiences. Participants were necessitated to work in teams, do quizzes/ exercises, go through pertinent case studies, prepare short presentations and

deliver toolbox talks to an audience on a subject of their own choice, followed by a feedback session to demonstrate their learning and comprehension based on SKA (Skill-Knowledge-Attitude). It is anticipated that the Workshop is going to assist HSE Facilitators a long way in delivering learner-focused sessions through professional engagement, maximizing the potential of the standardized HSE training material.

The Contents

a) Design (A Request For Training/ Conducting a Cost-Benefit Analysis, Role of Training, Conducting a Needs Assessment, Goals & Objectives, Evaluation Strategies, Writing a Training Proposal/ Working with Training Providers/ Trainer's Types **(Methods)**)

b) Development (Characteristics of Adult Learning, Kolb Learning Styles, Sequencing Learning Activities, How to Prepare a Powerful Training Module/ Presentation, Organizing a Presentation, Effective Visual Aids, Emergency Scenario Interactive Emergency Drill Level-4 (Critical))

c) Delivery (Delivery Skills Reminders, Interaction Skills, Group Process, Cultural Factors, Resistance & "Difficult Learners", Facilitation Skills, Energizers, Closing a Training Session & Evaluation Process/ Action Planning/ Use of Comparison Groups).

An Exclusive Green Tour
First Biodiversity Park of its kind in Pakistan

On 02.09.2022, an educational delegation from Head Office visited Morgah Biodiversity Park. Presentation was given by Mr. Irshad Ramay, Coordinator National Cleaner Production Centre (NCPC). This first biodiversity park of its kind in Pakistan was inaugurated by representatives of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the Government of Pakistan and the private sector in Morgah, Rawalpindi, Pakistan few years back. Morgah Biodiversity Park is administrated by ARL- Attock Refinery Limited. Unlike other amusement parks, it is basically for education purpose & for conservation of indigenous species, while additionally providing recreational facilities to the local communities. The delegates were informed that about 268 Plant species are grown in the Park including 125 species of rose. In Asia & Pacific, conservation of biodiversity has assumed renewed importance after the recent global catastrophic incidents which destroyed considerable parts of the region's reserves of biodiversity such as forests, fish stocks, coral reefs and mangrove swamps. Efforts like the one in Morgah can serve as models for restoring the biodiversity of devastated countries and help prevent further loss of the sustainable livelihoods. In the end, after souvenirs distribution ceremony and a savory lunch, Tree Plantation Drive was taken whereby everyone was provided with a memorable chance to plant a sapling in the park worth to remember.



HSEQ NEWSLETTER



How would you feel when your loved one is injured and you are idly waiting for the ambulance to arrive? Horrible, right? First aid is a prompt response and immediate care to a sudden or anticipated illness and wound. It is administered to both, minor and critical injuries at home, school or workplace, prior to professional medical assistance. It is not classified as a medical treatment and is matchless to a medical professional assistance however it aims to safeguard life, prevent the condition from worsening and accelerate the recovery. In certain cases, the victim recovers with mere first aid treatment.

Recently the frequency of natural catastrophes has been dramatically escalated such as earthquakes, floods followed by torrential rains, landslides, dust/sandstorms etc, in this crucial time the need of first aid and first aid professional has become indispensable. Moreover, accidents can occur anywhere, anytime whether it's your workplace or home, we all are susceptible to accidents. Having said that, an appropriate first aid kit and a professionally trained first aid provider can avert the detrimental consequences of an incident. In addition, provision of first aid can save lives if immediate and suitable actions are taken, its awareness increases the sense of safety among people and encourages them to be more vigilant within their residence, quick response to a severe injury can help to diminish pain and shield against infectious diseases.

First aid measures are an amalgam of basic procedure and common sense. It assists to treat burns, cuts, wounds, sprains and other related injuries. First aid training also includes CPR (cardiopulmonary Resuscitation) training, which is a lifesaving technique in many emergency cases when someone's heartbeat or breathing has been stopped. First aid training has become a need of time, schools should incorporate it in their syllabus and make it mandatory to learn these skills not only for the students but teachers as well. Companies should invest in first aid and CPR training of their employees which facilitates them with better comprehension towards health and safety knowledge and how to use it in case of emergency. First aid training provides people empowerment and a safe and secure environment where they can perform their routine or non-routine activities with peace of mind.

World first aid day is celebrated on the second Saturday of every September to highlight the importance of first aid in everyday life and encourage people to participate in the training programs. This year's First aid day theme was "Lifelong First Aid" emphasizing that first aid knowledge should be available to everyone irrespective of age. Motivating children, young and older adults to learn these skills as they can help having safer communities and alleviating the risk of accidents.

Human bodies are vulnerable to injuries, illnesses, traumas or accidents, having a first aid kit and training can substantially make a difference. Every household, workplace and institution must undergo this training and possess related and appropriate first aid kits. It is considered to be a first line of defense in treating first aid case victims. Everyone should strive to acquire these skills to handle urgent and critical situations and prevent them from aggravating.



Did You Know: Florence Nightingale was a pioneer in nursing and social care. Today, her work is more relevant to the Red Cross and the public than ever. Florence Nightingale famously led a group of nurses to care for British soldiers wounded in the Crimean War in 1854. To see her patients during the darkest nights, Nightingale carried a lamp as she walked among their beds. After that, she became known as 'The Lady with the Lamp'. When Nightingale and her nurses arrived at the military hospital, they were shocked at the terrible conditions. They immediately started to clean every room and Nightingale told her nurses to wash their hands often. Now we know that hand washing is one of the best ways to stop the spread of pandemics like corona virus. By 1860, Florence Nightingale had established the world's first professional nursing school at St Thomas' Hospital in London. The Nightingale School of nursing raised the reputation of nursing as a profession and had a global impact. She also helped design the wards by proposing full-height windows to let in more light and fresh air. Nightingale went on to support the foundation of the British Red Cross in 1870, and gave advice on nursing and running hospitals.

Rutledge Global Pvt. Conducted H2S Safety Level-II Training



Rutledge offers a wide variety of training courses specific to the oil & gas exploration and production industries. Its trainers conducted a training session for two groups on 04-07-2022 at Rig N-55 with an aspiration to create awareness and cognizance about Contingency / Emergency Preparedness and Response during Toxic Gas Release (H2S Gas Safety). This training aimed to discuss various emergency scenarios expected at rig site and their substantial response method amid emergency situations, with emphasis on Toxic Gas Release. More than 60 personnel participated in the training session from Rig N-55 and Rig SK-750. A mock drill on H2S Gas Release was also conducted to practically enable rig crew to respond in case of any Toxic Gas Release / H2S Gas Release at well site. All the Rig crew participated in the drill enthusiastically and responded well. Awareness session was concluded with Q & A Session and an exam was held to estimate the learning of participants.

Following topics were covered in the exclusive training

- Chemical and Physical Properties of H2S Gas.
- Occupational Exposure Limits
- H2S Risk Locations / Operations Commonly at Risk from H2S
- Measuring Units of H2S (PPM) Exposure Limits
- Toxicity of H2S and effects of H2S on human (Victim)
- First Response of second person with victims
- Rescue techniques and methods to rescue and revive a victim of H2S Gas
- Rescue & First Aid Techniques during H2S Exposure.
- Hazardous By-products of H2S
- Hydrogen Sulfide Gas Exposure Incidents examples
- Detection and Monitoring of Hydrogen Sulfide Respiratory Protection System
- Breathing Apparatus, SCBA / SABA, EEBA (Types & Functions)
- Rescue techniques. (a. Collar Drag; b. Two Arm; c. Two Person as rescuer)

Medical Emergency (Snake Bite) Mockup Drill



In compliance of OGDCL's Integrated HSE System Manual(Rev-08); 4.5 Crisis Management OGM/P-HSE-4.5(08)); & Location's Emergency Preparedness and Response Planning, an Emergency Mock-up drill (w.r.t. Medical Emergency at Rig Floor) was planned and conducted at site of Rig N-55.

Mock up Scenario: An Employee (Rig Maint. Helper) was working near tools bin, when he called his colleagues for help and informed that a snake was observed under tools bin, he tried to kill it, but the snake might have bitten him. Nearby workers rescued the victim on a stretcher towards Muster Point. Dispenser was informed on call, who reached at Rig site within minimum time. Dispenser provided Basic First Aid to control spread of snake venom and referred the victim to the nearest hospital for Blood test and provision of anti-snake venom.

Positive Points: Active participation of all Drilling / Rig Maintenance / mud crew, Understanding of the emergency response & types of medical emergencies and Basic First Aid in case of snake bite.

Areas of Improvement / Deficiencies Observed: Manual Hooter / siren should be purchased and installed at living camp also for emergency purposes.

Lessons Learned: Surprise Emergency Drills need to be conducted, Involvement of all sectional crew to learn to control various emergency situations.

Reward and Recognition Ceremony

A reward and recognition ceremony was held at Rig N4 in the light of OGDCL IHSE MS Manual Rev 008 Section 8.4 "Rewards Recognition and Penalties". The awards for the month of September 2022 were conferred under two categories: a) On Spot Recognition Award b) HSE Champion of the Month Award.



Ali Muhammad (Engine Driver)
(On Spot Recognition Award)



Irfan Raza (T.O- Electrical)
(HSE Champion of the Month Award)

Professional Level Training on Basic Life Support (BLS)



Basic life support (BLS), also known as basic cardiac life support, is a care process that is initiated when someone experiences sudden cardiac arrest (SCA), respiratory distress, or an obstructed airway. It can be performed by lay-people, trained bystanders, or certified first aid responders, and should be put into immediate effect following one of these events. OGDCL House being a high-rise building, where approximately 1800 employees of different array; age groups, genders (including handicapped) are working in different disciplines, an Emergent situation can arise, therefore it is imperative to train the employees in general and fire wardens/ paramedics in particular to combat the situation and help the employees during any emergency. In order to improve their learning curve further, two-days training on Basic Life Support (BLS) was arranged by HSEQ Department on Sept. 27-28, 2022 at Main Conference Room, OGDCL House by Dr. Nadia Nisar. Fire wardens/ paramedics provided excellent feedback.



HEALTH & WELLNESS AWARENESS CAMPAIGN

Health & Wellness Awareness Campaign was enthusiastically organized at Chanda and Mela fields from 20.09.2022 to 29.09.2022. Following events took place:

- Sports Event – Cricket Tournament ... (From 20-09-2022 to 23-09-2022)
- First Aid (Training by FMO). (27-09-2022)
- Basic Life Support (BLS) / Cardiopulmonary Resuscitation (CPR) (Training/ Lecture by FMO)(27-09-2022)
- Healthy life to reduce Coronary Risk factor (Lecture by FMO) (27-09-2022)
- Healthy Lifestyle Walk Program(29-09-2022) FM address to the workforce & refreshments (29-09-2022)

All Sections fully participated in the gala. Management along with employees appreciated the efforts of HSEQ section for the arrangements.



Success Story

OGDCL replaced OBM with HPWB DF at Shahpurabad-1 (North)

OBJECTIVE

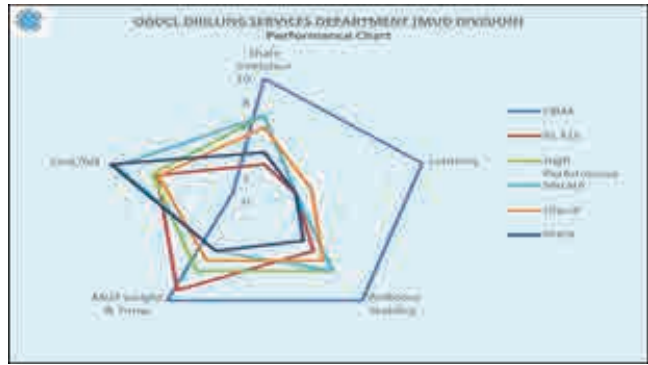
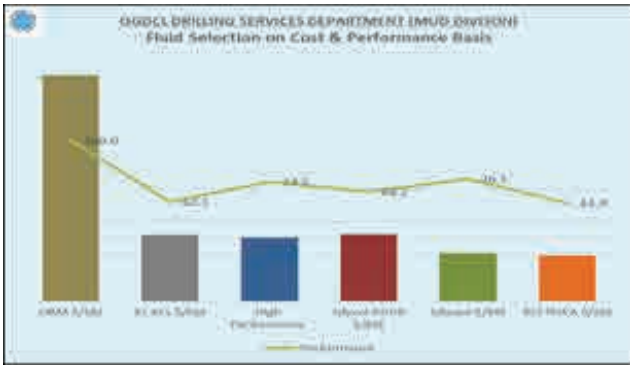
Objective was to replace OBM with Water base drilling fluid to achieve OGDCL environmental and economic goals. OGDCL which is Operator of Shahpurabad well – 01 slant (Kohat E.L) with Exploration Licence (50%) along with Mari Petroleum Company Limited (33.3%) and Saif Oil & Gas Development Company limited (16.6%) as a joint venture partner.

PROBLEM

Previously all offset wells of Shahpurabad-1 (17 ½ " & 12 ¼" Section interval) were drilled with OBM. It was highly challenging job to handle OBM formation cuttings for transportation to the Bioremediation site, such jobs were time consuming as well as creating environmental concerns.

SOLUTION

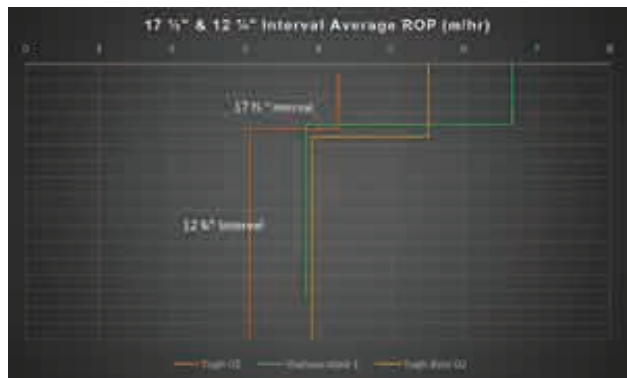
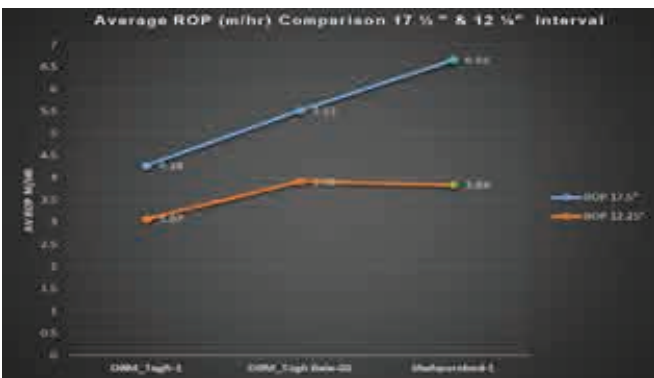
OGDCL drilling fluids technical team worked to replace OBM with environmentally friendly & cost-effective drilling fluids system to meet objectives and to get fluid performance near to OBM. During initial phase Drilling fluids technical performance and cost effectiveness was run and presented for fluid selection as below;



OGDCL Drilling Fluids Department collected formation cuttings samples for North region of already drilled wells, cuttings dispatched to Halliburton Global Lab UAE for analytical testing on High performance drilling fluids to evaluate drilling fluids and formation cuttings compatibility, based on the specialized testing, results were deeply analyzed and evaluated accordingly, consequently drilling fluids designed with reference of testing results.

Well, Shahpurabad-1 was spudded on the 11th August-2022 with 26" interval. Water based High performance drilling fluid was successfully run in the 17 ½ " and 12 ¼" hole interval (Formation; Panoba / Patala) as drilled 375m and 1075m respectively, finally run both interval casing to bottom without any problem.

Data was collected to evaluate the HPWB comparison with OBM offset wells, as per below graphs, ROP m/hr at Shahpurabad-1 was ahead in 17 ½ "Intervals in 02 offset wells and is close in 12 ¼ interval section respectively.



CONCLUSION

HPWB drilling fluids saved treatment expenditure of 1200 M. Tons of OBM formation cuttings, saving USD 150,000/- from the offset well Drilling Fluids cost and enhanced level of competence of OGDCL professionals on one of the latest Drilling fluids technologies.

PPR Presents

A FILM BY

YANN ARTHUS-BERTRAND

NARRATED BY

GLENN CLOSE

HOME

A STUNNING VISUAL PORTRAYAL OF EARTH

A unique film that approaches the current debate about climate change from a whole new angle, giving viewers the opportunity to grasp the idea of Earth's shifting dynamics is the one that goes well beyond the scientific reports, charts and graphs, an awakening call that speaks to our hearts and touches souls. Spanning 54 countries and 120 locations, all seen from the air, the film captures the Earth's breathtaking landscapes, showcasing its incomparable beauty and acknowledging its vulnerability. "Home" is a compelling emotional reminder of what is at stake: Earth, in all its beauty, and the people who live on it.

HSEQ Department arranged to show this documentary titled "HOME" – a French film by Yann Arthus-Bertrand, emphasizing on the diversity of life on Earth and how humanity is threatening the ecological equilibrium of the planet. "Home" is the first major film about climate change that has been made using only aerial photography.

On Tuesday, September 13, 2022 movie was unveiled to targeted viewers/ audience (i.e. female interns as Batch-I) from 1100 to 1300 hrs. HSEQ management was overwhelmed to see the exhilarating response of the viewers and has planned to exhibit the same show for the next Batch.

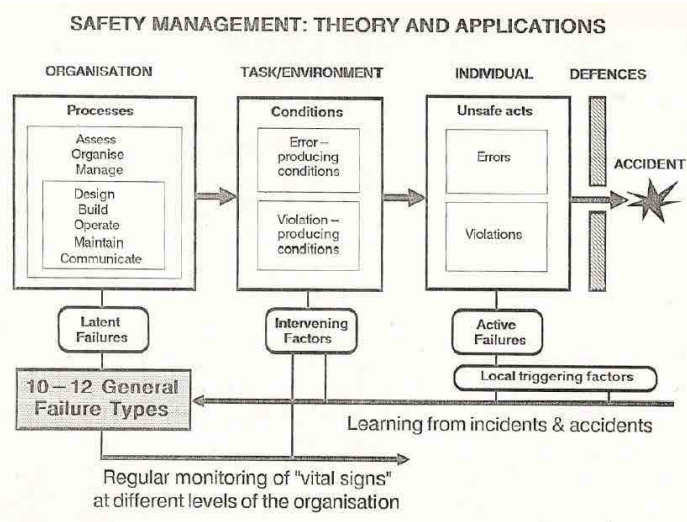
**OIL & GAS DEVELOPMENT COMPANY LIMITED**

SAFETY OUT OF FOCUS

Piper Alpha Tragedy

Piper Alpha was a disaster – in every sense of the word – and it claimed the lives of 167 fathers, sons, husbands and friends. This single catastrophic event significantly changed the industry forever. On the night of July 06, 1988, the Piper Alpha production platform was engulfed by an enormous fire so intense that the facility was virtually unrecognizable the following morning. As tragic as the Piper Alpha event was in many terms, and as devastating to so many, through key findings of the investigations and subsequent regulatory improvements to how the industry delivers its objectives, it did provide many lasting positive changes and now sets the standard globally for others to emulate. The resulting safety case regime of reducing risks to “as low as reasonably practical”, commonly referred to as ALARP, has proven to be far more effective than prescriptive methods.

The disaster – about 190 kilometres off the coast of Aberdeen – was the result of a catalogue of failures that began long before the first explosion at 10pm that fateful night. As shifts changed and the night crew on Piper began their duties for the evening, one of the platform’s two condensate pumps had failed to operate. The crew moved quickly to resolve the issue before production was affected. What the night shift crew did not know was that the failure occurred just a few hours after a critical pressure safety valve had been removed from the other condensate pump system that was not in service. It was temporarily replaced with a hand-tightened blind flange, and as the night crew turned on the alternate condensate pump system, the blind flange failed under high pressure, releasing volatile hydrocarbons at pressure within the process area of the platform. The result was a horrific chain reaction of explosions and failures across Piper Alpha that ultimately destroyed the platform and killed 167 workers in what remains the world’s deadliest offshore oil industry disaster. The situation was further compounded by the fact other platforms in the area did not cease to export hydrocarbons into the systems that crossed Piper Alpha, even though distress signals were clearly communicated. [Look at the tragedy from the “Swiss Cheese Model” perspective](#) →



Lord Cullen Inquiry: A Scottish judge, Lord Cullen, was tasked to lead the inquiry. He found the offshore industry’s culture had come to tolerate human shortcomings, and that systems meant to assure safety, had actually been allowed to deteriorate. He discovered there were no clear procedures for shift handovers and the permit to work system was not only inadequate in its form at the time, but frequently ignored. Training, auditing, and monitoring were also poor and lessons from previous, lesser accidents had not been shared or followed through. Crucially, Lord Cullen recognized the importance of “culture” and “leadership” and how it could either create or marginalize conditions for safe working. There were opportunities to prevent the disaster from happening – barriers were in place – but for a combination of reasons, the weaknesses in the barriers aligned and disaster struck. The public inquiry and resulting 106 recommendations made by Lord Cullen led to important and necessary changes to how we work offshore today. It changed technology standards, set new requirements for activity planning, and use of permit to work systems, increased supervision and governance, and established a legal requirement for operating platforms to have formal safety cases in place. Virtually every aspect of oil and gas production was reviewed, revised, and replaced or improved, and the criticality of promoting an open culture of learning and speaking up about concerns was emphasized.

But could such a disaster happen again? Lord Cullen himself was asked the question some years ago. He said: “The industry suffered an enormous shock with this inquiry; it was the worst possible, imaginable thing. Each company was looking for itself to see whether this could happen to them, what they could do about it. This all contributed to a will to see that something better for the future could be evolved.”

How Jim House, CEO, Neptune Energy analyzed Lord Cullen apprehensions? That it did. Safety standards, technology, training, and major hazard awareness have all dramatically improved over the last three decades. Yes, that was driven in part by new processes and procedures brought about by the Cullen Inquiry, but just as importantly it was championed by the dedication and commitment of the workforce in the years after, and still today. **Yet we cannot ever allow complacency to creep in. We must maintain a “chronic sense of unease” and make it our personal responsibility – each and every one of us, offshore and onshore – to make it safer.** Culture is everything. And let me be absolutely clear: **no barrel equivalent of production can ever be considered more important than the safety of our people. Safety can never be secondary or taken for granted. That is how Neptune Energy honor the MEMORY of all of those who have been involved in our vitally important industry, before and since Piper Alpha!**