|H1|2024|

connect

Chairman Praises Cutting-Edge Technology and Dedication of the LCPL Team

LOTTE CHEMICAL PAKISTAN LTD

Connect is a corporate newsletter intended for employees and partners of LOTTE Chemical Pakistan

16th International CSR Award

Ahmed A. Abedi

LCPL was awarded the 16th Annual NFEH CSR Award 2024 on 06 March at an award ceremony organized by the National Forum for Environment Health (NFEH). Mr. Waheed Ullah Khan (Director Admin, HR & IT) received this prestigious award on behalf of LCPL in a ceremony held at the Serena Hotel in Islamabad.

Mr. Chaudhary Latif Akbar (Speaker of the Legislative Assembly Azad Jammu and Kashmir) was the Chief Guest. Before the award ceremony, the chief guest shared his views on CSR activities and their importance.

Editorial

Dear Readers,

This quarter, we're proud to highlight some key achievements that showcase the dedication and hard work of our team. LCPL has been honored with the prestigious CSR award for our commitment to social responsibility. Additionally, we've reached an incredible milestone of 70 million man-hours without a lost time case, a testament to the exceptional focus on safety by all our stakeholders.

We were also privileged to host our Korean Chairman, Mr. Sung Soo Bae, at our plant site facility, reinforcing the importance of our work and the strong global ties within our company. various training sessions we continue to foster a culture of continuous learning, our recent activities, from workshops to various training sessions, are ensuring that we stay ahead in our field. Let's keep this momentum going as we strive for excellence in all aspects of our work!

- Newsletter Team

Completion of 70 Million Man-hours

Shuaib Iqbal

One Team, One Aim!

Lotte Chemical Pakistan Ltd. has achieved another milestone in HSE&S performance by completing 70 Million Man-hours without Lost Time Cases (LTC) for its employees and all contractor staff on 14 March.

Mr. Young Dae Kim (Chief Executive) congratulated the LCPL team and appreciated the efforts of all employees and contractor staff in achieving this world-class benchmark due to their continued commitment, positive attitude, adherence to safety rules, and responsible approach towards HSE&S.

Mr. Tariq N. Virk (Director Manufacturing) appreciated the exceptional safety record set by the LCPL team with continuous efforts. He mentioned that this would not have been possible without the great teamwork and responsibility shown by every person working on this site. LCPL's highest safety record has been sustained over almost 26 years, starting from 7 May 1998.

To acknowledge the commitment, efforts, and dedication of all LCPL employees and contractor staff, a ceremony was organized on 4 April in the Recreation Hall at the LCPL plant site, where Chief Executive of LCPL, Mr. Young Dae Kim presented awards to all the contractors. Gift vouchers were distributed among all LCPL employees and contractor staff.

Go Green with TPM

Muhammad Faraz Khan

The TPM manufacturing team hosted a tree planting event at the plant site on 29th May. This effort was organized through our Small Group Teams (SGTs) to bring the vision of our Director Manufacturing to life.

Despite the scorching heat, volunteers gathered at the material gate area with a sense of purpose and optimism. The plantation drive inspired us to continue advocating for environmental sustainability and stewardship, knowing that each of the total 120 carefully placed saplings contributes to a healthier, more balanced planet. Additionally, dedicated SGTs were assigned to oversee the care and maintenance of the newly planted trees.

Medication Non-Compliance Effects

Zia Ur Rehman

Creating a corporate culture that supports health and well-being is the key to the long-term success of the company. Dr. Naveed Ali Shah conducted a session on the adverse effects of discontinuation of medicine on 30 April. Dr. Naveed Ali Shah stressed upon the the impact of medicine because good health enables individuals to carry out their daily activities with ease, allowing them to lead a prosperous life.

The goal is to promote an awareness level regarding health because everyone deserves to live a long and healthy life.

Defect Resolved Through Observation

Taimoor Aijaz

The strength of the Production team lies in the dedication of its members, particularly the area operators who meticulously maintain equipment and remain vigilant in detecting even the slightest deviations. This dedication was exemplified by Oxidation Area Operator Ammar Sheikh on January 26, during the plant startup.

Ammar Sheikh's keen observation identified a fault in the critical control valve of the Oxidation Reactor. Despite its more emphasis on why is it a tricky location. However, believe at this stage, the edit might not be convenient his sharp eye detected the issue. The Instrument team promptly addressed the fault, ensuring the plant startup proceeded immediately.

Such contributions are crucial in maintaining smooth plant operations and striving for excellence. It is the collective effort of team members like Ammar Sheikh that ensures the plant runs efficiently, demonstrating a commitment to operational excellence.

Eid Milan

As part of the Eid-ul-Fitr celebrations, all LCPL Staff gathered for an Eid Milan Party on 15 April at the Plant Site. Lunch was served for all and some special arrangements were made for shift staff to participate in the celebrations. All employees met each other with joy and enjoyed the tasty lunch, salad, and dessert on the menu.


















Medical Camp

Ahmed A. Abedi

A free eye screening medical camp was organized on 11 January by LCPL volunteers at Haji Ghulam Muhammad Goth, Ghaggar Phatak in the Port Qasim area. A large number of patients visited the camp for eye screening. After detailed checkups, doctors recommended 71 cataract patients for immediate treatment/surgery. They also provided free medicines to other patients according to their diseases. LCPL had organized complete arrangements including surgery expenses, hospitalization, and commutation from village to hospital for these patients.

Engineering Stores Excel in IMS Audit

Asif Zaheer

Engineering Stores remain involved in various improvement projects, adhering to stringent deadlines to meet end-user facilitation and demand, all within the guidelines defined by management. Integrated Management System Surveillance audits are a key to achieving these targets.

We are thrilled to announce the successful completion of the IMS Surveillance audit in February at the Engineering Store. The highlight of this audit was the achievement of zero actions marked in our area since the inception of the PTA Plant. This outstanding result not only signifies our team's dedication but has also drawn the attention of other industries, inspiring them to adopt our best practices.

The United Registrar of Systems (URS) team accompanied by several visiting professionals expressed their appreciation for the tireless efforts of Assistant Manager Stores Nafees's team. Their commendation reflects the hard work and commitment put in by everyone involved. Special thanks to Assistant Manager Stores Nafees, for leading the team with such dedication.

Credit is also due to key team members including Muhammed Zain Siddiqui (Supply Chain Manager), Shuaib Iqbal (Manager QHSE & IMS Compliance) and (HSE and Technical Training Manager Sohail Abbas), whose consistent diligence and guidance ensured we met the highest standards.

The audit's success demonstrates our commitment to excellence and sets a benchmark for others to follow. We will continue to strive for such achievements, maintaining our standards and inspiring confidence within the industry.

Navigating Hydrogen Supply Constraints

Abdul Moiz

In early 2024, the Purification Plant faced significant challenges due to hydrogen supply limitations from Pakistan Oxygen Limited (POL).

These constraints threatened to disrupt production, particularly impacting the hydrogenation process, which is essential for converting color compounds into non-color compounds in crude terephthalic acid.

Despite the potential for a shutdown, proactive planning and operational expertise enabled the plant to sustain operations and achieve maximum production of on-spec Terephthalic Acid with the available resources.

The collaborative efforts of the Purification and Production departments were crucial in optimizing hydrogen usage and overcoming supply fluctuations.

This successful management of hydrogen limitations showcased the Purification Plant's resilience and commitment to operational excellence. By focusing on strategic resource allocation and partnerships, the plant maintained its critical processes and continued to deliver high-quality products.

A Reward Distribution Ceremony

Shuaib Iqbal

The Internal Faculty Recognition Program (IFRP) promotes learning from fellow LCPL employees based on needs and applicable knowledge, fostering innovation and competitive advantage. Rewards were distributed to the participating faculty members based on the reward points they earned.

The Job Qualification Program (JQP) is a key initiative of the Technical Training Center (TTC). In this program, all staff members undergo examinations in various skill block examinations and receive rewards upon successfully completing the assigned JQP blocks.

TPM and the Technical Training Center (TTC) organized a Reward Distribution Ceremony on 29 February at the LCPL Plant Site to honor the efforts of those who qualified in different skill levels of the Job Qualification Program (JQP), an initiative of those engaged in the Internal Faculty Recognition Program (IFRP) for knowledge transfer.

Mr. Tariq Nazir Virk (Director Manufacturing) was the chief guest of the ceremony. Mr. Raja Waheed Ullah Khan (Director Admin., HR & IT), Mr. Syed Qamar Alam (General Manager - Works), and Mr. Adnan Ul Haque (General Manager - Operations) were the guests of honor.

Mr. Sohail Abbas (HSE & Technical Training Manager) Consider another word. We've used briefed repeatedly. Instructed/Directed? the audience on the success of IFRP training and shared the list of successful candidates based on the results of JQP exams of various skill blocks. Rewards and certificates were distributed among the participants.

Artificial Neural Networks

Faizan ul Haque Siddiqui

The Gas Turbine full-load trial is a critical activity performed to assess the GTG HP Compressor and prevent potential compressor stalls. In the recent past, there were several obstacles to conducting the GTG full-load trial, including the cancellation of the power export contract and issues with sprint operations. However, as Albert Einstein quoted, “Once we accept our limits, we go beyond them”.

The team considered using Artificial Neural Networks (ANNs) to predict the efficiency without actually conducting the full-load trial. For this purpose, an ANN model was trained using historical data from previous GTG full-load trials. Collecting, normalizing, tuning, and analyzing the data were challenging tasks, but through dedication and hard work, the model was successfully implemented.

The model has proven to be highly effective, as it not only predicts GTG efficiency without the need for a full-load trial but also assists in determining the optimal timing for the next GTG water wash.

Fire Water Pump Controller Update

Aijaz Muhammad Khan

In January, the Instrument Team upgraded the diesel engine-driven fire water pump's controller, replacing the obsolete system with a modern one to enhance fire safety. This new controller meets NFPA-20 standards, ensuring reliability and compliance with international safety norms. It is designed to withstand the high humidity of coastal areas and features an Human Machine Interface interface, replacing the old annunciator-based system. The HMI simplifies operation and troubleshooting with advanced diagnostic capabilities.

This upgrade, led by Abdullah Bin Azhar (Manager Instrumentation), significantly improves our plant's fire defense, ensuring the fire water pump is fully operational and ready for emergencies.

Avery Dennison and Ingredion Visit

Shuaib Iqbal

Avery Dennison Pakistan Karachi & Ingredion Pakistan (Rafhan Maize) Faisalabad requested HSE & Technical Training Department for a visit to the Lotte Chemical Pakistan Ltd. plant site with the following objectives:

- To understand the HSE&S management system, fire safety management system, and practices implemented at LCPL,
- To establish good working relations with LCPL in HSE&S communications and training,
- To exchange ideas and best HSE&S practices implemented at their sites.

To honor their interest, the Avery Dennison Pakistan Karachi team was invited to the LCPL plant site on 28 February and Ingredion Pakistan (Rafhan Maize) Faisalabad team was invited on 15 May. Both the teams were warmly welcomed at the LCPL plant site by Mr. Sohail Abbas (HSE & Technical Training Manager) and Mr. Shuaib Iqbal (Manager-QHSE & IMS Compliance).

A briefing session was arranged for both the teams followed by a site tour as well. The teams appreciated the LCPL's commitment to HSE&S management systems and practices.

Breathing New Life

M. Noman Khan

Veolia's LCPL Anaerobic Effluent Treatment Plant (AETP), commissioned in late 2021, has significantly increased the Effluent Treatment Plant's capacity by nearly threefold while producing valuable biogas to reduce natural gas usage in high-pressure boilers, enhancing sustainability.

After initial success, the AETP reactor encountered performance issues due to insufficient biomass, leading to reduced effluent handling capacity. To address this, 300 tons of biomass was safely reintroduced into the AETP reactor using fifteen storage tankers under strict safety protocols. This process involved depressurizing the tankers containing pressurized methane and extreme levels of Hydrogen Sulfide, through temporary facilities at the new AAFO filling bay. The operation, managed by Utilities Shift Managers, was completed within the allotted timeframe without any safety incidents.

As a result of these efforts, the AETP Unit achieved a substantial improvement in Chemical Oxygen Demand conversion, significantly reducing daily natural gas usage in boilers by utilizing biogas, even at a fraction of the plant's full capacity. Plans are underway to increase operations to full capacity. The successful revival of the AETP underscores the technical expertise and commitment to environmental stewardship demonstrated by the LCPL production and technical teams.

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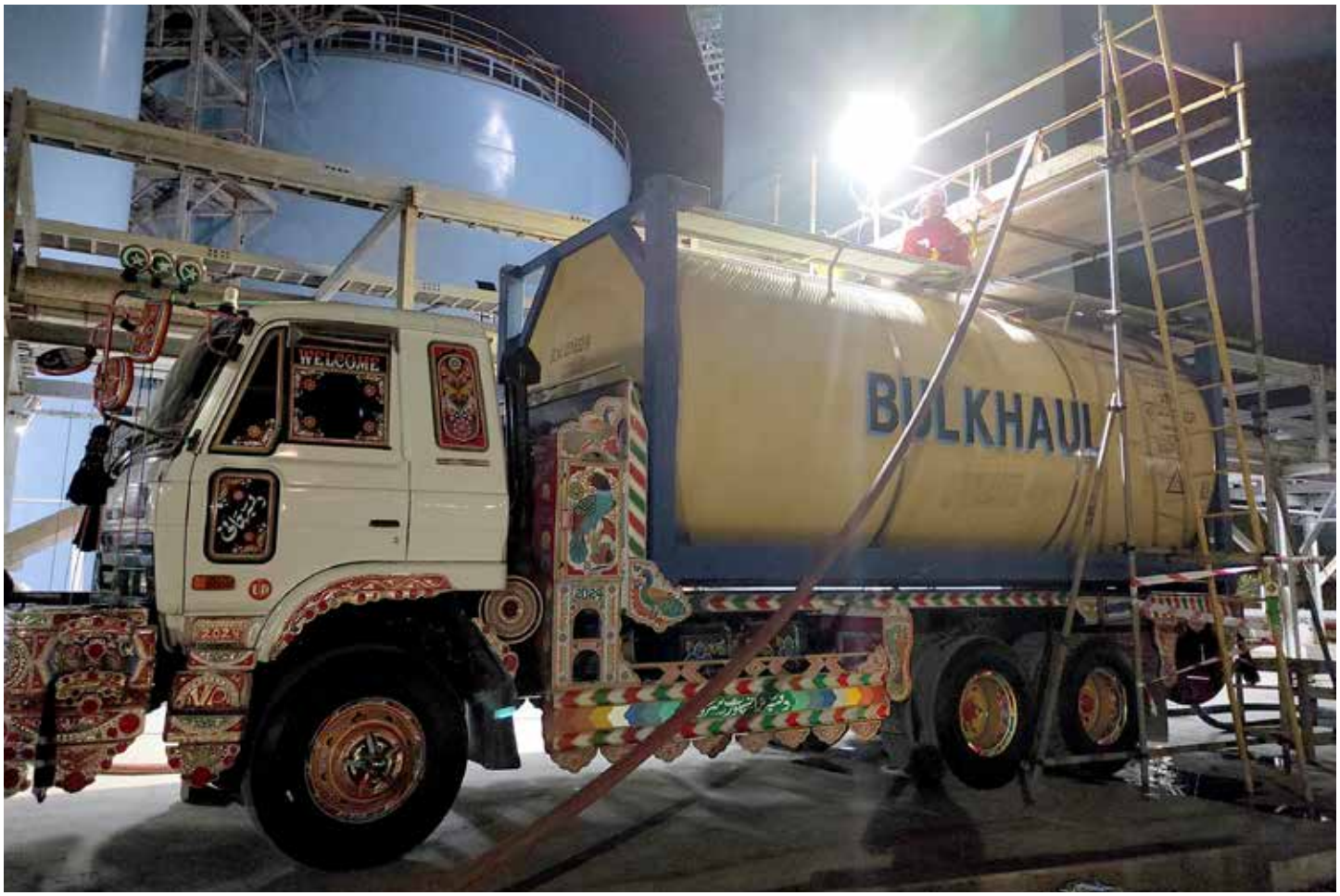


Efficient CTA Drier Operations

Muhammad Irfan

The Natural Gas (NG) header pressure from Sui Southern Gas Company Ltd. (SSGC) dropped, causing low suction pressure at the Natural Gas Booster Compressor – A (NGBC-A) and creating an emergency situation that could have led to NGBC-A and gas turbine tripping.

As NG pressure decreased at the suction, the discharge pressure of NGBC-A also fell, triggering NGBC-B to start automatically. The sudden activation of NGBC-B caused a further drop in suction pressure, nearing its tripping value. The Co-Gen shift team, including Shift Manager Co-Gen Umer Abid, Boardman Co-Gen Sabir Ali, and Area Operator Co-Gen Muhammad Rafiullah, demonstrated exceptional alertness and decision-making. They prevented NGBC and GTG tripping by quickly turning off the NGBC-B motor and adjusting the GTG load to match the available NG pressure at NGBC suction.

Normally, NGBC-B remains in auto standby mode, but in this scenario, sticking to standard procedures could have led to a prolonged outage of the Co-Gen plant, impacting variable costs and complicating base plant operations with a standby boiler. The shift team's innovative and decisive actions successfully avoided this risk.

Empowering Our Team

Uzair Khan

In our ongoing efforts to enhance team effectiveness, Shafay Ahad, our dedicated Shift Manager, and Muhammad Mehboob, our diligent Board Man, have taken on critical roles, strengthening our team. Let's explore how their validation and independent charge contribute to our team's success.

Validation ensures that our processes and products meet the highest standards. Shafay Ahad, with his meticulous approach, ensures that our operations align with industry best practices. From quality checks to compliance, Shafay's expertise strengthens our team's foundation. Muhammad Mehboob, as the Board Man, holds a unique position. His independent charge allows him to make swift decisions, ensuring seamless operations. Whether managing resources, resolving conflicts, or optimizing workflows, Mehboob's leadership fosters efficiency and teamwork.

As we onboard new team members, Shafay and Mehboob play pivotal roles. By sharing insights and best practices, they empower our expanding workforce.

E-PTW: A Green Initiative

Faizan ul Haque Siddiqui

The Electronic Permit-to-Work System (E-PTW) represents a remarkable stride towards environmental sustainability by LCPL. It replaces the older, traditional paper-based system thereby marking as a turning point towards a greener and more effective work environment.

E-PTW has accomplished its aim of reducing paper consumption which is in line with LCPL's environmental stewardship through digitizing the permit issuance and acceptance process. By storing electronic records efficiently, the system manages these records without the need for physical documents, further reducing the organization's carbon footprint.

E-PTW was implemented with the joint efforts of Muhammad Sohail Akram and Yasir Ahmed Shaikh, with other valuable contributions from Mohammad Sajid Khan, Arif Hussain, Ali Hasan Ayoubi and Muhammad Ismail. Now being used across all key areas within the plant; this step was initially rolled out at the Utilities plant.

This growth symbolizes LCPL's commitment towards optimizing environmental benefits out of such digitization project. By utilizing E-PTW, LCPL demonstrates its leadership in sustainable practices while pledging dedication towards making greener approaches more tangible in the future.

Maximizing Personal Excellence

Upgrading to LED Lights

Hamna Afaque

The Electrical team has completed a major upgrade to our PTA Warehouse by replacing conventional fluorescent lights with energy-efficient LED lighting. Using DIALux software, the team designed a system that improves luminance and reduces energy consumption. We replaced 18 fluorescent lights with 9 LED lights per row, across 15 rows, enhancing visibility and cutting energy use. This transition not only lowers energy costs but also reduces maintenance needs, aligning with our commitment to sustainability and operational excellence.

Empowering Leaders in Tough Times

Adeel Abbas

In response to lean manpower at our utilities plant, our leadership team has effectively integrated and empowered new team members, Shafay Ahad (Shift Manager) and Muhammad Mehboob (DCS Board Man).

Shafay quickly adapted his skills to industry best practices, thanks to the dedicated support of the Utilities team. Within three months, Shafay demonstrated strong quality control and compliance, grasping the plant's operations and running shifts independently.

Muhammad Mehboob, entrusted with key decision-making, has served as a crucial link between the area team and Shift Managers. Under the mentorship of the Utilities Shift Manager, Mehboob has rapidly acquired essential skills and now manages operations independently, responding swiftly to changing conditions.

The successful integration of Shafay and Mehboob highlights the plant's resilience and agility in overcoming manpower challenges, with seasoned leaders playing a key role in their development and readiness to contribute to our ongoing success.

Smart Enhancement

Aijaz Muhammad Khan

At Lotte Chemical Pakistan Limited (LCPL), ensuring the reliability of boiler burners is crucial for operational efficiency. Electro-pneumatic positioners and mechanical limit switches often pose challenges, including frequent maintenance and unexpected startup delays.

Drawing on years of troubleshooting experience, the instrumentation team—comprising Nadeem Bhatti (Engineer), Muhammad Awais (Sub-Engineer), and Aijaz Khan (Management Trainee)—addressed the common issue of flame failures. They chose to install a state-of-the-art smart positioner on the natural gas flow control valve. This new positioner, featuring a highly accurate feedback mechanism, eliminated the need for mechanical limit switches and introduced auto-calibration features that optimized gas consumption.

The modification was tested in the workshop and installed in the field within a single day. The results were impressive, with a significant reduction in burner tripping and elimination of multiple startup attempts, thanks to the smart initiative and dedicated efforts of the team.

Korean Ambassador Visit

Ahmed Ali Abedi

Mr. Park Ki Jun (Korean Ambassador) and Mr. Yi Sung Ho (Consul General of Korea) paid a memorable visit to LCPL on 16th February. Mr. Yong (Chief Executive, LCPL) warmly welcomed them. During the visit, Ambassador Park was given a detailed briefing about the plant and had the opportunity to tour the plant site and control room. He expressed his best wishes for LCPL and marked the occasion by planting a commemorative sapling.

LOTTE Chairman Visit

Ahmed Ali Abedi

The Chairman of LOTTE Chemical Pakistan Limited, Mr. Sung Soo Bae, commemorated the occasion by planting a tree, symbolizing growth and sustainability, during his inaugural visit to the LCPL Plant Site on 19th April. During this visit, he was given a detailed briefing about the PTA plant and also toured the facilities.
















Women's Day

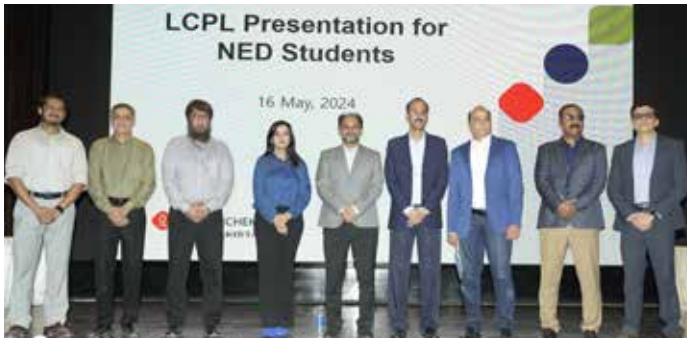
Rushna Khalil

The Women's Day celebration at LCPL highlights the organization's commitment to recognizing women's accomplishments, advancing gender equality, and creating an inclusive work environment. By cultivating a supportive workplace culture, LCPL is paving the way for a more equitable future, where women are not only valued and celebrated but also equipped with the resources and opportunities to excel in their careers.

Bridging the Gap between Industry and Academia

Rushna Khalil

LCPL recently held a highly anticipated recruitment drive at NED University of Engineering & Technology and NUST PNEC, targeting ambitious engineers eager for exciting career opportunities. Accompanied by our Technical, Production, and Engineering Managers, we provided detailed information about our comprehensive Management Trainee Engineer program, hands-on learning experiences, rigorous training, and clear career progression paths. This representation highlighted LCPL as a top employer that is deeply committed to the long-term development of its engineers.



Optimizing Plant Operations

Syed Aizaz Hussain

Pressure centrifuges are essential in pure plants for separating mother liquor from Purified Terephthalic Acid (PTA). Any downtime can significantly impact production, making continuous operation crucial.

On 17 March, a nuisance tripping occurred with Pressure Centrifuge due to a faulty feed-end vibration sensor. Persistent faulty alarms had previously signaled potential issues, leading the operational team to discuss contingency plans, led by Senior Shift Manager Sajid Shafique.

The faulty sensor could only be replaced during an outage, and following the tripping, the centrifuge was immediately handed over to Instrument Technician Muhammad Ayaz. The sensor was swiftly and safely replaced, preventing further disruptions. Throughout the maintenance, DCS Boardman Sohaib Ali Khan effectively managed upstream process levels and plant parameters, ensuring a smooth operation.

The coordinated efforts of the shift team and the meticulous planning by the area team and instrument technician minimized downtime and mitigated production loss. This proactive approach not only restored operational efficiency promptly but also underscored the team's commitment to optimizing plant operations under challenging conditions.

A Journey of Dedication

Jahanzaib Ali Malik

Muhammad Nadeem Anjum (Sr. Assistant Manager Process), a highly skilled individual, recently concluded his exemplary career after more than 24 years of dedicated service. From the earliest days of his career, he exhibited a rare blend of passion and professionalism that set him apart. His journey was not just a progression through roles and responsibilities but a steadfast commitment to excellence and innovation. Notably, Nadeem Anjum also dedicated himself to training and developing new engineers, DCS board men, and plant operators, leaving an indelible mark on their professional journeys.

His passion for his profession shone through his enthusiastic approach and continuous quest for improvement. Beyond his professional accomplishments, Nadeem Anjum leaves behind a legacy of relationships forged in mutual respect and admiration. His retirement is not just an occasion to bid farewell but also to express our heartfelt gratitude. We extend our deepest thanks for his hard work, dedication, and the invaluable contributions he has made to LOTTE Chemical Pakistan Limited (LCPL).

Winning Decisions

Problem Prevented by Observation

Sajid Shafique

Off-gas from the oxidation reactor knockout pot is routed to the off-gas dryer via the combustor cooler. The off-gases flow through the tube side of the exchanger, while the shell side is isolated.

On noticing off-gas flowing through the vent of the shell side, Consider revising to Area Operator - Oxidation, Mr. Faizan. Oxidation Plant suspected a leak in the tube side of the exchanger.

He promptly reported the issue to Senior Shift Manager Sajid Shafique. Subsequent lab analysis of the vent gas confirmed the presence of off-gas on the shell side, confirming a leak in the tubes.

Preventive measures were quickly implemented to prevent over-pressurization and further leakage from the shell.

Connecting the Dots

Ahmed Riaz Rana

The High Pressure Dissolver Feed Pumps are vital to the Purification Reactor, directly impacting production rates. One pump's reliability was compromised due to frequent failures and low efficiency, creating a significant bottleneck. The maintenance team collaborated with operations, technical teams, and the Original Equipment Manufacturer via video conferences to analyze the issue. They reviewed process trends and maintenance history to identify the root cause. A key component was replaced, leading to improved reliability and operational efficiency. The engineering team's efforts successfully restored this critical equipment's performance.

Quick Fix Restores Smooth Operations

Arsalan Ahmed

On March 7, the Gas Turbine Generator (GTG) experienced an issue where key parameter indications and controls were hanging on its Human-Machine Interface (HMI) located in the Control Room (CCR). This problem required immediate corrective action and highlighted a recurring issue with the Ethernet connector, which had previously disrupted operations on multiple occasions

.

Under the leadership of Shift Manager Arsalan Ahmed, swift measures were initiated. Control was seamlessly transferred to the local HMI, and a root cause analysis identified a faulty Ethernet connector linking the remote HMI.

Boardman Senior Assistant Engineer Process Asghar Ali Soomro implemented stringent control measures on DCS. Instrumentation support from Assistant Engineer Abdul Khaliq and efficient IT assistance were crucial in resolving the issue within one hour.

The GTG HMI has since operated smoothly, ensuring uninterrupted operational stability.

Engineering Stores Inventory Dashboard

Asif Zaheer

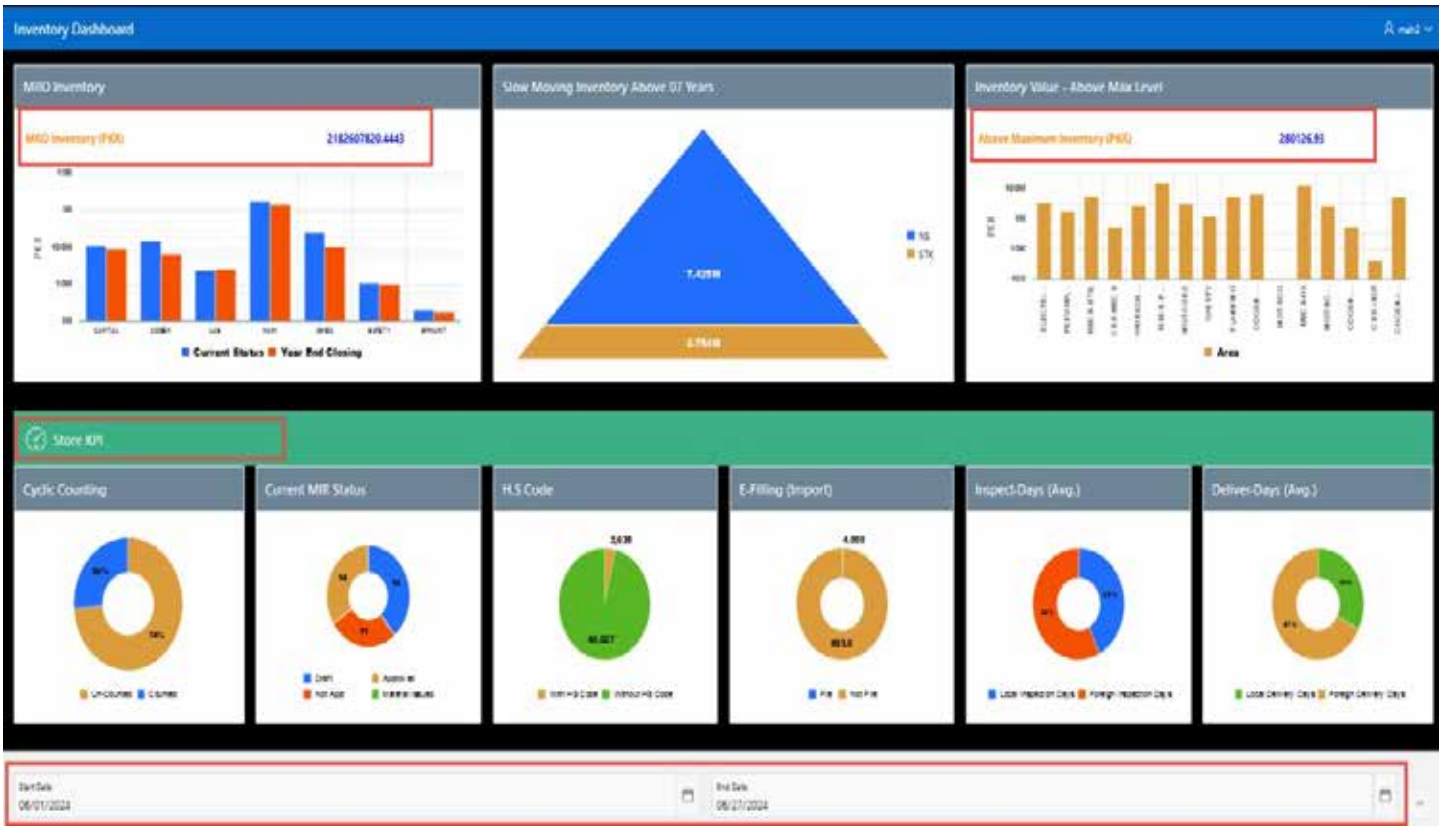
In today's fast-paced industrial landscape, efficient management of Maintenance, Repair, and Operations (MRO) inventory is crucial for operational success. The Commercial Team, including Nafees Ahmed (Assistant Manager Stores), Asif Zaheer (Material Planning & Engineering Stores Manager), and Muhammad Zain Siddiqui (Supply Chain Manager), initiated a project to provide end-users with real-time inventory insights through a new dashboard. This initiative aims to streamline operations and leverage cutting-edge technology for a competitive edge.

The IT Team, led by Ali Hassan Ayoubi (System Analyst) and Arif Hussain (IT Manager), chose Oracle APEX, a leading low-code application platform, to develop this solution. Despite initial challenges, the team successfully integrated data from Oracle and Maximo systems into the APEX environment.

Both Nafees Ahmed and Ali Hassan Ayoubi played key roles in meeting the project's deadline.

The dashboard offers real-time inventory updates and predictive analytics, enhancing end-users' ability to respond swiftly to operational demands, make quick inventory adjustments, and manage costs effectively.

This project not only demonstrates the transformative potential of Oracle APEX in enterprise applications but also highlights the power of perseverance, collaboration, and innovation in overcoming complex challenges.



Revamping Forklift Fleet

Sohaib Bin Abdul Aziz

Aging forklifts in LOTTE Chemical Pakistan Limited's (LCPL) bagging operation were causing frequent breakdowns, delays, and safety hazards due to worn-out tires and faulty brakes.

To address these issues, the Purification Plant and Mechanical Team replaced the outdated fleet with modern forklifts. This upgrade eliminated breakdowns and ensured a smooth flow of PTA powder to warehouses and containers. The new forklifts, equipped with advanced safety features, also improved the work environment, enhancing both safety and efficiency.

This successful initiative marks a significant step forward for LCPL, streamlining operations and prioritizing worker safety for continued success in PTA production.

Improved Reliability and Efficiency

Mahmood-ul-Hassan Siddiqui

The Process Air Compressor (PAC) is crucial for providing compressed air for Para-xylene oxidation. It's monitored by System-1, a vibration monitoring software by Bentley Nevada, which tracks compressor performance and the condition of its internal components. Initially installed in 2010, the System-1 Classic 3500 was upgraded in 2023 to the latest version, System-1 Evolution (Evo), which offers enhanced connectivity, compatibility, and advanced monitoring tools to keep up with technological advancements.

To maximize the use of this new system and address skill gaps, the LCPL Engineering team arranged hands-on training at the plant, led by Bentley Nevada experts.

Restoring Communication

Waqas Hameed

POL (Pakistan Oxygen Limited) is the main hydrogen supplier for Lotte Chemical Pakistan Limited's (LCPL) Purification plant, crucial for hydrogenation in producing Pure Terephthalic Acid.

POL also provides nitrogen gas for emergencies and powder handling during plant shutdowns. Effective communication is vital, especially in emergencies. Previously, LCPL and POL relied on a 600-meter multi-core armored cable for communication, but this system failed due to damage and poor mobile signal coverage.

To address these issues, the Purification Plant and Instrument teams proposed replacing the unreliable cable with a wireless communication system.

While there are initial setup costs, the wireless system promises enhanced reliability and long-term cost-effectiveness. It ensures consistent connectivity, unaffected by physical damage, and includes an Uninterruptible Power Supply (UPS) for continuous operation during power failures.

This solution not only resolves current communication problems but also improves emergency response capabilities, enhancing operational safety and efficiency for both LCPL and POL.

Improving Filtration with Activated Media

Adeel Abbas

The Kinjhar Canal's raw water quality has declined significantly in recent years due to silt contamination, which impedes the functioning of reverse osmosis (RO) systems. It results in frequent RO membrane cleaning and cartridge filter replacements.

High silt content and suspended solids degrade the filtering system, reducing water quality and increasing operating costs. In response, the utility team is adopting a new filtration technique called Activated Glass Filtration Media (AFM) to address these challenges.

AFM offers several advantages over traditional sand filters, such as a larger surface area, a self-sterilizing surface, and high backwash efficiency. It improves the silt density index of raw water, reduces biofouling on RO membranes, and decreases the need for chemical cleaning. Additionally, AFM enhances RO membrane longevity, increases permeate flow, extends cartridge filter life, reduces cleaning-in-place (CIP) frequency, and minimizes plant downtime. Performance metrics are still being evaluated.

The project, successfully commissioned through the hard work of the Utilities plant technical and production team, was led by Sr. Process Support Manager Talal Ayaz and Shift Manager Utilities Muhammad Shahid. The project team, including Arslan Mukaddam (Manager Project) and Itteqa Moin (AM Project), effectively aligned resources for its smooth execution and timely completion. Special recognition goes to Process Support Manager Utilities Muhammad Saad Khan and Management Trainee Engineer Adeel Abbas for their significant contributions to the glass media activities.

Enhancing Excellence Through Training

Muhammad Shahid

The LCPL Production Department has proactively enhanced team skills through a tailored "Specific Training Program." Recently, three sessions were held:

1. HtMI-Based PLC for Off-Gas Drier: Muhammad Sajid Shafique (Senior Shift Manager) introduced the upgraded Human Machine Interface (HMI) for the Off-Gas Drier's Programmable Logic Controller (PLC). The training simplified malfunction identification and highlighted new features, such as an alarm log and elapsed timer.

2. Activated Filtration Glass Media: Shift Manager Utilities Muhammad Shahid focused on optimizing raw water filtration with the new pipe flocculator and glass media in sand filters, improving RO operations and filtration efficiency.

3. ETP Chillers: Shafay Ahad (Shift Manager) covered the operations and control systems of Effluent Treatment Plant (ETP) chillers, crucial for Anaerobic Effluent Treatment Plant (AETP) and ETP process, benefiting both new and experienced team members.

These sessions aim to boost technical proficiency and operational efficiency across the teams.

Scholarship

Ahmed Ali Abedi

LCPL has consistently endeavored to prioritize the education of underprivileged and vulnerable children, aiming to empower them as contributing members of society. Our goal is to equip them to play an active and positive role in both their communities and families as they grow up.

The Citizen Foundation (TCF) is an exemplary organization that has made significant contributions in rescuing underprivileged children from the streets, enrolling them in schools, and offering them free education.

Recognizing its corporate social responsibility, LCPL has donated to support the education of 60 children for the academic year 2024 on 28-March. This contribution is pivotal in sustaining our mission and breaking down barriers that hinder children growing up in poverty from accessing quality education.

In-House EDG-A Module Solution

Hamna Afaque

Our facility recently faced a challenge when Emergency Diesel Generator (EDG-A) showed a low coolant level fault, indicating a risk to operational readiness. The issue was traced to a failed Electronic Control Module (ECM), which was obsolete and unavailable from the original vendor. In response, the Engineering Team opted for a local solution: sending the faulty module for repairs and reprogramming. After repairs, comprehensive tests confirmed EDG-A's functionality and performance. This resolution demonstrates our team's resilience and ingenuity, ensuring the continued reliability of our emergency systems.

Vigilance and Prompt Response

Asad Hayat

The main reaction for the conversion of Para-xylene to CTA occurs inside the Oxidation Reactor. This reaction is controlled by various parameters, and deviations in these parameters can have a significant impact on CTA production and quality. Therefore, precise instruments are installed to monitor and control these reaction parameters, detecting even the slightest deviation to allow for necessary counteractions.

The pressure of the Oxidation Reactor is one of the most critical parameters. Stable reactor pressure is essential for consistent CTA quality and smooth plant operation. On 5th January, a pressure transmitter malfunctioned. Raffatullah Qadri (Oxidation DCS Boardman) and Muhammad Ali (Oxidation DCS Boardman), under the leadership of Muhammad Sajid Shafique (SSM Oxidation Plant), quickly identified the issue and took necessary corrective actions. The faulty pressure transmitter was promptly replaced, and the situation was swiftly handled. A similar event occurred on 20th April when the pressure transmitter malfunctioned again.

Furqan Ahmed (Oxidation DCS Boardman), under the leadership of Asad Hayat (SSM Oxidation Plant), promptly addressed the situation, preventing a potential emergency. The vigilance and timely actions of the teams in both instances were exemplary, as they not only avoided a plant trip but also safeguarded equipment and the environment.

In-House Rectification

Syed Muhammad Ali Jaffri

The engineering team recently completed a significant maintenance activity on our 220 kV earth switch, enhancing operational efficiency and safety.

We achieved this by replacing the faulty relay, verifying the control circuitry, and performing thorough mechanical servicing of the earth switch arms, including cleaning, lubricating, and replacing worn parts.

Since its completion in March, this maintenance has ensured the reliable operation of the 220 kV earth switch, demonstrating our commitment to maintaining high standards of operational efficiency and safety at LCPL.

Dealing with Uncertainty

Ahmed Riaz Rana

The Recycle Solvent Drum, a critical agitator vessel in the Purification Plant, developed an abnormal sound in late February, which couldn't be inspected or fixed while the plant was running.

This posed a challenge for the maintenance team, as they had to prepare for an unknown issue. The engineering team held a joint to evaluate the problem from all angles and devised multiple strategies to address various scenarios.

When the vessel was finally opened, the issue was identified as a damaged shaft. Sohail Javed (Sub-Engineer Mechanical) quickly assessed the problem, and the engineering team worked efficiently to resolve it within the allotted time. The machine was successfully restored to operation, with all parameters stable. The team's in-house efforts saved both time and significant costs.

Muhammad Sameer Ali, FSc, Aisha Bawani Government College, Karachi, has joined the Company as Sub Engineer Process-IV, with effect from 1st February 2024.

Al Aqmar Abbas Ali, BE – Mechanical, NED University of Engineering & Technology, Karachi, has joined the Company as Trainee Engineer, with effect from 12th February 2024.

Muhammad Absar Ahmed, BE – Mechanical, NED University of Engineering & Technology, Karachi, has joined the Company as Trainee Engineer, with effect from 12th February 2024.

Syed Muhammad Haziq, BE – Chemical, NED University of Engineering & Technology, Karachi, has joined the Company as Trainee Engineer, with effect from 12th February 2024.

Adeel Abbas, BE – Chemical, University of Engineering & Technology, Lahore, has joined the Company as Trainee Engineer, with effect from 19th February 2024.

Muhammad Usman, BE Mechanical, NED University of Engineering & Technology, Karachi, has joined the Company as Assistant Manager Maintenance-Cogen, with effect from 25th March 2024.

Muhammad Faraz Khan, BE Mechanical, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI), Swabi, has joined the Company as Assistant Manager TPM, with effect from 25th March 2024.

Muhammad Ammar, DAE Chemical, SMA Rizvi Textile Institute, Karachi, has joined the Company as Sub Engineer Process-IV, with effect from 1st April 2024.

Uzair Khan, BE Chemical, University of Engineering & Technology (UET), Lahore, has joined the Company as Shift Manager, with effect from 16th April 2024.

Muhammad Hassan, BE Electrical, NED University of Engineering & Technilogy, Karachi, has joined the Company as Assistant Manager Electrical, with effect from 29th April 2024.

Long Service Award Recipients

Waseem Ahmed Siddiqui completed 25 years of service on 21st March 2024. He joined the company on 22nd March 1999 and is presently working as Manager Legal, Shares & Secretarial.

Syed Arif Hussain completed 25 years of service on 6th April 2024. He joined the company on 1st August 2007 and is presently working as IT Manager.

Anwar Ul Hassan Arain completed 25 years of service on 10th April 2024. He joined the company on 4th November 2009 and is presently working as Engineer Mechanical.

Asad Ahmed Khan ccompleted 25 years of service on 9th June 2024. He joined the company on 10th June 1999 and is presently working as Technical Manager.

Syed Irfan Ali completed 15 years of service on 29th April 2024. He joined the company on 30th April 2009 and is presently working as Lab Officer.

Muhammad Zain Siddiqui completed 15 years of service on 1st February 2024. He joined the company on 2nd February 2009 and is presently working as Supply Chain Manager.

Shahid Ur Rehman completed 15 years of service on 30th June 2024. He joined the company on 1st July 2009 and is presently working as Sub Engineer Mechanical-I.

Muhammad Irfan completed 10 years of service on 21st January 2024. He joined the company on 22nd January 2014 and is presently working as Senior Shift Manager Oxidation.

Rehana Rafi completed 10 years of service on 28th February 2024. She joined the company on 1st March 2014 and is presently working as Departmental Secretary and Procurement & Payment Officer.

Waqar Ali Teepu completed 10 years of service on 28th February 2024. He joined the company on 1st March 2014 and is presently working as System Administrator.

Muhammad Ahmed Ullah completed 10 years of service on 2nd March 2024. He joined the company on 3rd March 2014 and is presently working as Manager Electrical.

Tariq Usmani completed 10 years of service on 30th April 2024. He joined the company on 1st May 2014 and is presently working as Administration Officer.

Wali Ahsan completed 10 years of service on 14th May 2024. He joined the company on 15th May 2014 and is presently working as Process Engineering & Design Manager (Core & Lab).

Sammar Mazhar completed 10 years of service on 21st May 2024. He joined the company on 22nd May 2014 and is presently working as Shift Manager Cogen.

تقریب تقسیم انعامات

شعیب اقبال

فیلو ملازمین سے سیکھنے، جدت اور مساوی فوائد کو فروغ دیتا ہے۔ اس پروگرام میں حصہ لینے والے فیکلٹی ممبران میں ان کے حاصل کردہ انعامی پوائنٹس کی بنیاد پر انعامات تقسیم کیے گئے۔

جاب کوالیفیکیشن پروگرام (JQP) ٹیکنیکل ٹریننگ سینٹر (TTC) کا ایک اہم اقدام ہے۔ اس پروگرام میں تمام اسٹاف ممبرز مختلف مہارتوں کے امتحانات سے گزرتے ہیں اور متعین کردہ JQP بلاکس کو کامیابی سے مکمل کرنے پر انعامات کے حقدار بنتے ہیں۔

TPM اور ٹیکنیکل ٹریننگ سینٹر (TTC) نے 29 فروری 2024 کو LCPL پلانٹ سائٹ پر انعامات کی تقسیم کے لیے تقریب کا اہتمام کیا تاکہ معلومات کی منتقلی کے پیش نظر انٹرنل فیکلٹی ریکگنیشن پروگرام (IFRP) ملازمت کی اہلیت کے پروگرام (JQP) کے لیے مختلف مہارتوں میں کوالیفائی کرنے والوں کی کاوشوں کو خراج تحسین پیش کیا جاسکے۔

جناب طارق نذیر ورک (ڈائریکٹر مینوفیکچرنگ) تقریب کے مہمان خصوصی تھے۔ جناب راجہ وحید اللہ خان (ڈائریکٹر ایڈمن، ایچ آر اینڈ آئی ٹی)، جناب سید قمر عالم (جنرل منیجر، ورکس) اور جناب عدنان الحق (جنرل منیجر، آپریشنز) بھی مہمانان خاص تھے۔

جناب سہیل عباس (ایچ ایس ای اور ٹیکنیکل ٹریننگ منیجر) نے حاضرین کو IFRP ٹریننگ کی کامیابی سے آگاہ کیا اور مختلف اسکل بلاکس کے JQP امتحانات کے نتائج کی بنیاد پر کامیاب امیدواروں کا اعلان کیا۔ بعد ازاں شرکاء میں انعامات اور اسناد تقسیم کی گئیں۔

HSE&S کے سفر کا ایک اور سنگ میل

شعیب اقبال

ایک ٹیم۔۔۔ایک مقصد

Lotte کیمیکل پاکستان لمیٹڈ نے 14 مارچ 2024 کو اپنے ملازمین اور کنٹریکٹر کے تمام اسٹاف کی طرف سے کسی حادثہ کے بغیر 70 ملین مین آورز مکمل کرتے ہوئے HSE&S کی کارکردگی میں ایک اور سنگ میل حاصل کر لیا ہے۔

چیف ایگزیکٹیو جناب ینگ ڈائی کم نے LCPL ٹیم کو مبارکباد دیتے ہوئے تمام ملازمین اور کنٹریکٹر اسٹاف کی بھرپور لگن، مثبت رویہ، حفاظتی اصولوں کی پابندی اور HSE&S کے حوالے سے ذمہ دارانہ رویہ سے ورلڈ کلاس بینچ مارک حاصل کرنے میں ان کی کوششوں کو سراہا۔ یہ کامیابی ہمارے HSE انتظامات کے نتیجے اور LCPL کو ایک محفوظ کام کی جگہ بنانے کے لیے ہمارے عزم کو ظاہر کرتی ہے۔ کارکردگی کا یہ معیار ہمارے ملازمین، کنٹریکٹرز اور ان کی ٹیموں کے زبردست تعاون سے ہی ممکن ہوا۔ انہوں نے HSE&S کی اعلیٰ کارکردگی کے لیے کوشش جاری رکھنے کی ضرورت پر زور دیا۔

مسٹر طارق این ورک (ڈائریکٹر مینوفیکچرنگ) نے مسلسل کوششوں کے نتیجے میں LCPL ٹیم کے قائم کردہ غیر معمولی حفاظتی ریکارڈ کو سراہا۔ انہوں نے مزید کہا کہ اس ریکارڈ کا حصول 1998 میں پلانٹ کے شروع ہونے کے بعد سے اس سائٹ پر کام کرنے والے ہر فرد کی زبردست ٹیم ورک اور ذمہ داری کا مظاہرہ کئے بغیر ممکن نہیں تھا۔ LCPL کا یہ اعلیٰ معیاری حفاظتی ریکارڈ 7 مئی 1998 سے اب تک تقریباً 26 سالوں سے برقرار ہے۔

LCPL کے تمام ملازمین اور کنٹریکٹر اسٹاف کے عزم، کاوشوں اور لگن کو تسلیم کرنے اور HSE&S کے اس اہم سنگ میل کو منانے کے لیے، 4 اپریل 2024 کو LCPL پلانٹ کے ری کریئیشن ہال میں ایک تقریب کا اہتمام کیا گیا، جہاں LCPL کے چیف ایگزیکٹو، جناب ینگ ڈی کم نے تمام کنٹریکٹرز کو شیلڈز دیں اور LCPL کے تمام ملازمین اور کنٹریکٹر اسٹاف میں گفٹ واؤچر تقسیم کیے گئے۔

LCPL کے تمام ملازمین اور کنٹریکٹر ٹیم کو بہت بہت مبارکباد!

کورین ایمبسڈر وزٹ

احمد علی عابدی

کوریا کے سفیر جناب پارک کی جون اور کوریا کے قونصل جنرل جناب بی سنگ ہونے 16 فروری 2024 کو LCPL کا یادگار دورہ کیا۔ LCPL کے چیف ایگزیکٹو جناب ینگ نے ان کا پرتپاک استقبال کیا۔ دورے کے دوران محترم سفیر پارک کی جون کو پلانٹ کے بارے میں تفصیلی بریفنگ دی گئی اور انہیں پلانٹ سائٹ اور کنٹرول روم کا دورہ کرایا گیا۔ انہوں نے LCPL کے لیے نیک خواہشات کا اظہار کیا اور ایک یادگاری پودا لگا کر اس موقع کو تاریخی بنا دیا۔

اس پروقار تقریب کے مہمان خصوصی اسلامی جمہوریہ پاکستان کے صدر جناب ڈاکٹر عارف علوی تھے۔ Lotte کیمیکل پاکستان لمیٹڈ (LCPL) کی جانب سے جناب سہیل عباس (HSE اور ٹیکنیکل ٹریننگ مینیجر) نے ایوارڈ وصول کیا۔

میڈیکل کیمپ

احمد علی عابدی

11 جنوری 2024 کو LCPL کے رضاکاروں کی جانب سے پورٹ قاسم کے قریب گھگر پھاٹک کے حاجی غلام محمد گوٹھ میں آنکھوں کے علاج معالجہ کے لیے مفت میڈیکل کیمپ کا انعقاد کیا گیا۔ مریضوں کی بڑی تعداد نے آنکھوں کے علاج کے لیے کیمپ کا دورہ کیا۔ تفصیلی چیک اپ کے بعد، ڈاکٹروں نے موتیابند کے 71 مریضوں کو فوری علاج / سرجری کی سفارش کی۔ ڈاکٹرز نے دیگر مریضوں کو ان کی بیماریوں کے مطابق مفت ادویات بھی فراہم کیں۔ LCPL کی جانب سے ان مریضوں کے لیے آنکھوں کے آپریشن کے اخراجات، ہسپتال میں داخلہ اور گاؤں سے ہسپتال تک کے سفر سمیت مکمل انتظامات کئے گئے۔

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چیئرمین نے جدید ترین ٹیکنولوجی کے حصول پر خوشی کا اظہار کیا اور LCPL ٹیم کی لگن کو سراہا۔

احمد علی عابدی

LOTTE کیمیکل پاکستان لمیٹڈ کے چیئرمین، مسٹر سنگ سوبائی نے 19 اپریل کو LCPL پلانٹ سائٹ کا دورہ کیا۔ چیئرمین نے اپنے پہلے دورے کے دوران، ترقی اور پائیداری کی علامت ایک درخت لگا کر اس موقع کی یادگار بنا دیا۔ اس دورے میں چیئرمین کو PTA پلانٹ کے بارے میں تفصیلی بریفنگ دی گئی اور انہیں تمام سہولیات کا دورہ بھی کرایا گیا۔

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