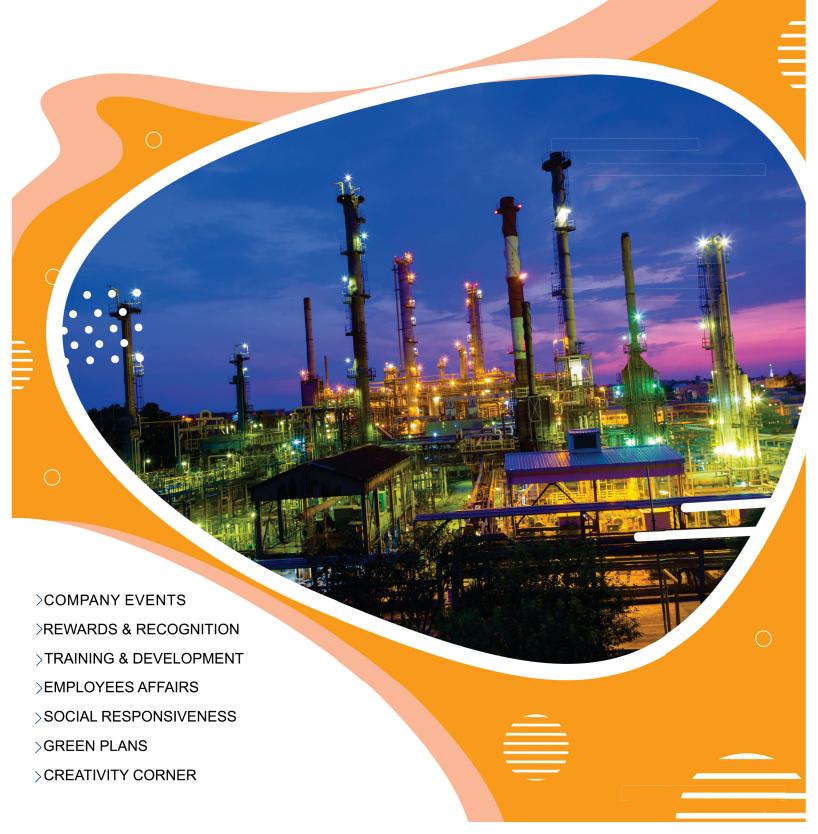


PONEERS in Petroleum Refining

JAN-DEC 2023 Volume V, No. I



PATRON-IN-CHIEF



M. Adil Khattak Chief Executive Officer

PATRON



Nadeem Nazir HOD (HR & Admin.)

EDITOR



Saba Sarfraz HR & Admin.

EDITORIAL TEAM MEMBERS



Salman Shaikh Operations



Kamran Shahzad HR & Admin.



Muhammad Ahmed HR & Admin.

Editorial Note



Dear Readers!

The Editorial Board is once again at work and is pleased to unveil this edition of Pioneers. We are delighted to welcome Mr. Nadeem Nazir as the Patron of the ARL newsletter.

In this edition, life at ARL has been covered from Jan-Dec, 2023 under the segments of company events, rewards & recognition, green plans, social responsiveness, training & development, employees affairs and their contributions.

You are welcome to share your feedback at newsletter@arl.com.pk

Happy Reading!

SAFETY WEEK

Attock Refinery Limited celebrated Safety Week from April 26th to 28th, 2023, in-line with the International Labor Organization's World Day (April 28th) for Occupational Health and Safety at Work.

On the first day of Safety Week, refinery employees joined together for a safety walk. Safety walk reminds the significance of prioritizing safety culture in all aspects of refinery operations. During the Safety Week, a series of safety talks were organized to engage with employees for



their suggestions to further improve OH&S practices. Presentations were given on Occupational Acquired Diseases, Electrical Safety, chemical Handling and Storage Safety. Moreover, a highly interactive and informative session on Defensive Driving & Road Safety was conducted by the National Highway and Motorway Police.

INDEPENDENCE DAY CEREMONY

76th Pakistan Independence Day was celebrated at ARL General Office on August 14, 2023 with traditional fervor and excitement. Members of management & non-management staff attended the ceremony. The key highlights of the ceremony were the blowing of a hooter, recitation from the Holy Quran, playing of the national anthem, flag hoisting and prayers for the solidarity of the nation. The buildings of ARL General Office, CBA Office and ARL Main Reception were also decorated with lights.



WORLD ENERGY DAY

ARL celebrated world energy day on October 26, 2023 to reaffirm its commitment and inculcate energy management and conservation culture. This celebration is being organized in-line with World Energy Day (22nd October).

The purpose of this celebration was to educate, motivate and enhance the energy consciousness of employees to strengthen their commitment towards energy conservation at the workplace. Energy awareness sessions were arranged throughout the organization to ensure maximum participation of all the employees.



JUNIOR MANAGEMENT STAFF (JMS) ANNUAL DINNER

For Junior Management Staff (JMS), ARL arranged an annual dinner on October 07, 2023. Top management of the Company also graced the event with their presence. A large number of JMS along with their spouses attended the dinner.



BALLOTING FOR HAJJ & UMRAH NOMINATIONS - 2023

The Hajj & Umrah balloting ceremony was held at ARL Diner in the presence of chief guest Syed Asad Abbas, HOD (F&CA) on January 31, 2023. Five Workers for Umrah and four workers for Hajj along with their spouses or dependents were nominated for the year 2023 through balloting amongst the eligible Muslim Non-Management Staff. As the result of balloting, the following employees were declared successful:-

UMRAH

Sr. No.	Name	Designation	Department
1	Mr. Zulfiqar Ali	Head Supervisor	F&CA
2	Mr. Abdul Jalil Jaddun	Plant Attendant Senior	Operations
3	Mr. Muhammad Arif	Plant Attendant Senior	Operations
4	Mr. Aurangzeb	Plant Attendant Senior	Operations
5	Mr. Muhammad Hafeez	Driver Motor Senior	Maintenance

HAJJ

Sr. No.	Name	Designation	Department
1	Mr. Muhammad Younas	Head Supervisor	F&CA
2	Mr. Muhammad Naseer	Plant Attendant Senior	Operations
3	Mr. Muhammad Munir	Plant Attendant Senior	Operations
4	Mr. Muhammad Ahsan Khan	Plant Attendant Senior	Operations

ARL management congratulated the Hajj and Umrah nominees.

HAJJ FAREWELL PARTY- 2023

The Hajj farewell party was held on May 18, 2023, at Elliott Club. Syed Asad Abbas, HOD (F&CA) was the Chief Guest on the occasion. Departmental Heads and CBA members attended the function. Four Hajj nominees performed the Hajj at company expense and seven employees performed the Hajj on their own expense this year. All Hujjaj were garlanded and were presented gifts by the Chief Guest.



NON-MANAGEMENT STAFF [NMS] FAREWELL PARTY

The farewell party for NMS retirees was held at ARL Diner on December 26, 2023. M. Adil Khattak, CEO, was the chief guest at the occasion. Senior Management, CBA representative and a large number of NMS were present. During his address, the chief guest expressed warm wishes for retirees' future wellbeing and highly commended their dedication and contribution.



BALLOTING FOR HAJJ & UMRAH NOMINATIONS - 2024

The Hajj & Umrah balloting ceremony was held at ARL Diner on November 22, 2023. Mr. Asif Saeed, HOD (C&MM) was the chief guest on the occasion. Five Workers for Umrah and four workers for Hajj were nominated along with their spouses or dependents for the year 2024 through balloting amongst the eligible Muslim Non-Management Staff. The following employees were declared successful through draw: -

UMRAH

Sr.No.	NAME	POSITION	DEPARTMENT
1	Mr. Muhammad Farooq	Driver Motor Senior	HR & Admin
2	Mr. Muhammad Javed	Office Attendant Senior	HR & Admin
3	Mr. Muhammad Saeed Khan	Fitter Senior	Maintenance
4	Mr. Abdul Qayyum	Plant Operator Senior	Operations
5	Mr. Muhammad Arif	Plant Attendant Senior	Operations

HAJJ

Sr.No.	NAME	POSITION	DEPARTMENT
1	Mr. Muhammad Siddique	Plant Operator Senior	Operations
2	Mr. Muhammad Arif	Plant Attendant Senior	Operations
3	Mr. Naveed Qamar	Head Supervisor	HR & Admin
4	Mr. Safeer Ali	Painter Sign Senior	HR & Admin

BALLOTING FOR NON-MUSLIMS

Mr. Ayub Hashim, Maintenance Department was declared successful as a result of balloting to visit Holy Places within Pakistan and the chief guest of occasion Major (R) Sohail Akhter, Chief Security Officer, presented the winner a cheque of Rs.260,000/-. This function was held on December 14, 2023 at Elliott Club which was attended by Non-



Muslim NMS and CBA representatives.

CHRISTMAS PARTY

A Christmas party was held at Elliott Club on December 27,2023. Representatives from ARL's senior management staff, a large number of Christian employees and members of CBA attended the ceremony.



8[™] HEALTH, SAFETY & ENVIRONMENT CONFERENCE 2023

8th Health, Safety and Environment (HSE) Conference, organized by Attock Refinery Limited, took place on October 23, 2023, at Morgah Club, Rawalpindi. The event drew eminent speakers and participants from a wide array of fields, making it a prestigious and highly anticipated gathering. In opening remarks, ARL representative accentuated the paramount importance of HSE in today's business landscape. This event holds significant importance depicting a successful century of ARL's Gradient of achievements. The value of sharing best practices and learning from other's experiences to ensure a safer and sustainable future was reinforced. During the conference, six papers were presented, including Project Safety Management, Paradigm Shift from Conventional Compliance Based Process Safety to Quality and Risk

During the conference, six papers were presented, including Project Safety Management, Paradigm Shift from Conventional Compliance Based Process Safety to Quality and Risk Based Process Safety, Safety Culture & Leadership, The Double-Edged Sword of Carbon Capture & Storage Technologies in Oil & Gas Sector-Pakistan's Perspective, HSE Implementation – Cement Sector and Customized Employee Wellbeing Program – Fit for Life.



















ARL ANNUAL SPORTS CEREMONY

ARL employees participated in the annual sports event with great enthusiasm and energy. The outdoor games included hockey, football, cricket, volleyball, tug of war, archery and athletics, while indoor games comprised table tennis, badminton and carom, among others. ARL's annual sports ceremony was organized where trophies and prizes were distributed among the winners. Syed Asad Abbas, HOD (F&CA) was the chief guest of the event.













MAN OF THE QUARTER (MOQ) AWARDS

4th MOQ (2022) awards ceremony was organized at ARL Diner on January 31, 2023 and 1st MOQ (2023) awards ceremony was held at ARL Diner on May 25, 2023. The awards were distributed in the following categories:

No. of Recipients **Award Type**

Performance 33 Safety 8

Quarterly Safe Man-Hours trophies were won by Electrical & Instrument Section consecutively in 4th Quarter of 2022 and 1st Quarter of 2023.

4TH QUARTER (2022)

PERFORMANCE AWARDS































SAFETY AWARDS











1ST QUARTER (2023)

PERFORMANCE AWARDS











Muhammad Zahoor







Saymuel Yagub Gill







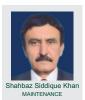








SAFETY AWARDS









MAN OF THE QUARTER (MOQ) AWARDS

2nd MOQ awards ceremony was arranged at ARL Diner on August 10, 2023 and 3rd MOQ awards ceremony was held at ARL Diner on October 26, 2023. The awards were distributed in the following categories:

No. of Recipients **Award Type**

Performance 34 Safety 8

In 2nd Quarter, Safe Man-Hours trophy was won by DHDS unit whereas the 3rd Quarter Safe Man-Hours trophy was won by AMU/SWS Section.

2ND QUARTER (2023)

PERFORMANCE AWARDS











































3RD QUARTER (2023)

PERFORMANCE AWARDS





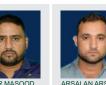


ARSHAD MEHMOOD

















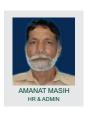




ZULFIQAR ALI

ZAHEER ABBAS

SAFETY AWARDS







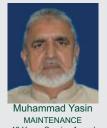




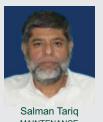
LONG SERVICE AWARDS

ARL distributed Long Service Awards to the following management and non-management employees to recognize and appreciate employees' long association with the company.

MANAGEMENT EMPLOYEES



40 Years Service Award



MAINTENANCE 30 Years Service Award



Muhammad Nadeem C&MM 20 Years Service Award



C&MM 20 Years Service Award



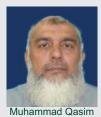
HR & Admin 20 Years Service Award



Muhammad Farooq Malik HR & Admin 20 Years Service Award



MAINTENANCE 20 Years Service Award



MAINTENANCE 20 Years Service Award



Ather Ikram Shah MAINTENANCE 20 Years Service Award



MAINTENANCE 20 Years Service Award



Abdul Rashid Nadeem Operations 20 Years Service Award



Muhammad Ishtiaq Qureshi Operations 20 Years Service Award



Mr. Yasir Qayyum F&CA 20 Years Service Award



Sh. Muhammad Nauman Operations 20 Years Service Award



Operations 20 Years Service Award



Muhammad Qasim Azeem Operations 20 Years Service Award



BR & A 10 Years Service Award



Engineering



Engineering 10 Years Service Award







10 Years Service Award







MANAGEMENT EMPLOYEES



Navid Tariq Operations 10 Years Service Award



Operations

10 Years Service Award





Operations 10 Years Service Award



Operations 10 Years Service Award



Mohsin Asghar Operations 10 Years Service Award



Muhammad Arif Shahzad Technical Services 10 Years Service Award



Taimoor Ghafoor HR & Admin 10 Years Service Award



Operations 10 Years Service Award



Muhammad Bilal Operations 10 Years Service Award



Operations 10 Years Service Award

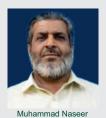
NON-MANAGEMENT EMPLOYEES



Shahbaz Siddique Khan MAINTENANCE 40 Years Service Award



OPERATIONS 40 Years Service Award



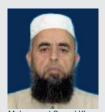
OPERATIONS 40 Years Service Award



Muhammad Sheraz **OPERATIONS** 40 Years Service Award



Amjad Javaid HSEQ 40 Years Service Award



Muhammad Saeed Khan MAINTENANCE 40 Years Service Award



Muhammad Javed HR & ADMIN 40 Years Service Award



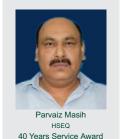
C & MM 40 Years Service Award

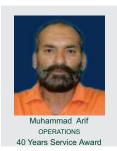


Safeer Ali HR & ADMIN 40 Years Service Award



OPERATIONS 40 Years Service Award





TRAININGS

Top Senior management attended a training session on "Leading With Emotional Intelligence" by Ms. Sobia Zafar. The training aimed to improve the participants' ability to manage both their own and their team members' emotions.



ARL organized a four-day "Train The Trainer" workshop to develop its internal trainers which was conducted by m/s Carnelian Pakistan. During the workshop, participants were trained to use various techniques and best practices for conducting effective training sessions.



An in-house technical training was held by m/s OLIVE Technical Services (Pvt) Limited for six days where the participants were provided with hands-on information on Centrifugal Pumps, Positive Displacement Pumps and Reciprocating Compressors.



TRAININGS

M/s Blanchard Pakistan organized a five-day training program for three tiers of senior management, focusing on "Work of Leaders, Situational Leadership & Self-Leadership". The training aimed to boost employee morale, improve productivity, promote better decision-making, build stronger teams and train future leaders in the company. The program emphasized developing a management style that fosters a positive working environment.







building retreat was organized at ARL, with the theme "Growing Together". The training program was conducted by Mr. Haseeb Hassan and Ms. Zufyshan Haseeb, with the aim of improving communication among employees and helping them work towards the company's common goals.

OUR GREAT ASSET

Welcome to the ARL Family!

Talented people have a lot of professional opportunities and we are honoured that you have chosen ARL to be your professional home. Our commitment to you is to always put Our People first.

Making this a place for you to excel, achieve greatness and grow your professional franchise. We hope ARL will be the place you call home for a very long time....

Thank you and welcome to the team!

Sr. No.	EMPLOYEE NAME	DESIGNATION	DEPARTMENT	JOINING DATE
1	Mr. Adil Hussain	Senior Officer	Operations	January 02,2023
2	Mr. Adnan Farooq	Senior Officer	Operations	January 02,2023
3	Mr. Zeeshan Hafeez	Senior Officer	Operations	January 03,2023
4	Mr. Ahsan Idrees	Senior Officer	F&CA	February 27,2023
5	Mr. Sheharyar Rasheed	Field Operator	Operations	March 01,2023
6	Mr. Muhammad Arif	Junior Officer	HR & Admin	March 01,2023
7	Mr. Adil Abbas	Field Operator	Operations	March 03,2023
8	Mr. Muhammad Usama	Field Operator	Operations	March 03,2023
9	Mr. M. Danish Nawaz Khalil	Engineer	Operations	March 09,2023
10	Mr. Muhammad Ismail	Field Operator	Operations	March 13,2023
11	Mr. Sameer Khan	Senior Office	HSEQ	April 12,2023
12	Mr. Saad Jan Khattak	Senior Office	Maintenance	April 14,2023
13	Mr. Wasif Dad	Senior Officer	Maintenance	April 14,2023
14	Mr. Umair Ali Wajid	Senior Officer	Maintenance	April 14,2023
15	Mr. Muhammad Noor Taj	Senior Officer	Maintenance	April 14,2023
16	Mr. Daniyal Ahmed	Senior Office	Maintenance	April 14,2023
17	Mr. Fazal-E-Rabbi	Senior Officer	Maintenance	April 14,2023
18	Mr. Muhammad Raza	Senior Officer	Maintenance	April 14,2023
19	Mr. Khizar Mehmood	Senior Officer	Maintenance	April 14,2023
20	Mr. Hassan Ali	Senior Officer	Maintenance	April 14,2023
21	Mr. Muhammad Mueed Ul Hassan	Senior Officer	Maintenance	April 26,2023
22	Mr. Talha Sajid	Senior Officer	Maintenance	April 28,2023
23	Mr. Muhammad Umer	Engineer	Operations	May 04,2023
24	Mr. Ali Hussnain	Senior Officer	Operations	May 15,2023
25	Mr. Faisal Bashir	Senior Officer	Operations	May 15,2023

OUR GREAT ASSET

Sr. No.	EMPLOYEE NAME	DESIGNATION	DEPARTMENT	JOINING DATE
26	Mr. Mohsin Ibrahim	Engineer	Engineering	June 12,2023
27	Mr. Muzzammal Hussain Tahir	Senior Officer	Engineering	June 12,2023
28	Mr. Zia Ul Amin	Senior Officer	HSEQ	June 23,2023
29	Mr. Mubassar Ahmed	Senior Officer	Operations	June 26,2023
30	Mr. Muhammad Zulfiqar Ali	Senior Officer	Operations	June 26,2023
31	Mr. Aamir Waqas	Senior Officer	Operations	June 26,2023
32	Mr. Muhammad Ishaq	Senior Officer	Operations	June 26,2023
33	Mr. Sadiq Mehmood	Senior Officer	Engineering	June 26,2023
34	Mr. Shamus Ur Rahman	Shift Engineer	Operations	June 27,2023
35	Mr. Muhammad Saad Habib	Engineer	Maintenance	June 27,2023
36	Mr. Malik Umair Ali	Engineer	Maintenance	June 27,2023
37	Mr. Zain Hassan	Senior Officer	HSEQ	June 27,2023
38	Mr. Taimoor Ghafoor	Junior Officer	HR & Admin	June 27, 2023
39	Mr. Qaiser Shehzad	Senior Officer	Maintenance	July 07, 2023
40	Mr. Hassan Khan	Senior Officer	Maintenance	July 10, 2023
41	Mr. Abdul Hanan	Senior Officer	HSEQ	July 10, 2023
42	Mr. Ghulam Ullah	Senior Officer	Maintenance	July 20, 2023
43	Mr. Syed Anas Ali Shah	Senior Officer	Operations	July 21, 2023
44	Mr. Abad Ali	Senior Officer	Maintenance	August 07, 2023
45	Mr. Saad	Engineer	Maintenance	August 09, 2023
46	Mr. Muhammad Ishtiaq	Senior Officer	Operations	August 16, 2023
47	Mr. Munawar Hussain	Senior Executive	HR & Admin	August 17, 2023
48	Mr. Abdullah Shakeel	Senior Office	Maintenance	September 14, 2023
49	Mr. Ahmad Akhtar Rehman	Deputy Manager	HSEQ	September 25, 2023
50	Mr. Danish Aadil	Senior Officer	Maintenance	September 26, 2023
51	Mr. Farrukh Ihtisham Mughal	Engineer	Maintenance	October 02, 2023
52	Mr. Ali Zulqarnain	Senior Officer	BR&A	October 03, 2023
53	Mr. Naseer Hayat Satti	Senior Officer	Operations	October 09, 2023
54	Mr. Muhammad Usama Khan	Senior Officer	Operations	October 16, 2023
55	Ms. Nazia Rahim Hassan	Senior Officer	C&MM	November 03, 2023
56	Mr. Mirza Rehman Babar	Field Operator	Operations	November 06, 2023
57	Mr. Anas Ayub	Field Operator	Operations	November 06, 2023
58	Mr. Sheroz Altaf	Field Operator	Operations	November 06, 2023
59	Mr. Muhammad Atif Manzoor	Field Operator	Operations	November 06, 2023
60	Mr. Shahab Ud Din	Field Operator	Operations	November 06, 2023
61	Mr. Muhammad Muzammil	Field Operator	Operations	November 06, 2023

OUR GREAT ASSET

Sr. No.	EMPLOYEE NAME	DESIGNATION	DEPARTMENT	JOINING DATE
62	Mr. Muhammad Anees Kiyani	Field Operator	Operations	November 06, 2023
63	Mr. Muhammad Gohar Affaq	Field Operator	Operations	November 06, 2023
64	Mr. Arif Shah	Field Operatorr	Operations	November 06, 2023
65	Mr. Junaid Ahmad	Field Operator	Operations	November 06, 2023
66	Mr. Muhammad Zulqurnain Qasim	Field Operator	Operations	November 06, 2023
67	Mr. Hassan Ali	Field Operator	Operations	November 06, 2023
68	Mr. Sheheryar	Field Operator	Operations	November 06, 2023
69	Mr. Touseeq Mubarak	Field Operator	Operations	November 06, 2023
70	Mr. Ali Hamza	Field Operator	Operations	November 06, 2023
71	Mr. Adnan Younis	Field Operator	Operations	November 06, 2023
72	Mr. Zeeshan	Field Operator	Operations	November 06, 2023
73	Mr. Zeeshan Waheed	Field Operator	Operations	November 06, 2023
74	Mr. Ahmad Hasan	Engineer	Operations	November 06, 2023
75	Mr. Noman Yousaf	Engineer	Technical Service	November 06, 2023
76	Mr. Muhammad Sheraz	Field Operator	Operations	November 08, 2023
77	Rana Muhammad Kashif	Field Operator	Operations	November 10, 2023
78	Mr. Suneel Ashraf	Field Operator	Operations	November 16, 2023
79	Mr. Ahsan Altaf	Engineer	Operations	November 17, 2023
80	Mr. Muhammad Usman	Engineer	HSEQ	November 24, 2023
81	Mr. Muhammad Imran	Senior Officer	Operations	December 05, 2023
82	Mr. Aamir Bashir	Senior Officer	Maintenance	December 12, 2023
83	Mr. Naeem Ullah	Senior Officer	Maintenance	December 19, 2023
84	Mr. Ismail Zeeshan	Field Operator	Operations	December 20, 2023
85	Mr. Muhammad Junaid	Junior Officer	HR & Admin	December 27, 2023
86	Mr. Abdul Basit	Senior Officer	Maintenance	December 28, 2023

Quote

Ourtstanding people have one thing in common: an absolute sense of mission.

Zig Ziglar

INDUSTRIAL / EDUCATIONAL VISITS AT ARL



Agroup photo of students of School of Chemical and Materials Engineering, NUST, with the ARL Officials.



A group of Students from Karnal Sher Khan Cadet College, Swabi, visited ARL.



A group photo of Students of National University of Technology (NUTECH), Islamabad, during their study visit at ARL.



Officials from Karachi Nuclear Power Generating Station (KNPGS) were hosted at the Attock Refinery Limited.



Officials from Oil & Gas Regulatory Authority (OGRA) attended a training program at ARL.

ANNUAL SUMMER INTERNSHIP PROGRAM 2023



ARL provides summer internship opportunities to continuing students for 4-6 weeks, with the aim of providing them with industrial and professional exposure. The students are given formal orientation sessions in batches. This year, ARL offered internships to over 135 students from different recognized academic institutions across the country

INDUSTRIAL / EDUCATIONAL VISITS AT ARL



A study visit was organized for the students of COMSATS University, Lahore Campus.



A group photo of students of University of Engineering & Technology (UET), Faisalabad Campus, was taken during their vist at ARL.



A photograph was taken during a study trip by students from FAST National University, Islamabad.



During the study visit of students from Foundation University, Islamabad, a photograph was taken.



A group photo of students from Islamabad Model School for Girls F-6/1, Islamabad during their visit at at ARL.



A field trip was organized for students from the University of Engineering & Technology (UET), Peshawar.



Students of College of Electrical and Mechanical Engineering, NUST, visited ARL as the part of their study program.



A group photo was taken at ARL during the visit of students from the University of Punjab, Lahore.

ATTOCK SAHARA FOUNDATION (ASF) MEENA BAZAAR

ASF organized its annual Meena Bazaar at ARL Cricket Ground on March 11, 2023. Several NGOs, Companies and Banks set up their stalls. In addition food, handicraft, garments and jewelry stalls remained the main attraction for families visiting the Meena Bazaar.





ASF ANNUAL FEMALE SPORTS

ASF conducted Female Sports from 22 May 2023 to 29 May 2023 at Elliott Club. Govt. Girls High School (ARL) Nai Abadi, Govt. Girls Higher Secondary School (AOC) Morgah and ASF team participated in this event. Around 100 girls participated in different games. Table Tennis (Single, Double), Badminton (Single, Double) Volleyball, Basketball, Tug of War and Races were organized.





AWARENESS SESSION ON DENGUE

ASF joined hands with ARL to conduct a Dengue Awareness session at Elliott Club, on August 09, 2023. Representatives from district management, district health department, local community, department of social welfare participated in this session. Dr. Nawaz, Medical Officer (AHL), Dr. Anum from Social Security department & Mr. Usama, Entomologist, Punjab Health Dept. shared valuable information amongst the participants



regarding dengue and its prevention. Mr. Almas Sabeeh Saqib, Assistant Commissioner sadder, was chief guest on the occasion.

74[™] MORGAH CLUB FLOWER SHOW

74th annual flower show was organized by Morgah Club on March 21, 2023. Senior Management employees of Attock Group of companies residing at ARL colony participated in the lawn competitions. Shields and cash prizes were delivered to the houses of winners due to a new wave of the Covid-19 pandemic. 1st position holders of different categories for Lawns of Bungalows and offices are as follows:

Sr. #	Category	Winner
1	Extra Large Bungalow	Mr. Shuaib A. Malik
2	Large Bungalow	Mr. Iftikhar Yousaf
3	Medium Bungalow	Mr. Abdul Rahim
4	Small Bungalow	Mr. Asif Jamil
5	Large Office	ARL General Office
6	Small Office	Morgah Club
7	Large Parks	Morgah Biodiversity Park
8	Small Parks	Miller Park
9	Road Sides	Refinery Chowk to Barrier No. 3



A Beautiful view of lawn of ARL General Office

ELLIOTT CLUB FLOWER SHOW

18th annual flower show was organized by Elliott Club on March 30, 2023. Non-management and Junior management staff participated in this flower show and presented their gardens for competition.

Sr. # Category		Winner
1	JMS Garden	Mr. M. Asim
2	NMS Garden	Mr. Zulifqar Ali

SPRING TREE PLANTATION CAMPAIGN

To promote the concept of Green Pakistan and to encourage tree plantation among local communities, ARL plants 10,000 to 12,000 tree saplings every year as part of Corporate Social Responsibility. In this context, the Horticulture section of ARL launched Spring Tree Plantation during March and April. Under this campaign, plantations were carried out at different locations including



Morgah Morh, ARL Vegetable Farm, Fruit orchards, Morgah Biodiversity Park, ARL cricket ground and residential areas of ARL colony.

ATTOCK INSTITUTE OF HORTICULTURE (AIH)

Attock Institute of Horticulture conducted the following activities:

- ·Six students from PMAS Arid Agriculture University, Rawalpindi completed an internship at AIH.
- ·One-day personal safety workshop for gardeners in collaboration with Honda Atlas on February 02, 2023.
- ·German Scientists of Organic farming visited AIH on February 21, 2023.



MORGAH BIODIVERSITY PARK (MBP) VISITS

Following Visits were arranged for students of different universities where they learned about conservation practices of flora and fauna and enjoyed the green environment of MBP.



Faculty members and students of Bahria University Islamabad at Morgah Biodiversity Park



Faculty members and students of PMAS Arid Agriculture University during their visit

ARTIFICIAL INTELLIGENCE IN SUPPLY CHAIN MANAGEMENT: PROS AND CONS



Introduction:

In recent years, artificial intelligence (AI) has emerged as a game-changer in various industries, including supply chain management. AI technologies offer the potential to optimize

operations, streamline processes, and enhance decision-making capabilities. However, like any disruptive innovation, AI in supply chain management comes with its own set of advantages and disadvantages. In this article, we will explore the pros and cons of employing artificial intelligence in supply chain management.

Pros of Artificial Intelligence in Supply Chain Management

Enhanced Efficiency and Automation: One of the primary advantages of AI in supply chain management is its ability to automate routine tasks and processes. AI-powered systems can efficiently handle repetitive tasks, such as inventory management, demand forecasting and order processing, leading to improved operational efficiency and reduced human error.

Real-time Data Analysis: Al-driven tools can process vast amounts of data in real-time, providing supply chain managers with valuable insights. This data-driven decision-making enables proactive measures to address potential issues, optimize inventory levels and respond quickly to market changes.

Predictive Analytics: All can leverage historical data and patterns to predict future demand and supply scenarios accurately. This capability helps businesses optimize inventory levels, minimize stockouts and reduce carrying costs, ultimately leading to better customer satisfaction and cost savings.

Supply Chain Visibility: Al-based systems enable end-to-end visibility across the supply chain. This transparency allows companies to identify bottlenecks, track shipments and monitor supplier performance effectively, thereby facilitating more informed decision-making.

Improved Customer Service: With better demand forecasting and inventory management, AI can enhance customer service levels by ensuring products are available when and where they are needed. This leads to higher customer satisfaction and loyalty.

Cons of Artificial Intelligence in Supply Chain Management

High Implementation Costs: Integrating Al technologies into supply chain management systems often requires substantial upfront investments. Small and medium-sized businesses may find it challenging to afford such advanced solutions, limiting the accessibility of Al-driven benefits.

Complexity and Integration Challenges: Incorporating AI into existing supply chain structures can be complex and may necessitate significant changes in processes and employee skill sets. Integrating AI with legacy systems can also pose integration challenges.

Data Security and Privacy Concerns: Al systems depend on vast amounts of data, including sensitive information about customers, suppliers and operations. Ensuring the security and privacy of this data is crucial, as any breach could have severe consequences.

Lack of Human Touch: While AI enhances automation and efficiency, it may lead to reduced human involvement. This could affect relationships with suppliers and customers, where personal interactions play a vital role.

Overreliance on AI: Relying solely on AI systems without human oversight could be risky. Technical glitches, algorithm biases or unforeseen circumstances might lead to suboptimal decisions or disruptions in the supply chain.

Conclusion:

Artificial intelligence offers remarkable potential for revolutionizing supply chain management, bringing unprecedented efficiency and data-driven decision-making to the table. The advantages of AI, such as enhanced efficiency, real-time data analysis and predictive analytics, promise substantial benefits for businesses.

However, supply chain managers must also consider the drawbacks associated with AI, such as high implementation costs, integration challenges and data security concerns. Finding the right balance between AI-driven automation and human expertise is crucial for a successful and sustainable AI-enabled supply chain.

Ultimately, by understanding and leveraging the pros while proactively addressing the cons, businesses can harness the full potential of artificial intelligence in supply chain management, gaining a competitive edge in an increasingly dynamic and interconnected global marketplace.

PROCESS SAFETY MANAGEMENT IN CHEMICAL PLANTS



Mohsin Ibrahim ENGINEERING

What is PSM?

Any business that works with hazardous materials must have process safety management (PSM). It is essential for guaranteeing efficient and safe industrial

operations that also safeguard both the environment and the workers. PSM is a system that aids businesses in controlling and managing their process risks. It entails the identification of possible risks, the creation and application of controls to lessen those risks, and the ongoing evaluation of those controls to determine their efficacy. PSM aims to preserve the environment from any negative effects of accidents, as well as to avoid accidents and injuries. Process safety management is a set of proactive and corrective actions intended to stop or lessen the effects of accidents involving processes. The prevention of process-related mishaps and the mitigation of their effects are crucial components of any organisation that uses or manufactures hazardous chemicals.

Components of PSM:

The following components are included in process safety management:

- ·Identification of risks and risk assessment
- ·Process risk evaluation
- ·Operational protocols and employee education

- ·Inspection and maintenance
- ·Auditing and management evaluation. **Implementation:**

Company must devise controls to lessen the risks connected with the dangers once it has recognised them. Safe work practices, engineering and administrative controls can all be included in these measures. It's crucial to bear in mind that no one control will be ideal, so you'll need to combine many measures to keep employees secure. After all of these controls have been implemented, it's crucial to periodically examine and update them. The dangers related to workplaces and processes will alter as well. You can make sure that your employees are always safe by routinely checking your controls.

Employees Training:

One of the most crucial facets of process safety management is employee training. In order to perform their job obligations safely, all personnel who work with hazardous products or in hazardous environments must get the necessary training. The following subjects should be covered in training:

- The risks associated with the materials or methods used.
- The unique risks connected to your place of employment.
- How to handle dangerous materials safely.
- -Actions to do in case of emergency.

EFFICIENT HOUSEKEEPING PRACTICES AT CRUDE OIL REFINERIES: ENSURING SAFETY AND OPERATIONAL EXCELLENCE



Atiq-ur-Rehman **OPERATIONS**

Housekeeping plays a crucial role in maintaining a safe and efficient working environment at crude oil refineries. The hazardous nature of refinery operations makes it imperative to uphold stringent housekeeping standards. 5S Plan

Sort

Shine

may be used for maintaining good housekeeping that is sorting, straightening, shining, standardizing and sustaining.

·Safety First: Safety is the top priority in any refinery setting and proper housekeeping is a fundamental aspect of ensuring a secure workplace. Oil refineries handle flammable materials, toxic chemicals and high-pressure equipment, making the need for a clean and organized environment critical. Regular cleaning of workspaces, equipment and walkways reduces the risk of accidents, spills, and fire hazards, contributing to the overall safety of the facility.

Environmental Compliance: Crude oil refineries are subject to Standardise stringent environmental regulations. Effective housekeeping practices help to prevent spills and leaks that could lead to environmental contamination. Regular inspections, prompt cleanup of spills, and proper disposal of waste materials are essential to ensure compliance with environmental

standards. Implementing eco-friendly cleaning practices further demonstrates a commitment to environmental stewardship.

·Equipment Reliability and Efficiency: A well-maintained and clean refinery environment positively impacts the reliability and efficiency of equipment. Dust, debris and contaminants can compromise the performance of machinery and lead to breakdowns or inefficiencies. Regular cleaning and maintenance routines for equipment, such as pumps, compressors and heat exchangers, contribute to optimal operational performance and reduce the likelihood of unplanned downtime.

Prevention of Corrosion and Degradation: The harsh operating conditions in crude oil refineries, including exposure to corrosive substances, make equipment susceptible to corrosion and degradation.

· Emergency Preparedness: Effective housekeeping is crucial for emergency response preparedness. In the event of a spill, leak, or other emergencies, a well-organized and clean facility allows emergency responders to navigate the area safely and respond promptly. Marked evacuation routes. accessible emergency equipment, and trained personnel are essential components of an

Set up 5S Steering Committee

Develop 5S Implementation Plan

Implement 5S

arate unnecessary from necessary items and remove unnecessary items.

- Discard items that are clearly no longer of use.
- Evaluate items that are potentially unneccesary.

Organise for better workflow and store items for easy retrieval.

- Arrange necessary items for better workflow.
- Create visual order.

Keep workplace clean, tidy and in good condition.

- Determine target areas for cleaning or inspection.
- Assign cleaning or inspection duties. Establish a cleaning or an inspection method.
- Carry out cleaning or inspection.

Create standards to make Sort, Straighten and Shine a habit.

- Set up Sort, Straighten and Shine (S³) duty chart. Develop S³ standard operating procedures. Establish the S³ operating standard.

Maintain 5S standards and implement initiatives to sustain 5S activities.

- Establish and implement a 5S internal audit system.
- Implement 5S initiatives for continued employee engagment.

effective emergency response plan that is supported by good housekeeping practices.

Conclusion:

Housekeeping is an integral part of maintaining a safe, environmentally compliant and efficient crude oil refinery. The benefits of effective housekeeping extend beyond safety, influencing equipment reliability, environmental sustainability and emergency preparedness. Refineries that prioritize and invest in robust housekeeping practices not only safeguard their workforce and the surrounding environment but also contribute to the overall success and longevity of their operations.

ARL UP-GRADATION PROJECT



Naveed Ahmed TS, P & D

In order to remain competitive and achieve higher product standards (Euro V specifications) for Premium Motor Gasoline (PMG) and High-Speed Diesel (HSD), ARL intends to execute an upgradation project which includes a new Continuous Catalyst Regeneration Reformer

(CCR) unit, its allied facilities and revamp of some of the existing units.

Project overview: The project comprises the installation of new process plants, the revamp of existing units and the installation of utility, auxiliary and offsite units. This includes:

i) CCR Complex which will consist of a Naphtha Hydro-treating Unit, a CCR Unit, an existing Semi Regen Reformer Unit revamping to Par-Isom Unit, and an existing Penex Unit revamping to Penex Plus Unit (collectively "CCR Complex"), resulting in a high-octane PMG pool, meeting Euro-V specifications. The Basic Engineering Design Package (BEDP) of CCR Complex is prepared by Honeywell UOP, USA.

ii) The existing Diesel Hydro-treater Unit (DHDS) is a 12,500 BPSD unit that was originally designed to produce 500 ppm sulfur in HSD.

DHDS will be revamped to produce HSD with a maximum Sulfur content of 10 ppm at 110% of the current design capacity. BEDP of DHT Revamp is prepared by Honeywell UOP, USA.

iii) A new Kerosene Hydrotreater for the production of Kerosene/Jet Fuel having 10 ppm max Sulphur.

iv) Offsites and Utilities upgradation as per new requirement.

Project Update:Basic Engineering Design Package for CCR Complex (including new and revamped units) and DHDS Revamp is complete. The consultant was engaged for the preparation of the Tender Document for project Front End Engineering Design (FEED) and Project Management Consultant (PMC) services. The consultant also assisted in shortlisting and pre-qualification of the potential international contractors for the FEED and PMC work.

The Tender document has been prepared by the consultant and reviewed by ARL. It will be sent to the pre-qualified companies for their bids.

Petroleum Policy & Agreement with OGRA

Government has approved petroleum policy providing the framework for the execution of refinery upgradation projects. In this regard, an Upgradation Agreement under the policy is being negotiated for finalization.

SPENT CAUSTIC MANAGEMENT



Syed Viqar-ul-Hassan OPERATIONS

Caustic Solution (Sodium Hydroxide dissolved in water) of 12% strength is used at the Merox plant for the removal of undesirable Mercaptans (compounds of Hydrocarbons with Sulfur) in Naphtha and Kerosene products. After treatment of these

products, the spent caustic contains hazardous chemicals like Phenols and Sulfur-containing compounds that have bad odor and possess high pH. A Spent caustic treatment facility is installed at the Merox unit. This facility is indigenously designed at ARL. Its purpose is to remove Phenols and neutralize pH, so that the treated spent caustic is safe for draining towards Effluent Treatment Plant (ETP).

Following processes are used to treat spent caustic:

1)Deep Neutralization: 98% concentrated Sulfuric acid (H₂SO₄) is added to the spent caustic in a specially designed rubber-lined reactor vessel, where pH is maintained at 3.

2)Steam Stripping: Steam is injected into the reactor vessel to increase its temperature up to

60 °C. This step removes Sulfur-containing compounds causing bad odor.

3)Fenton Process: Oxidation of phenols is carried out with Hydrogen Peroxide (H_2O_2) in the presence of Iron Sulfate $(FeSO_4)$ catalyst. Phenols are decomposed and reduced to 0.3 ppm.

The Issue of Delay in Spent Caustic Treatment:

Disposal of the spent caustic batch was taking several weeks. Accumulated spent caustic was causing space issues for upcoming batches and backlog at the Merox plant. Following steps were taken to resolve this issue:

➤ Purity and efficacy of the oxidizing agent (H₂O₂) chemical under use was found drastically reduced, as it decomposes on exposure to heat and light. Its dosing rate was increased and fresh chemical was introduced to achieve the desired results.

➤ Concentrations of FeSO₄ and H₂O₂ were optimized and fresh batches were prepared.

After these adjustments, more than seven batches of spent caustic were treated successfully. Environmentally compliant effluent, qualifying phenol and other tests, were released towards Effluent Treatment Plant.

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