National Petrochemical Industrial Co.

Redefine, Reshape, Reinvent

Reshape Today to Reinvent Tomorrow







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MESSAGE FROM THE CHIEF EXECUTIVE OFFICER - CEO

- The way we look at responsibility and sustainability stems from an inner belief in our obligation to society, we believe that corporate entity should give back to society. Businesses are all a part of society, so we at NATPET feel an obligation and a responsibility to make things better for everyone. By acting on that, we are simply showing gratitude to the society we are living in.
- The legacy we want to leave is the idea that businesses and individuals have to strive to improve society. For instance, I have seen our employees engage and volunteer to clean old city and the sea bed of Jeddah. It was very exciting for me to see that our employees are motivated, without any financial reward, to participate in activities for the benefit of society. At NATPET, in terms of sustainability, we have focused on environmental issues so far because of the strength of our knowledge base in this area. However, I want to see the company expand beyond environmental challenges and embrace social and economic-related sustainability issues, we are always thinking about what else we can do. This is the legacy we want to leave to continue our responsibility to society in the best way that we can.



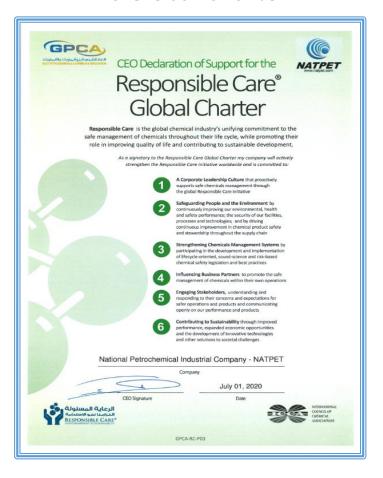


Management Commitment

UNGC Declaration



RC Global Charter



QEHSS & Responsible Care Policy





Vision and Mission

Vision

 NATPET aims to be one of the major global players in the production and selling of top quality Polypropylene and polypropylene derivatives.

Mission

 NATPET strives to become a company of preferred choice in relation to its customers, employees, suppliers, society and stakeholders.

TQM Strategic Goals & Measures (2021)

SAP Success Factor Perspective	Strategic Objectives 2021
Finance	 Managing cost with high efficiency and productivity.
Customer	 To meet and exceed customer's expectations related to product and associated services. Complying GPCA requirements for Responsible Care.
Process	 Improving core business processes through process redesigning innovation and continually improving QEHSS systems.
People	 Engagement and development of young talents through continuous feedback and support.



NATPET At A Glance

National Petrochemical Industrial Co. NATPET is a producer of 400,000 MT/ year propylene / polypropylene plant located at city of Yanbu on the west coast of Saudi Arabia. This Plant produces a wide range of polypropylene grades mix of (Homo-polymer & Copolymers) to serve diversified market segments, such as, rigid and flexible packaging, fiber, raffia, consumer goods, automotive, electrical appliances, medical, civil, infrastructure & many other applications.





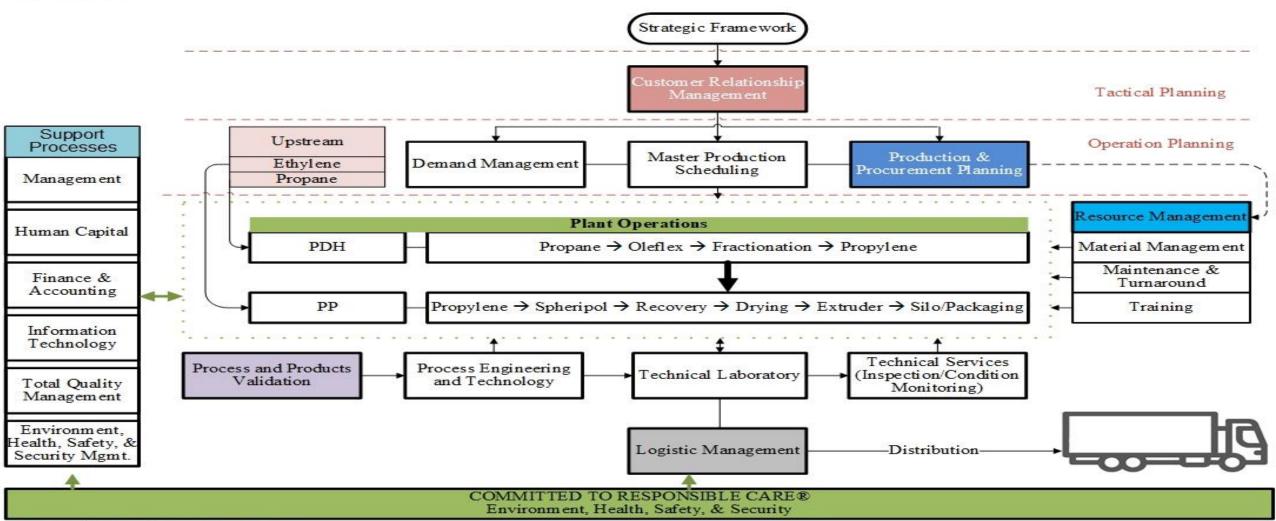


90 Countries

400,000 MT Capacity



NATPET Process Chain



File Ref: TQM/Process flow/NATPET Process Chain.vsdx





TQM/Sustainability Achievement









lyondellbasell Polypropylene Technology Licensor - Spheripol Process

2008

Established Quality management system ISO 9001:2008, certified by SGS

2011-12

Established lab management system ISO 17025 :2005 accredited by DAC/GAC

2009

Established Environment management system ISO 14001, certified by SGS.

2013-15

NATPET Stood 1st Position in King Khalid Award CSR Arabia and other international awards

2010

Established Safety management system OHSAS 18001:2007 certified by SGS Achieved REACH registration

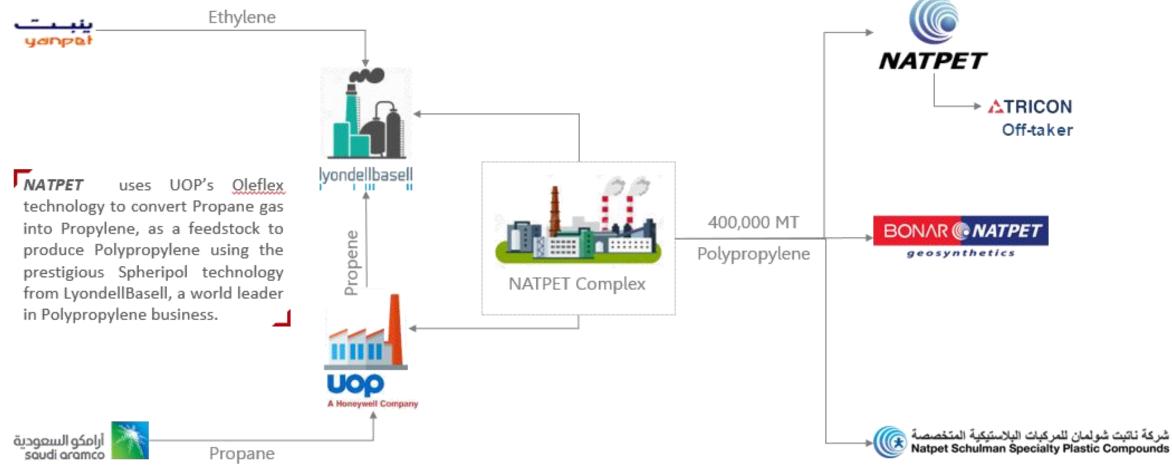
2016 -2018 onward

Established Responsible care management system RC14001 2015 and revised all applicable standards





NATPET Value Chain

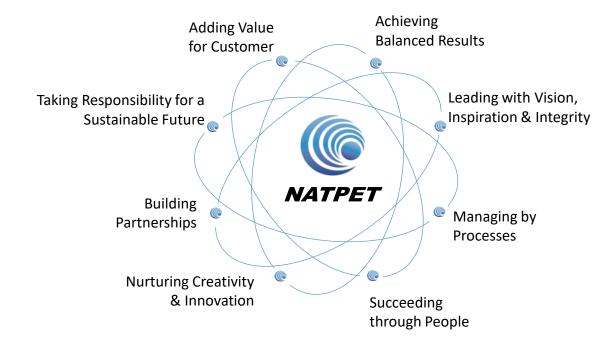


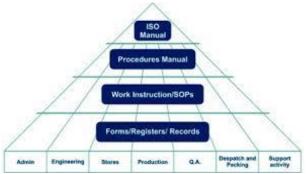




NATPET TQM - Management Systems

- TQM processes are aligned with EFQM & "KKA RC Award 6 Core Areas"
- Objectives are set, cascaded down the level, KPIs are defined and monitored through Balance Score Card
- NATPET Management System is managed through strategically aligned processes using fact-based decision making to create balanced and sustained results.
 - In total we have more than 850 documented procedures.
- NAPET Identity Guidelines Manual (in practice)
 - To maintain our standards and ensure that all communications will follow one protocol in line with NATPET corporate image
- NATPET Level of Authority (in practice)
 - To ensure the efficient operation of NATPET by implementing proper controls through the appropriate approvals and delegation of authority required for various transactions and activities



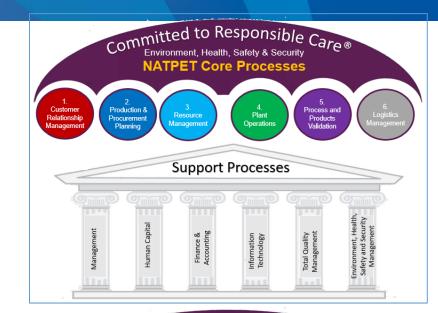




NATPET Management Systems Excellence

- NATPET Management Systems based on TQM Philosophy "Do the right things right, right the first time, every time and all the time"
- TQM processes are aligned with "EFQM Model and KKA RC Award requirements"
- NATPET Management System is managed through strategically aligned processes using fact-based decision making to create balanced and sustained results.
 - In total we have more than 647 documented procedures.
- Objectives are set, cascaded down the level, KPIs are defined and monitored through Balance Score Card
- Business model is centered around the principles of sustainable development defined by three pillars:
 - 1. People /Employees & Community

Profit / Economics





Commitment to Good Governance

NATPET Sustainability Programs

NATPET UNGC Declaration

NATPET submitting Communication on Progress COP since 2014.

GRI Reporting Sustainability, Key Stakeholder & Material Issue International Certifications

- 1. ISO 14001:2015 Environment Management System
- 2. ISO 9001:2015 Quality Management System:
- 3. RC 14001:2015 Responsible Care Environment, Health, Safety, Security Management System
- 4. OHSAS 18001:2007 Health & Safety Management System
- 5. ISO 17025:2005 Laboratory Accreditation Certificate
- 6. ISO 22000:2018 Food Safety Management System
- 7. ISO 27001:2013 Information Security Management System*
- 8. ISO 22301:2012 Business Continuity Management System*
- 9. ISO 50001:2011 Energy Management System*
- 10. *Certification expected by June 2021.















Core Area 1

Building a Nationally Competitive Workforce





HR Mission Statement

 We strive to recognize and support the staff and community by being sensitive and culturally aware. We also strive to balance competence in the technical aspects of our work with sensitivity to the individual needs and situations of staff, keeping the bigger picture in mind as we administer the details.

Equal Opportunities Policy

- NATPET is committed to provide equal opportunities and to avoid unlawful discrimination in employment. Striving to ensure that the work environment is free of harassment and bullying and that everyone is treated with dignity and respect, which is an important aspect of ensuring equal opportunities in employment.
- Clarifications:
- It is unlawful to discriminate directly or indirectly in recruitment or employment because of age, disability, sex, pregnancy, maternity, race, religion or belief.



NATPET Employees Benefit

- The company provides all benefits as mentioned in labor law in addition to that NATPET provide:
- Life insurance 36 Monthly basic salary
- Bonuses,
- Merit salary increase,
- Education Allowance,
- Full medical coverage,
- Special Leaves (Hajj, Maternity, Paternity, Marriage, Etc.) according to Labor law.
- Housing and Transportation allowance
 - (Minimum 18,000 for bachelor and 25,000 for married or 3 basic which ever higher),
- Examination Leave, Emergency Leave,
- Business Trip and per-diem, Compensatory time off (Thursday), Social Gathering,
- Ramadan Gift, Performance award, Training courses in-house & external
- Recreation Club Membership
- Al-Nakheel Holiday Program





Human Resource Documents

- Organization Structure Manual:
- Compensation & Benefit Manual:
- Salary & Administration Manual:
- PMS & carrier Development Manual:
- HR policy Manual:
- Recruitment & Selection Manual:



- Human resource is providing ESS services through out the organization to fulfill the level of employee satisfaction.
- Employee Suggestion Scheme Innovation



Employee Self Service (ESS) for Employees





Sustainability Programs



Young workforce are more technological oriented & lead the digital revolution"

Training and Career Development

NATPET Partnership with NGOs

NATPET and Al Nabta Collaboration provides services and products that contribute to **sustainable development**.

Waste Free Environment - WFE

Waste Free Environment aims to promote recycling and to raise awareness on responsible litter disposal, aims to change people's attitude and mindsets towards litter disposal and raises the need for communities to respond to environmental issues.

Developing Leaders of Tomorrow – LoT

Leaders of Tomorrow is an initiative launched by GPCA, aims at building the local human capital in the region, bridging the gap between academia and the industry





Ethics and Protection

Whistleblowing Policy

- Introduction:
 - This policy applies to all employees of the NATPET, other individuals performing functions in relation to the NATPET, such as service providers and contractors, are encouraged to use it.
 - It is important to the business that any fraud, misconduct or wrongdoing by staff of the NATPET is reported and properly dealt with. The NATPET therefore encourages all individuals to raise any concerns that they may have about the conduct of others in the business or the way in which the business is run. This policy sets out the way in which individuals may raise any concerns that they have and how those concerns will be dealt with.
- Summary:
- The NATPET provides protection for workers who raise legitimate concerns about specified matters. These are called "qualifying disclosures". A qualifying disclosure is one made in the public interest by a worker who has a reasonable belief that:
- a criminal offence;
- a miscarriage of justice;
- an act creating risk to health and safety;
- an act causing damage to the environment;
- a breach of any other legal obligation; or
- concealment of any of the above is being, has been, or is likely to be, committed.
- It is not necessary for the worker to have proof that such an act is being, has been, or is likely to be, committed a reasonable belief is sufficient. The worker has no responsibility for investigating the matter it is the NATPET's responsibility to ensure that an investigation takes place.
- A worker who makes such a protected disclosure has the right not to be dismissed, subjected to any other detriment, or victimised, because he/she has made a disclosure.
- The NATPET encourages workers to raise their concerns under this procedure in the first instance. If a worker is not sure whether or not to raise a concern, he/she should discuss the issue with his/her line manager or the HR department.



Training and Career Development

Vision

To equip NATPET employees with the best training to meet Company Targets/Goals.

Impact of Training on NATPET Economic Performance

- NATPET invests in skills to prepare economies and labor markets for the demand and changes of increased global competition.
- NATPET also offers training opportunities and create learning potential and became learning organization in which workers have the opportunity to develop professional and social competences through peer learning.
- Investments in training have a positive and significant impact on NATPET economic performance indicators.

Mission

To help NATPET employee be the best among the leading competitors in Petrochemicals industries.

Benefit in investing Training

- Enhancing employees competencies
- Increase and Improve:
 - Quality of People
 - Quality of Products
 - Productivity: Achieved Targeted Plans
 - Cost: Eliminate/Reduce Equipment Failure and Downtime
 - Material Flow: Eliminate Spare parts Shortage/Over Stocking
 - Safety: Safe Working Environment, Procedures and Process
 - Man Power: Control Turnover/Successful Succession Plan



Coop Training Program (Batch 26 January 2020)

Social Responsibility and Responsible Care, Successfully completion of Coop Training Program

Sn	Name	Major	Specialty	College	Duration	From	То	Degree	Department	Sup'v Name
1	Amer Haroon Bokhari	Electronic Technology	Instrument	YIC	14	26-Jan-20	23-Apr-20	Diploma	Instrument	Yaser Basahal
2	Sami Morshid Al-Bothaili	Electronic Technology	Instrument	YCAT	14	26-Jan-20	23-Apr-20	Diploma	Instrument	Yaser Basahal
3	Abdullah Jasser Alqoraish	Production Tech	Mechanical	YCAT	14	26-Jan-20	23-Apr-20	Diploma	Inspection	Ali Ahmed
4	Abdullah Rowaisi	Production Tech	Mechanical	YCAT	14	26-Jan-20	23-Apr-20	Diploma	Mechanical	Abdulaziz Al Hazmi
5	Ahmed Al-Hindi	Production Tech	Mechanical	YCAT	14	26-Jan-20	23-Apr-20	Diploma	Mechanical	Abdulaziz Al Hazmi
6	Abdulrahman Al-Madani	Mechanical Technology	Mechanical	YIC	14	26-Jan-20	23-Apr-20	Diploma	TPID	Abdulrahman Safar
7	Bander Al-Nazawi	Software	IT	YCAT	14	26-Jan-20	23-Apr-20	Diploma	IT	Irfan
8	Mohammed Al-Mowalad	IT Support	IT	YCAT	14	26-Jan-20	23-Apr-20	Diploma	IT	Irfan
9	Fayez Al-Farsi	Supply Chain Management	Supply chain	YIC	14	26-Jan-20	23-Apr-20	Diploma	Procurement	Hamza Jarad
10	Ahmed Fareed Abdo Hassan	Accounting	Finance	YIC	14	26-Jan-20	23-Apr-20	Bachelors	Accounts & Budgeting	Majdi Damrah

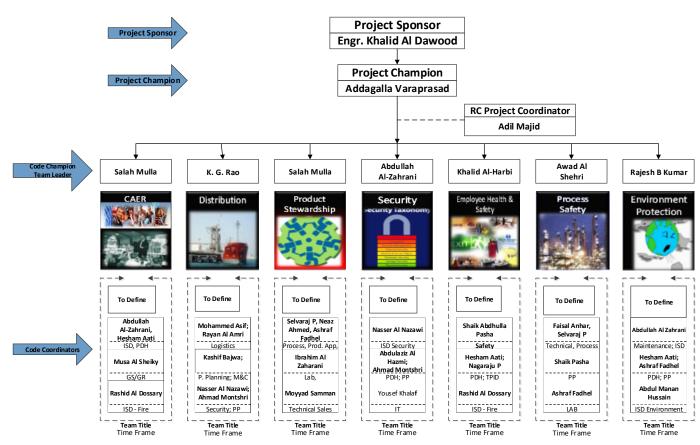




Committed to Responsible Care

NATPET Representation in GPCA

NATPET Responsible Care® Committee Members



- NATPET has representation in:
 - GPCA Responsible Care Committee
 - RC Code Committee
 - International Trade



Commitment on Responsible Care

Responsible Care® is an ethic by which the global chemical industry has pledged to conduct its business.

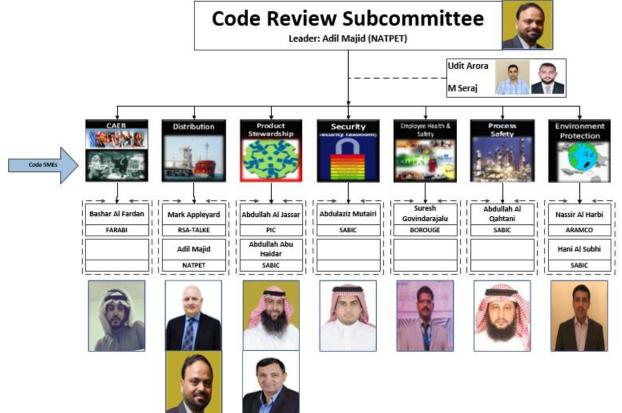
Responsible Care® is a worldwide performance improvement initiative based around agreed-upon features

"Do the right thing and be seen as doing the right thing

GPCA – Responsible Care Committee
NATPET – TQM is the team leader for
responsible care code committee and
revised codes of Practices Jan 2018
Implemented at NATPET









NATPET HSE STATISTICS YTD (August 2021)

NATPET HSE STATISTICS - AUGUST 2021:

Highlights:

Highlights:

- 112,099 safe man hours for the month and 5.17 million safe manhours since last LTI.
- 1063 Safe Work Days, since the last Loss Time Incident (LTI) 02-Oct-2018.



A) Manufacturing KPI related to ISD – Monthly Review – August' 21

Goals	KPI	Target	August'21	YTD
	Loss time incident (LTI) / Major incident	0	0	0
Achieve a performance	First aid cases	< 3	0	1
that meets industrial standards for	Oil/Chemical spillage incidents	1 per month	0	0
Occupational Health,	Minor fire incidents	4	0	1
Gas Leak, Fire,	Unintended flaring	< 10	0	1
Spillage, and Emissions.	Work permits to be audited, 5 weekly/plant (by cross-discipline Sr. Managers) (50 PTW audited in Aug 2021)	5	6.25	6.10





Core Area 2

Innovating Solutions for Sustainable Development





Waste Free Environment - WFE

- Waste Free Environment aims to promote recycling and to raise awareness on responsible litter disposal, aims to change people's attitude and mindsets towards litter disposal and raises the need for communities to respond to environmental issues.
- During the annual NATPET Waste Free Environment campaign, which takes place between February and March, responsible and enthusiastic NATPET volunteers, various organizations, community members and educational bodies, join hands and engage in campaign activities to dedicate their time back to their environment.
- WFE focuses on the 3 R's: Reduce, reuse and recycle.
- NATPET initiated WFE program since 2014.

Date Feb 25th, 2018	Site Makarem Annakheel Village/ Beach, Jeddah	Activities Beach Clean Up Park/Community Area Clean Up Awareness to Schools Children		
Item Number of People attended	Number 600 Plus	Comment Government officials and public		
Number of divers attended	60	In two shifts 09:30 & 11:00		
Number of Schools	Three	 Al FALAH school Prince Bandar bin Abdul-Aziz school Umar Farooq School 		
Number of Universities	None			
Amount of Waste collected (kg)	806	 437 kg of plastic related waste such as chairs, bottles, fishing ropes, 215 kg metal waste (cans, steel wires, iron rods etc.) 154 kg rubber related and other materials 		
VIPs (Kindly List the Names)	 H.E. Waleed Suliman Alhejaili - (Director General of General Authority of Meteorology and Environment Protection Mr. Mohammed – King Khalid Award Association 			





Developing Leaders of Tomorrow – LoT

- Leaders of Tomorrow is an initiative launched by GPCA, aims at building the local human capital in the region, bridging the gap between academia and the industry. Leaders of Tomorrow is considered as the first official collective step where industry stakeholders collaborate in shaping skills and preparing the future industry leaders with the required skills set.
- NATPET is an active member in sponsoring students to attend the GPCA yearly conferences. Each conference will cater to the participating students by encompassing an element of the initiative in the form of a seminar, workshop, roundtable and site visit.

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SPECO LEADERS OF TOMORROW	F
OF TOMORROW	Ctuc



Year	# of Students Sponsored	Institutions	No. of Programs
2017	9	KFUPM; KKA; KAUST	4
2018	13	KFUPM; KKA; KAUST	5
2019	8	KFUPM; KKA; KAUST	3
2021	4	KKA; KFUPM	2



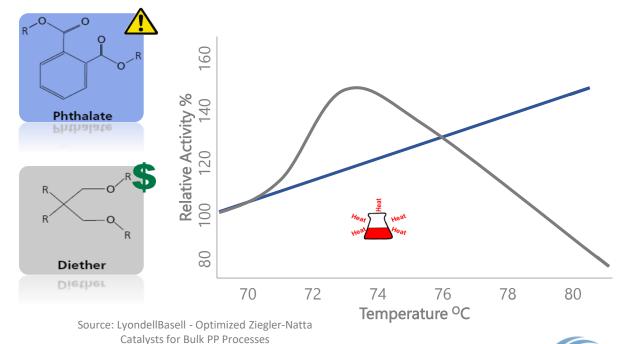




Product, Service and Process Innovation

- Optimized Ziegler-Natta Catalyst for PP process
- Diether Donor Catalyst For Better Environment
 - The behavior of a catalyst in a bulk reactor is mainly determined by the internal donor that is used to make the catalyst.
 - Changing to Diether based catalyst was part of NATPET R&D practice even before LYB implementation on their Spheripol plants.
 - The following are some of the result of using Diether catalyst:
 - NATPET is one of the first plants in the world using Phthalate free catalyst even before the license provider.
 - Innovation in fiber process by introducing Phenol free fiber as the first Spheripol plant in the world.
 - Biaxially oriented polypropylene BOPP enhancement due to diether based catalyst.



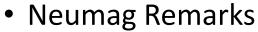






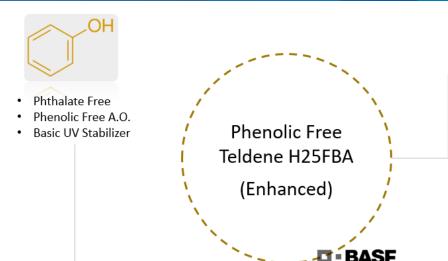
Product, Service and Process Innovation

Phenol Free Fiber



Numag is the worldwide market and technology leader for complete plants

 Neumag asked NATPET to be the reference material in their trials for phenol free products.



Benefits:

- Eliminating yellowing and discoloration issues
- Durability under UV light
- Matching the developed new regulatory compliance
- Slight enhancement in physical properties





During all the trials the new NATPET PP grade showed a good performance and enables to run the processes faster than the guarantee speeds for the S+ machine for these products. With the coarser 10dpf product the only





Product, Service and Process Innovation

- NATPET is the first healthcare and medical grade producer in the middle east and Africa.
- Optimization Trial Plan:
 - Run the new resin with the same parameters of old resin
 - Optimize the temperature with the new resin
 - Optimize the cycle time with the new resign
- Evaluation of the trial setting:
 - Energy was measured and recorded for the three above steps
- Al Shifa were able to increase the production capacity from 780 million syringes/year to 904 million syringes/year



	RESULTS C	DBTAINED	
20			
15	16.30%	16.83%	
10			
8	<u> </u>		
4	Savi	roductivity	
2	r g y	duct	
0	=======================================	2	

COMPARISON						
Resin	Peak Barrel Temp (°C)	Cycle Time (s)	Specific Energy (kWh/kg)	% CO ₂ Emissions Saved/ ton PP		
Traditional resin	245	20,8	1,1613	-		
NatPet R40MLT-MG	210	20,8	1,1507	0,9		
NatPet R40MLT-MG	210	17,3	1,0324	11,1		







Core Area 3

Empowering Local Suppliers





Responsible Supply Chain Management

- Shorter Procurement Cycle Encouraging Local Sources.
- Developing Local Suppliers as a business partner.
- Zero waiting hours, with competitive prices & quality.
- Developing contractors and sponsoring in various conference SQAS LSP.
- Suppliers assessment and evaluation are effectively followed.
- NATPET Standard Terms & Conditions include:
 - Article# 12.3 & 12.4 specifically in order to obtain commitments from Suppliers on EHSS & Pollution issues.
 - Article# 12.6 speaks of 'Social Obligations'.
 - Article# 18 encourages preference of National Products/Resources.



Core Area 4

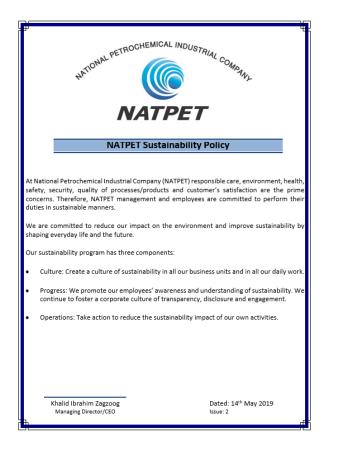
Making a Commitment to Good Governance and High Quality





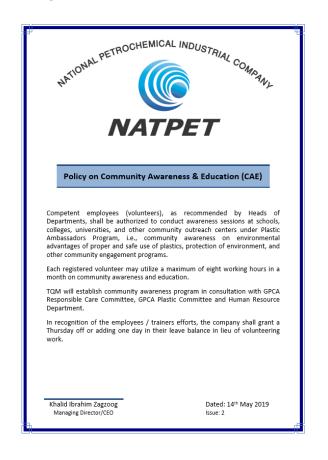
Commitment to Good Governance

NATPET Sustainability Policy



Community Awareness & Education Policy









Sustainability, Key Stakeholder & Material Issue

Our List of Key Stakeholders

- Shareholders.
- 2. Customers.
- 3. Employees.
- 4. Government.
- 5. External Organizations e.g. GPCA.
- 6. Local Community.
- 7. Suppliers and contractors.
- Distributors.
- 9. Banks.
- 10. Academic and Non-Profit Organizations.
- 11. Media.

Our List of Material Topics

- 1. Health and safety.
- 2. Waste management.
- 3. Customer satisfaction.
- 4. Business continuity.
- 5. Product quality.
- 6. Anti-corruption.
- 7. Financial performance.
- 8. Corporate Governance.
- 9. Education and training.
- 10. Labor rights.
- 11. Protecting the environment.
- 12. Sustainability.
- 13. Corporate social responsibility.
- 14. Reputation.
- 15. Energy consumption.
- 16. Raw materials & resources.



Commitment to High Quality

- RC 14001:2015 Responsible Care Environment, Health, Safety, Security Management System
- ISO 14001:2015 Environment Management System
- ISO 9001:2015 Quality Management System:
- OHSAS 18001:2007 Health & Safety Management System
- ISO 17025:2005 Laboratory Accreditation Certificate
- ISO 22000:2005 Food Safety Management System
- ISO 27001:2013 Information Security Management System*
- ISO 22301:2012 Business Continuity Management System*
- ISO 50001:2011 Energy Management System*
- *Certification expected by Oct-Nov 2018

- NAPET Identity Guidelines Manual (in practice)
- To maintain our standards and ensure that all communications will follow one protocol in line with NATPET corporate image.
- NATPET Level of Authority (in practice)
- To ensure the efficient operation of NATPET by implementing proper controls through the appropriate approvals and delegation of authority required for various transactions and activities.















Financial Excellence

- NATPET maintains highly transparent systems for the availability of information, disclosure and reporting. The Management prepares and present fairly, the financial statements of the company in compliance with the International Financial Reporting Standards (IFRS), that are endorsed in the Kingdom of Saudi Arabia and other standards and pronouncements issued by SOCPA, and the applicable requirements of the regulations for Companies and the Company's By-laws.
- The company's financial statements comprise the following:
 - The statement of Financial Position
 - The statement of Income
 - The statement of comprehensive income
 - The statements of changes in equity
 - The cash flow statement
 - And the notes to the financial statements, which include a summary of significant accounting policies.
- It is important to disclose the true condition of the company conveying the financial state to the shareholders and investors.
- NATPET financial accounts are being audited by one of the Big 5 Accounting Firms were





Charity & Donations









Quality Assurance

NATPET ISO 17025 Accredited Lab

- NATPET Lab is a certified ISO/IEC 17025 testing laboratory.
- This ISO Quality System is deemed necessary to ensure the technical competence in testing and reporting results for customers' satisfactions



Compliance to International Standards

- NATPET Lab is committed to keep the testing quality as per the international highest standards.
- Major Test Methods are being reviewed and updated with the latest ASTM, ISO and Basell standard methods.









Proficiency Testing Performance Verification

- NATPET Lab ensures the testing performances of every personnel is on a par with the other laboratories through ASTM Proficiency Testing Programs (PTP).
- The reliability of the equipment and the lab personnel doing the tests are competent.





The ASTM to send two
 PP samples to all
 participating laboratories
 for analyses.

3. The ASTM statisticians to evaluate all submitted results in two test method categories (ASTM & ISO) The participating laboratories to test two samples and submitted results back to The ASTM.



American Standard For Testing and Materials (ASTM) Proficiency Testing Program



Career Development Training Plan

General Awareness

- Newly hired personnel will undergo lab safety awareness and do observations of all lab activities
- Deeper Understanding
 - Then, they will be given technical knowledge and test familiarizations.
- Beginning Skill Development
 - When ready, they will start performing actual routine analyses under strict supervisions of lab supervisors and mentors in 3 labs (Utility, PDH & PP) on rotational basis
- Advanced Skill Development
 - Two qualified mentors are assigned to evaluate their acquired skills and so to carry out further for their progressive career advancements.
- Master Status
 - Everyone is encouraged to acquire mastery and to pass on (teach) their expertise to the others.





Tests



Energy Management

- Process Engineering & Technology Department:
 - Monitoring Energy consumption and advising Technique to end user to keep with in targets
 - Monitoring Resources (Utilities) and Optimizing with the help of end users
 - Monitoring critical equipment forecast that lead to TA and SD advising users
- NATPET Strategy to Reduce utilization of resources:
 - Utility supply agreement amendment have done with the suppliers in order reduce Utilities and Power.



Energy Policy

National Petrochemical Industrial Company (NATPET), is committed to sustainable growth, based on our principles of integrity, quality, safety, social, Responsible care and environmental responsibility. The management has set up an energy policy to have our clear vision and direction to improve our use of energy as the energy plays integral part of our principles. Our goal is to output the best quality product at the least consumption of energy while increasing the value of our product.

In order to achieve our objectives and targets, the management of NATPET operates under the enhanced energy management system (hereinafter refer to as "EnMS") in compliance with the International Standard ISO50001, and with related legal and other requirements as the baseline.

- By operating effectively under EnMS, our objectives are:
- The management is to provide adequate resources for EnMS operation to achieve targets.
- The management is to provide information and necessary training sessions to the people of organization for an active operation as well as enhancing their skill.
- To understand the status of energy use and consumption for reviewing our energy situation to come up with energy conservation opportunities (ECO's).
- To plan action items based on ECO's and implement, review and improve.
- To introduce energy monitoring concept, PDCA cycle to be integrated in EnMS operation for gradual enhancement of real time monitoring and targeting practice.
- To derive the optimum energy consumption for each product we produce to operate under measurable energy performance indicator.
- 7. To prevent generating "MUDA (waste)".
- To tackle with problems or potential problems aggressively, for timely corrective actions and recurrence prevention.
- 9. To collaborate with our suppliers and customers for producing energy efficient products.
- 10. To conduct regular audits to verify compliance and to pursue continuous improvement.
- 11. To hold management review session at least twice annually to evaluate the progress and identify actions for improvement including reviewing this policy.
- 12. To communicate externally for updating our energy performance.

Targets:

 By defining the total energy consumption of our business year 2018 as the baseline, we aim to reduce by 3 % in the business year 2012. (CO2 reduction of ----- ton-CO2 and water consumption reduction of -----)

The Top Management has ultimate accountability for this policy. The Top Management delegates responsibilities for the implementation of this policy to EnMS team and TQM. All employees are responsible for understanding how this policy applies to them in their day to day activities.

April 2018

File name: EnMS-Policy draft.docx



Energy Management (To retain Energy in Targets)

- Daily monitoring of Imported sales gas consumption
- Yearly Steam trap survey to identity passing trap and attend
- Monitoring and stopping unwanted equipment, optimizing with advance control methods
- Streetlights switched off based on photocell and office lights are switched off by Employees before leaving offices (cultural change)
- Monthly Analyzing leading Turn around forecasted equipment's and take necessary steps to enhance the unit run length
- KPI for year 2019-2020 facility level to reduce utilities will be continued in year 2020-2021
- Analyzing and Modifying equipment which leads to longer shutdown and Turn around



NATPET – Customer Focused Organization

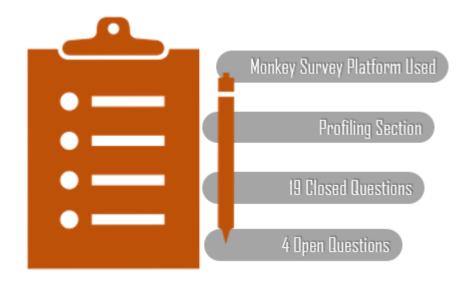
Customer Satisfaction Survey (CSS)

 The CSS was launched in 2016 by a Co-Joint effort from Product Application and Marketing Departments.

The purpose was to better understand our customers needs and to further improve our product and service qualities. It has been set as a biennial action.

- The survey was restricted to customers that have purchased from NATPET in the past two-years.
- No restrictions regarding origin of customer.
- CSS in figures:
- 150 customers contacted.
- 80 total respondents. (53.33% respond rate)
- 73 converters respondents, 7 traders respondents.
- Three major and two minor areas of improvement

LAYOUT OF SURVEY





Commitment to High Quality - Maintenance

5S Approach

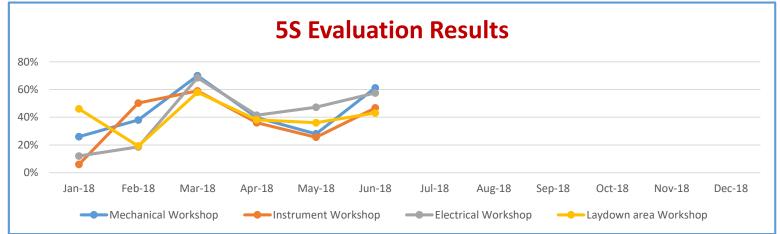
- The way of "learning by doing"
 - Approximately 20% by learning and 80% by doing.
- Application of principles on your work process
- Focused on immediate implementation
- Immediate tangible benefits

The Benefits of 5S

- Less waste (Improved Efficiency).
- Reduced space used for storage.
- Improved Maintenance.
- Improved safety.
- Better, more committed employees.
- Improved Quality.









Commitment to High Quality - IT

Information Technology 24/7

- NATPET IT researches and implement cost effective latest solutions that enhance the company ability to provide quality services for all employees of NATPET and JVs to operate successfully.
- Committed to provide:
 - Servers Management
 - Computing
 - SAP/ERP Systems
 - Telecommunications
 - Networking Infrastructure & Security
 - Technical Support
- Service Partners:







Innovative Solutions

- Skype for Business Integration with Cisco IP Phones and mobile devices
- Virtual Private Network
- Ability of Operating all IT Infrastructure Remotely
- PP Economical Grades Dashboard / What-If Analysis
- Migrating to cloud
- Improving Communication MS Exchange 2016
- Improving Intranet portal MS SharePoint 2016
- Dashboards:
 - Dashboards track progress & determine business performance and allow effective business analysis.



Commitment to High Quality - IT

Information Technology

- Committed to provide:
 - Servers Management
 - Computing
 - SAP/ERP Systems
 - Telecommunications
 - Networking Infrastructure & Security
 - Technical Support
- SAP Success Factor
- PI System Upgrade the Plant information Management system
- Virtualization
- Service Partners: Microsoft CISCO









Innovative Solutions

- Skype for Business Integration with Cisco IP Phones and mobile devices
- PP Economical Grades Dashboard / What-If Analysis
- Migrating to cloud
- Dashboards:
 - Dashboards track progress & determine business performance and allow effective business analysis.
- Information Security
 - Firewalls Cisco ASA and WatchGuard
 - Patch Management
 - **Vulnerability Testing**
 - Security policy and compliance
 - **Emergency Response Plan & Preparedness**
 - Risk Management
 - **Incident Management**
 - **Business Continuity**
 - Paperless: on MS SharePoint





Responsible Supply Chain Management

Responsible Purchasing Policy



Purchasing Strategy

- Shorter Procurement Cycle Encouraging Local Sources.
- Developing Local Suppliers as a business partner.
- Zero waiting hours, with competitive prices & quality.
- Developing contractors and sponsoring in various conference SQAS LSP.
- Suppliers assessment and evaluation are effectively followed.
- NATPET Standard Terms & Conditions include:
 - Article# 12.3 & 12.4 specifically in order to obtain commitments from Suppliers on EHSS & Pollution issues.
 - Article# 12.6 speaks of 'Social Obligations'.
 - Article# 18 encourages preference of National Products/Resources.

Recognition of Suppliers (Best Contractor Award Criteria)

S. No.	Criteria	Points	
01	Technical, Quality and other systems	20	
02	Schedule, Response, Delivery of Materials/Works	20	
03	Communication/Supervision, Cooperation & Attitude	20	
04	Safety, Environment & Security	20	
05	Documentation, Equipment, Tools & Procurement	20	
	Total Evaluation Points	100	





Core Area 5

Responsible Environmental Management

NATPET practices that contribute to the quality of environment on along-term basis.



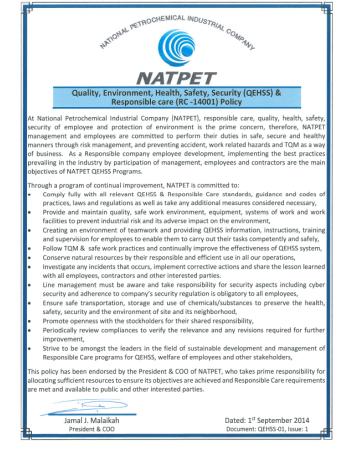


Environment Management System

- NATPET methodology on environment sustainability:
 - Management Commitment
 - External Reporting
 - NATPET Environment Initiatives
 - Environmental Management Programs











NATPET Responsible Care Committee Members – 2020/2021



External Reporting

- NATPET External Environmental reporting includes the to the followings:
 - Royal Commission Environmental Control Department
 - Annual Environmental Compliance to RC
 - Stack Emission Monitoring Reports
 - Presidency of Metrology and Environment
 - King Abdullah City of Science and Technology(KACST)
 - King Abdullah city for atomic and Renewable Energy (KACARE)
 - Gulf Petrochemical and Chemical Association(GPCA)









Environment Major Milestones

- Zero violation of Royal Commission Environmental Regulations 2015(RCER 2015) & Environmental permit to operate
- 100% compliance to set parameter for Industrial wastewater discharge to MARAFIQ IWTP(Industrial Waste water treatment/Recycling plant).
- 100% compliance of down stream Joint Venture Projects with their relevant Environmental permits
- No Groundwater contamination found as per groundwater sampling and laboratory analysis reports by the RC approved third party.
- CEMS(Continuous Emissions monitoring System) performance in Range with Emission range Set by RC for various Environmental air pollutants i.e. Co2,Cl2,Hcl,SOX, COX.
- Annual Fugitive Emissions performance in line with RC Regulations through GBN(Gulf Business Network) As Approved RC vendor.
- Plant Boundary Noise Survey Conducted and found in line with RC Regulations.
- No incident of leakage for radioactive sources and found in line with KACARE(king Abdullah city of atomic and renewable energy) regulations.
- Environmental Initiatives:
 - Energy Audit Saudi Efficiency program and classified amongst the best
 - Co2 Reduction program
 - Renewable energy program Balderrie Energies Gmbh.
 - The engineering and technical experts of the NATPET contribute in the way of proposing new materials, equipment modification, recycle/reuse of waste.



Protection of Environment from Ionizing Radiation

- NATPET have 29 radioactive sources in PP and PDH plant.
- There is no surface radioactive contamination in accordance with Saudi Arabian National Regulation during the wipe test conducted by third party.
- Comprehensive and detailed radiation protection management program for radiation workers and employees.
- Valid Practice License from concern regulatory authority of KACARE.



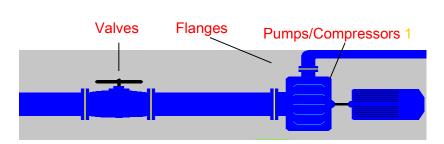






Environment Protection Programs

- Programs are implemented across the NATPET and monitored as per USEPA methodology
- Continuous emission monitoring of air pollutants
- Stack emissions monitoring
- Relative Accuracy test Audit of each online analyzer
- Fugitive emissions monitoring program
- Flare emissions monitoring and management.
- Re-use of NaHS solution as byproduct:
 - About 490 Ton NaHS solution re-used as byproduct saving SR 1.47 million.
- Hybrid System Implementation and Reduction of Water discharge:
 - Saving of approximately 30,000 cubic meter of process water per year.
- Third Party (SGS) Confirmation for Ground Water Quality









Monitoring

Reducing GHG

- Minimizing the C2 and C3 flaring by installing special cooler in GPR which will reduce carbon foot print and will save money by saving C2 and C3 burning.
- Flare Lost Optimization
- Catalyst Recycling Project
- Energy benchmarking
- Control valves/Enviro Seal Gland packing
- Installation of Cladding on Reactor Critical joints





Environmental Management Programs

- Industrial hazardous Waste Management Program
- Continuous Catalyst Regeneration Management Program
- Sale and Disposition of Sodium Hydrogen-sulphide Management Program
- Nuclear Gauges Management Program
- Natural Gas Management Program
- Wastewater and Electricity Management Program
- Ground water monitoring system
- Legal requirements for Royal Commission Environmental Regulations
- Noise monitoring management
- Air Quality management system
- Non contact cooling water management
- Process water management
- Industrial waste water management
- Illumination monitoring and industrial Hygiene monitoring program



Eco-profile of Polyolefins (HDPE AND PP) IN THE GCC

- Study was carried out in the years 2015 and 2016. The aim was to create an Ecoprofile for HDPE and PP producing the GCC. Eco-profiles assess the environmental impacts along the production chain from «cradle-to-gate».
- The following impact categories were taken into account for the assessment:
 - The climate change, ozone depletion, eutrophication, acidification, particulate matter formation, ionizing radiation, photochemical ozone formation, and resource depletion. Furthermore, primary energy demand and water use were investigated.

Impact category	Unit	Ethylene	Propylene Steam cracker	Propylene PDH/ Metat.	Propylene Prod. Mix	HDPE	PP
Global Warming Potential	kg CO ₂ eq.	1.21	1.25	1.88	1.51	1.70	1.95
Primary Energy Demand	MJ	73.5	74.9	89.8	81.1	77.8	86.6
Abiotic Depletion Potential, elem.	× 10-7 kg Sb eq.	1.05	1.35	6.14	3.34	1.11	3.74
Abiotic Depletion Potential, fossil	MJ	65.51	66.21	80.08	71.98	69.28	76.50
Acidification Potential	g SO ₂ eq.	2.86	1.55	2.09	1.78	3.82	2.94
Particulate Matter (PM10)	g PM10 eq.	2.30	1.63	2.20	1.87	3.25	2.91
Eutrophication Potential	g PO ₄ eq.	0.19	0.20	0.42	0.29	0.32	0.40
Ozone Depletion Potential	^{x10-3} g CFC11 eq.	0.21	0.22	0.41	0.30	0.34	0.40
Ionizing Radiation	g U235 eq.	2.48	2.87	5.73	4.06	7.38	8.36
Photochemical Ozone Formation	g C _s H ₄ eq.	1.15	1.10	1.54	1.28	1.82	1.84





Thank You





