

UPSTREAM SERVICE SOLUTIONS





Innovative chemicals to improve production

Oil and Gas exploration and production processes are highly complex and capital-intensive. Production companies face challenges related to cost structure swings, asset protection, safety, climate, geographic hazards and environmental constraints across the diverse conditions they operate in.

Veolia offers unique solutions that drive down lease operating expenses and minimise problems that threaten well profitability. We integrate chemicals, technologies, equipment systems, and robust versatile service support to provide a balanced approach to solving customer problems and maximising production efficiencies. We collaborate with your experts to optimise chemical usage, maximise uptime, objectively measure our performance, and ensure that we positively impact your balance sheet economics.

With over 160 years of operational and construction experience in water treatment, Veolia focuses on your field's future production and securing water injection. We understand the variability in the water requirement of the wells and have developed innovative approaches to reduce costs and enhance your results across the entire field lifecycle.

HYDREX PROTECTION

Veolia's comprehensive line of Hydrex™ performance chemicals provides effective protection for your water injection package and enhanced oil recovery challenges.

Our operational expertise drives the continuous improvement which separates Veolia as a leader in all its business activities. Our Hydrex technologies deliver the results you expect for your offshore platform to support your business objectives.

We are aligned with your needs to operate efficiently and cost effectively, while producing a quality product. Through our Hydrex chemicals, our goals are to maximize your production efficiency rates, protect your asset integrity and optimise life cycle costs while assuring that your overall operating expense is minimised.

HYDREX™ Water Treatment Chemicals

- Anti-Scalants
- Non Oxidising Biocide
- Membrane Alkaline Cleaners
- Membrane Acid Cleaners
- Scavengers Cl₂/O₂
- Coagulation Aid
- Custom blended products



OPERATIONAL EXCELLENCE

Veolia service solutions are designed to meet the performance and compliance demands of the O&G market. We unlock customer value by optimising the OPEX on the water treatment package while at the same time improving water availability. Through a dedicated customer approach combining Veolia Offshore & Onshore support, audits, selecting & optimising Hydrex product application, utilising our digital Aquavista platform we are able to demonstrate the value delivered to our customers generating annual savings of 30% up to 50% for water treatment chemicals volume and/or improve their uptime operation by 20%.



SUPPORT SERVICES

Veolia's technical team assists our clients 24/7 providing field problem resolutions to support engineering and operational decisions.

Our technical team are located globally and have validated experience in all aspects of O&G production, water treatment additives, oil & water treatment and injection management. We collaborate to evaluate, diagnose and assist our clients with the most cost effective solutions.

AQUAVISTA™ mitigates the operational risk, maximises the ROI and OPEX savings. From your operators to your management personnel AQUAVISTA™ provides a tool to efficiently manage water treatment plants with real time data and associated KPI's in conjunction with best practices on operation with continuous or on demand support from Veolia's technical team.



CHEMICAL SUPPORT SERVICES

Veolia supplies a comprehensive range of Hydrex water treatment additives that optimises the entire environmental footprint while reducing the overall supply chain and maintenance cost.

Our regulatory and compliance managers are always available to provide customers with the required support for any particular questions they might face on those topics.

Your local Hydrex representative contact is at your service for all your requirement as:

- On-site technical visits, assistance and services
- Complete audits of water treatment equipment & operations
- Optimised procedure for membranes CIP and others chemical related maintenance activities



EFFICIENCY

- Reduce total cost of ownership
- Reduce operating costs
- Guarantee performance
- Integrating best in class technology



YIELD

- Maximise productive uptime
- Increase production
- Unlock value from existing assets by Op's and construction experience
- AQUAVISTA™ digital offer
- Water quality - expertise to reduce fouling & scaling



CAPITAL OPTIMISATION

- Optimise cash flow
- Asset improving financing



LICENCE TO OPERATE

- Guarantee compliance
- Health & Safety
- Product compliant with O&G regulations



BRAND CSR

- Delivering CSR objectives
- Environmental footprint reduction

What to expect from Veolia

Our field team work closely with each customer to select specific products and devise targeted solutions that maximise water injection availability and improve your bottom line:

- On-site or off site surveys at each platform assessing your operational conditions and water treatment program to identify potential issues associated with the baseline.
- A technically robust improvement program is finalized and validated by Veolia engineering & service team.
- Client meeting to review the program, projected savings implementation strategy, development of KPI's indicators and assess sustainability impact.
- Development of a transition plan, including customised service program for each client to guarantee that asset integrity and production efficiency are achieved and maintained.

DESIGN & DEVELOP

On-site or Off-site survey
Continuous improvement plan & associated KPI's

Direct site or operational interface

Chemical, Service, Operational risk mitigation program development

VALIDATE & REVIEW

Economic & Technical modeling
Projected operational improvement plan & associated KPI's

DELIVER & PERFORM

Hydrex Chemicals, Aquavista, service program and associated KPI's review

Environmental & Personal Safety Program

Our seven safety elements are:

1. Management Commitment
2. Safety Responsibility and Accountability
3. Employee Involvement
4. Hazard Identification and Control
5. Accident Investigation and Reporting
6. Training
7. Planning and Evaluation

More than 179,000 global employees working in customer systems, Safety and Environmental Stewardship are at the core of every activity Veolia undertakes. Our GOAL is to conduct SAFE activities in a SAFE manner every day.



Our full range of UPSTREAM SERVICE SOLUTIONS



OFFSHORE

- Rota Support
- Adhoc Visits
- Shutdowns
- Operations Analysis
- Surveys
- Supervising
- Trouble Shooting



ONSHORE

- Real Time Digital Monitoring
- OPEX reviews
- Remote Monitoring
- Technical Support
- Performance Management
- 24/7 Hotline
- Operational Recommendations



START UP & COMMISSIONING

- Bespoke personnel for specific water injection system start up
- Full onshore technical support at start up
- Support for non Veolia designed systems
- Oversee new process plant through installation and start up



SPARES MANAGEMENT

- Stock control
- Regional warehousing
- Adhoc supply
- Shipping and Storage
- Predictive Maintenance
- Loyalty scheme



CARTRIDGE FILTERS

- Seawater Treatment System
- Produced Water Treatment Systems
- Custom Element Types available
- Filtration ranging from 0.1 to 100 μ - nominal and absolute
- Various end caps
- Low Pressure Drop
- Excellent Temperature /oil resistance
- Low Pressure Drop



ENVIRONMENTAL SERVICES

- Chemical cleaning
- NORM cleansing
- General Offshore Environmental work scopes
- Decommissioning
- Waste Management
- Mercury disposal



TRAINING

- Regional training centres
- Onshore training skid
- Bespoke Training
- Classroom plant familiarisation
- On-shore Practical training on key maintenance activities



ENGINEERING UPGRADES

- Lifecycle upgrades
- Study scopes
- Feasibility Studies
- Plant Enhancements
- RCFA's
- Operational Support
- Safety Reviews
- Risk Assessments
- Work Packs & Procedural modifications
- Job Card production



Resourcing the world

Veolia Water Technologies

Orbital House, 3 Redwood Crescent, East Kilbride G74 5PR • UK
off. +44 1355 588000 • fax +44 1355 588001

hydrex.westgarth@veolia.com • www.vwswestgarth.com