

AquaChemie Terminal & Processing Plant

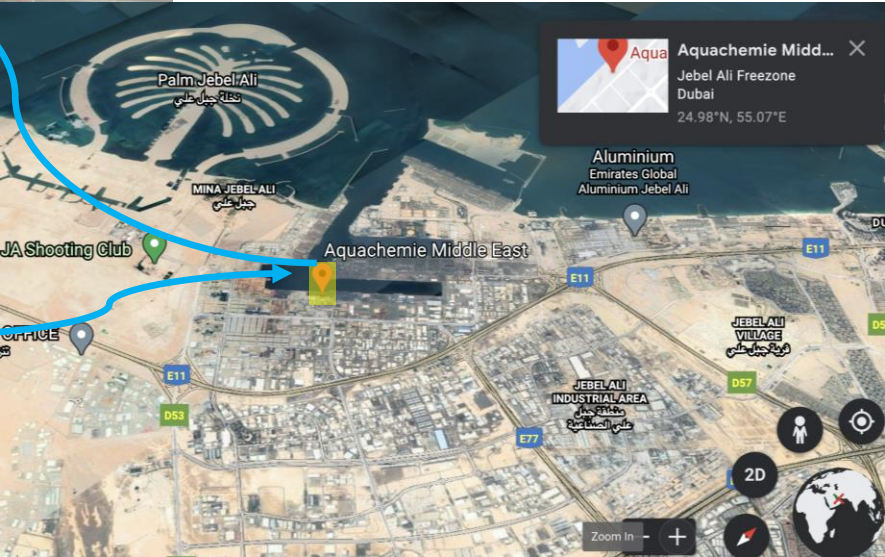
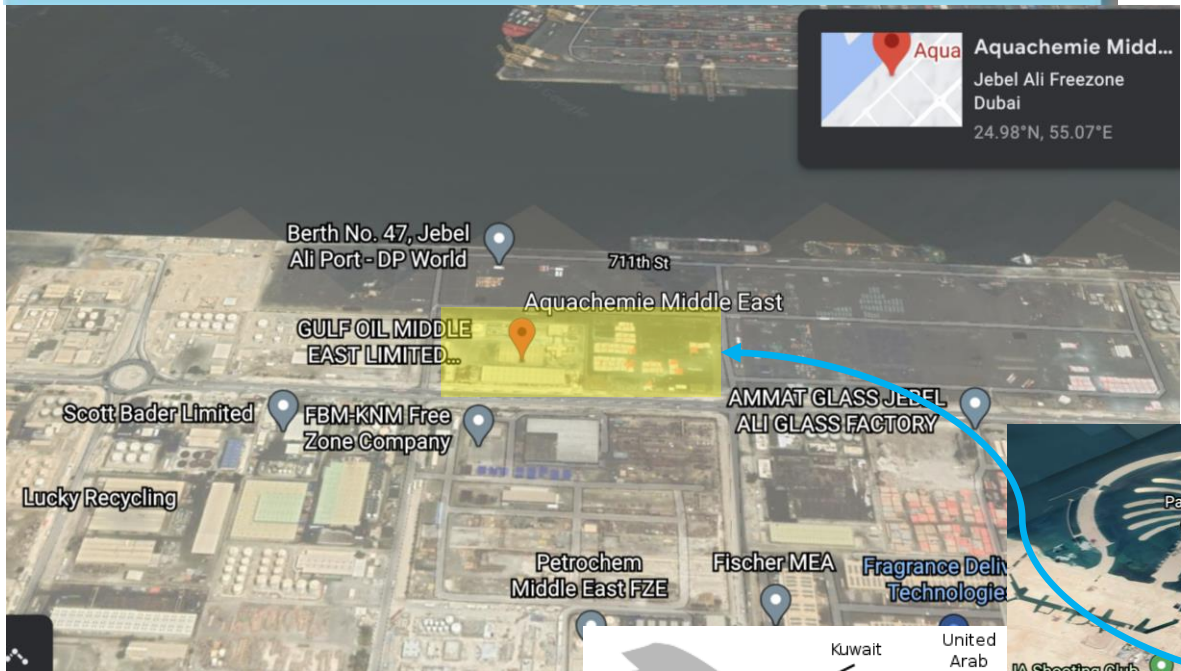
**Safe, Convenient
& State-of-the-Art**

**Strategic gateway
hub to conduct
petrochemical
trade across GCC
& beyond**



AQUACHEMIE TERMINAL...in Jebel Ali DP World Port

PLOT: B048F01 (20,000 m²)
WAYLEAVE: B048F01W (500 m to Chemical Berth # 4)



TERMINAL... @ Jebel Ali Port



3D Model of
AquaChemie Petrochemical Terminal

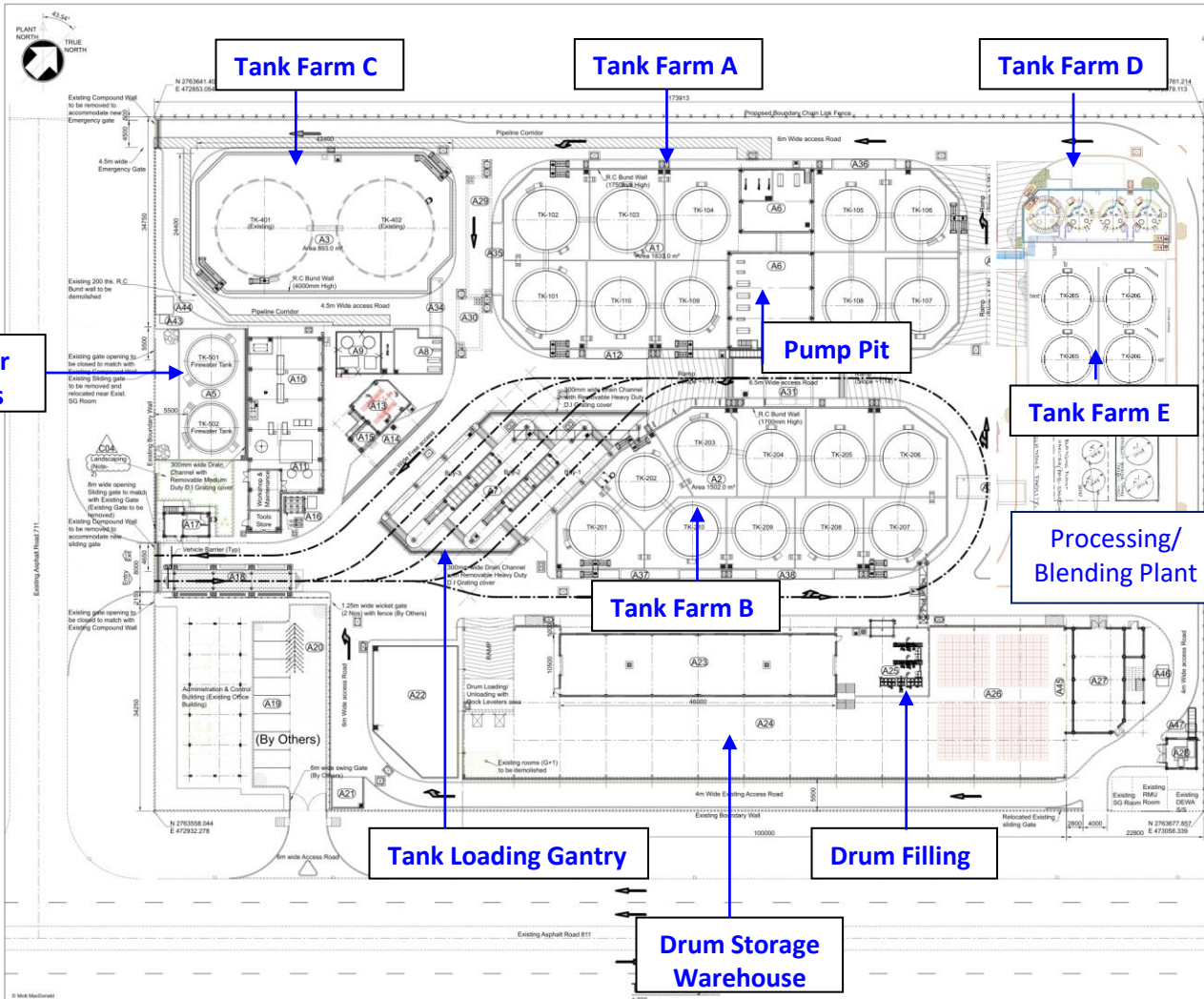
Mott MacDonald - for Concept Design, Basic Engineering, Detailed Engineering & PMC

HIGHLIGHTS

- Location: Jebel Ali, UAE
- \$55 Million Investment
- Plot Area - 20,000 Sqm
- Connected to Berth # 4 with 5 Nos, 6" SS Jetty Pipeline
- Tanks – 34,000 CBM over 26 Nos. API-650, nitrogen blanketed
- AquaChemie HQ Building
- For 100 hazardous NFPA Class 1B (UN Class 3) products
- Warehousing: over 6300 drums & ISO tanks storage
- Truck Loading Facility: 3 Nos.
- Drumming Lines: 5 Nos.
- Pumps: Dedicated for Ship backloading, Inter tank transfer, Truck loading & Drum filling
- Fire fighting system: Per NFPA & Dubai Civil Defense Regulations

Working towards CDI-T accreditation

Terminal & Processing Plant ...Layout Plan



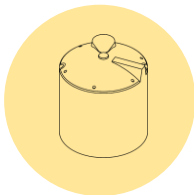
<p> ID Facilities A1 Tank Farm A (10 Tanks) A2 Tank Farm B (10 Tanks) A3 Tank Farm C (2 Tanks Existing) A4 Tank Farm D (2 Tanks) A5 Fire Water Tanks (2 Nos) A6 Class 3 Product Pump Shelter A7 Truck Loading Gantry Shelter A8 Class 8 Product Pump Area A9 Newer Shed A10 Fire Pump Shelter A11 Plant Air Package A12 House Rack A13 Class 8 Drumming Shelter A14 Lay-by Loading Shelter A15 Lay-by Top Loading Platform A16 Service Water Package A17 Gate Office (C/L Users) A18 Weigh Bridge A19 Covered Car Park (By Others) A20 Linear soak away A21 Waste Skip Enclosure A22 ISO Tank Storage Area A23 Flammable Goods Storage Room A24 Existing Shed A25 Class 3 Drum (IBC) Filling Machines A26 Empty Drum Storage Area A27 Backhoe Building A28 Transformer Room (Relocating Exst. Transformer) A29 3 x 10 x 30 m Deep Contaminated water UGD R.C. Holding Tank (1.150m) A30 3 x 10 x 30 m Deep Contaminated water UGD R.C. Holding Tank (2.50m) A31 R.C. Pipe Column 1 A32 R.C. Pipe Column 2 A33 R.C. Pipe Column 3 A34 R.C. Pipe Column 4 A35 Detunge Valve Shelter-1 A36 Detunge Valve Shelter-2 A37 Detunge Valve Shelter-3 A38 Detunge Valve Shelter-4 A39 Detunge Valve Shelter-5 A40 Detunge Valve Shelter-6 A41 Blending Plant (By Others) A42 Plant Equipment Area A43 CPTL Unit Shelter A44 Access Road A45 Battery Charging Area A46 1.0 x 1.0 m Shed A47 Local Isolation Plant with Shelter </p>			
<p> Key to symbols To be Demolished Chain Link Fence Chain Link Fence (By Others) Future By Others </p>			
<p> Reference drawings P01 28/04/20 JX Preliminary NRV ADS P02 21/04/20 JX Updated as per Topography NRV ADS C01 05/07/20 JX Revised as per Clients Comments NRV ADS C02 05/07/20 JX Generally revised NRV ADS C03 30/08/19 JX Revised as marked NRV ADS C04 06/08/20 JX Revised as marked NRV ADS Rev Date Drawn Description CHK'd App'd </p>			
<p> Status Stamp NOT FOR CONSTRUCTION Level 2 Festival Tower, Dubai Festival City P.O. Box 11302, Dubai United Arab Emirates T +971 (04) 206 9111 F +971 (04) 232 8000 W mottram.com </p>			
<p> Client AquaChemie Middle East FZE, Jebel Ali, P.O. Box 211586, Dubai, UAE </p>			
<p> Title Petrochemical Storage Tanks Terminal and Associated Facilities in JAFZ North Terminal Layout </p>			
<p> Designed 2 Xaver JX Eng check G-Kay NRV Drawn 2 Xaver JX Coordination G-Kay AG Eng check H-Burk SH Approved A-Burk ADS MMD Project Number 414410 Sited as A1 Sited as A1 Sited as A1 Sited as A1 Suitability Description 1:300 STD Suitable for Internal Review & Comment S3 Drawing Number 414410-MMD-00-XX-DR-C-0002 Revision </p>			

PRIMARY FACILITIES...in AquaChemie Terminal

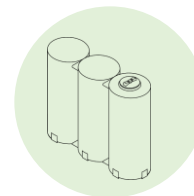
- TANKS -



20 numbers of API 650 tanks
NFPA Class 1 products in two
tank farms

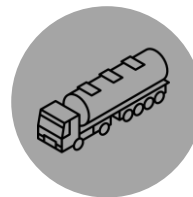


2 numbers of API 650 tanks,
for storage of Non-flammable
products

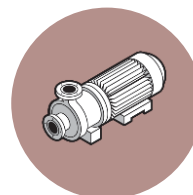


4 numbers of API 650 Day
Tanks, for storage of NFPA
Class 1 products

- OTHERS -



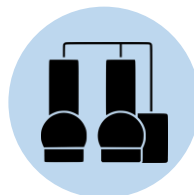
3 bays for Tanker Truck
Loading (Top/ Bottom)



Dedicated API Pumps for Ship
back loading, Tanker Truck
loading , Drum filling and Inter
Tank Transfers



5 Semi-Automatic Drum
Filling Machines



Processing & Blending Plant



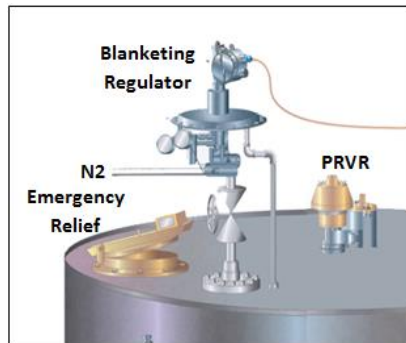
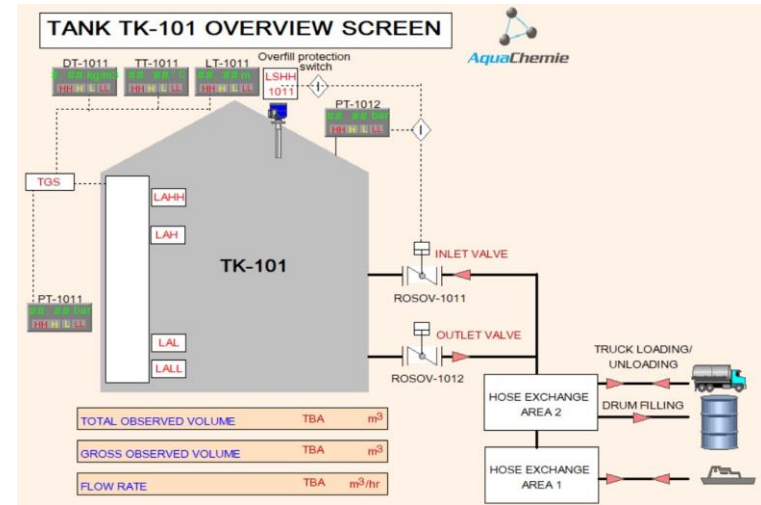
ASSOCIATED FACILITIES...in AquaChemie Terminal

- **Buildings** - 1. Admin Block with Control Room & Laboratory; 2. Guard Office; 3. Switch Gear & Utility Building.
- **Warehouse** - Storage of approximately 6,300 Drums of NFPA Class I, II and III products
- **ISO Tanks storage yard**
- **Fire detection & Protection System**
- **Nitrogen system** - for Pipeline Pigging/ Purging and Product Tanks blanketing
- **Compressed Air system**
- **PLC/ SCADA & ESD Systems**
- **Fire Alarm & CCTV Systems**
- **Perimeter Roads** for Fire Tenders & Emergency Exits
- Contaminated Water **Drainage system**, Domestic Drainage and **Water Supply Systems**
- **Area Lighting**
- **Public Address System**



Safety Features...for Bulk Storage Tanks

- NFPA Class I products, designed as per API 650
- **100% redundant Pressure/ Vacuum Relief Valves**
- **Overfill Protection and Tank Gauging System with Remote Operated Shut Off Valve (ROSOV) at inlet**
- **Emergency Vents**
- **Foam Pourers** to suppress any fire inside the tank
- **Fixed Fire Water Deluge System** to cool the external tank surfaces
- **Nitrogen Blanketing** to avoid explosive mixture formation inside tanks



Tank top Devices



Water & Foam Deluge Station



Water Monitors

SAFETY FEATURES...Other Associated Systems

Product Pumps - API Pumps with product compatible elastomers.

Electric Motor Drives in classified areas are Explosion Proof

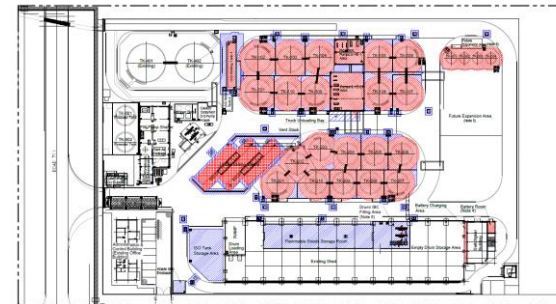
Emergency Shut Down Devices (ESD) - In the event of any Emergency in the terminal, ESD will stop all pumping

Earthing and Grounding

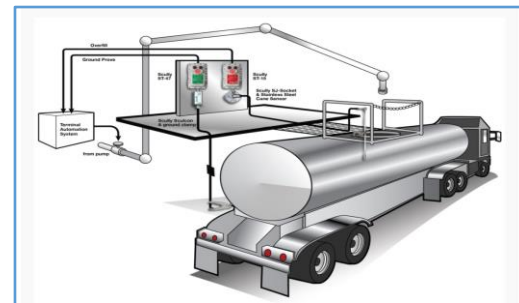
- Product & fire water tanks are grounded to the plant earthing system
- Equipment, Piping (& supports) & structural steel buildings are also grounded
- Bulk loading trucks at loading bays are provided with grounding facility (SCULY) to discharge any static electricity prior to loading operation (will not start unless completely discharged)

Cathodic Protection - Jetty pipelines protected with Impress Current CP System

Dead Man Switch in Truck Loading Bay - Senses Operator alertness & loading pump if operator gets to sleepy mode



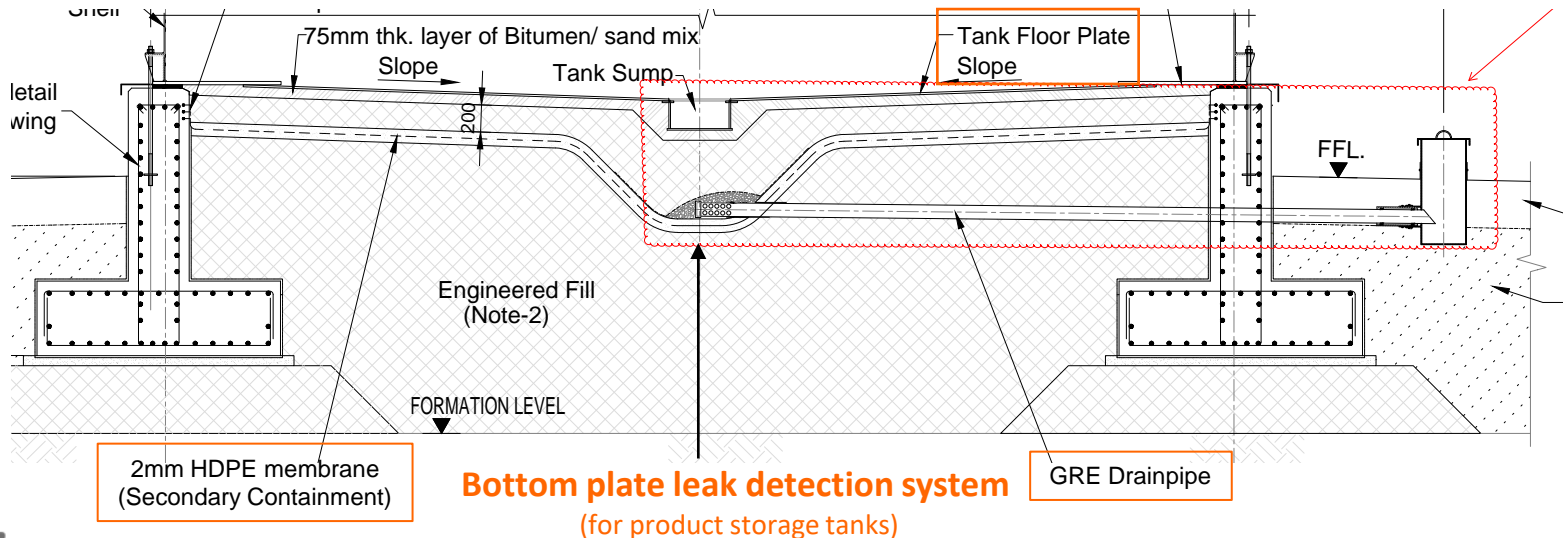
Hazardous Area Classification



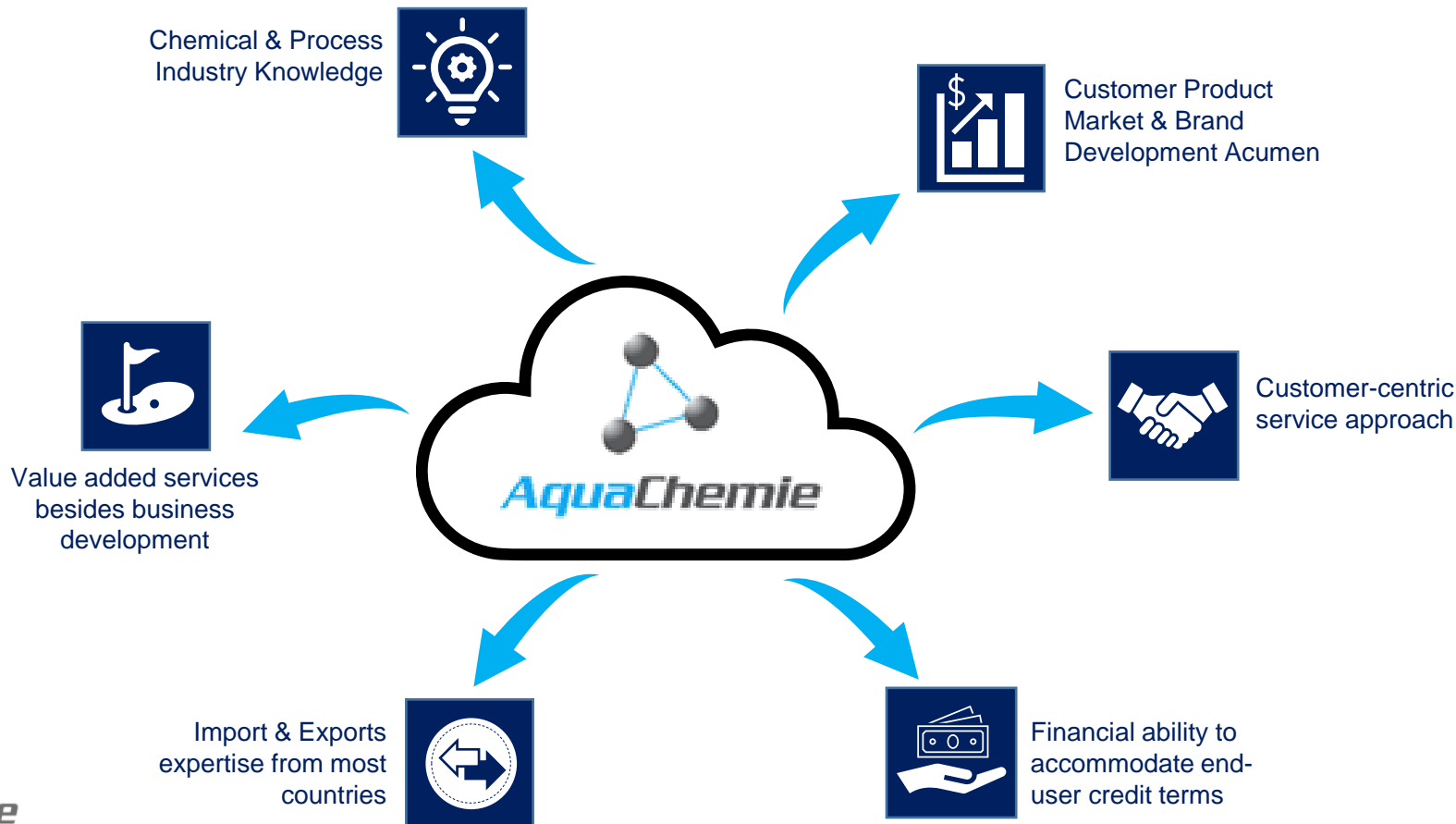
Scully Grounding System

ENVIRONMENTAL PROTECTION...for Ground leaks & Air Emission

- **Spill collection tanks along with RC Bund Walls** - Containment capacity for 110% volume of the largest tank are connected to 150 & 50 m³ spill tanks.
- **Contaminated product drainage system** - to underground sumps, through flame trap with controlled flow from Tank Farms, Tanker Truck Loading areas, Drum filling, Drum Storage areas & Pump Pits
- **Vapor Adsorption System** - for Drum Filling Machines.
- **Groundwater Monitoring Wells** - at strategic locations for routine inspections, for any potential soil contamination.

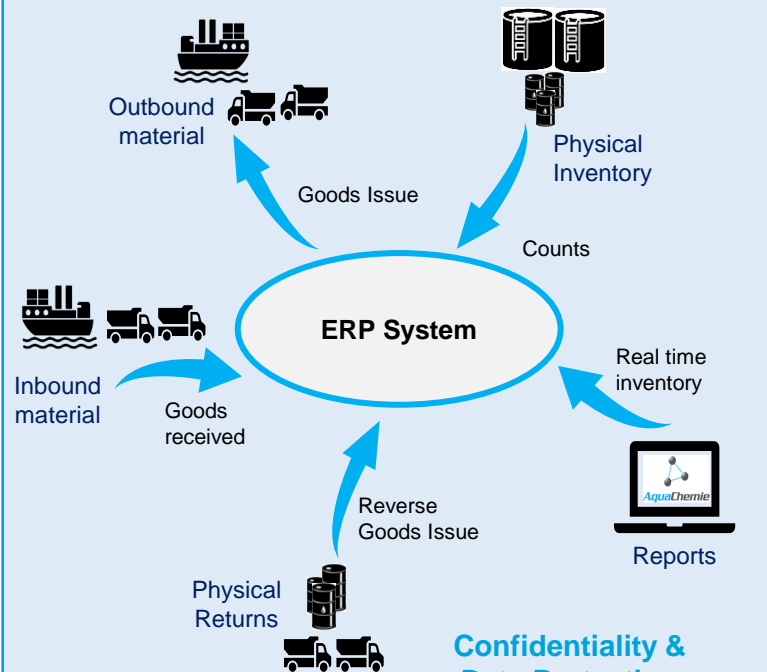


YOUR MARKETING HUB...for the Region & beyond

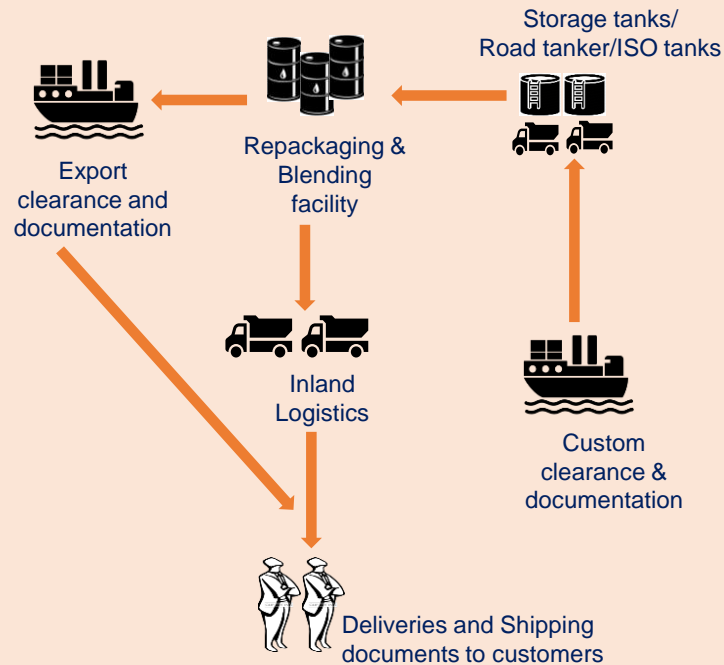


ADD-ON SERVICES...for your products

Inventory Management



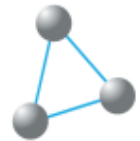
Supply Chain Management



Thank you...

sales@aquachemie.com

**Humbly,
adding value to your
Business & Operation...**



AquaChemie