



Quarterly **MIDDLE EAST** ISO Tank Container Market Review

For: ITCO (International Tank Container Organisation)

By: Leslie McCune, Managing Director, Chemical Management Resources Limited

+ 44 7783 042 664

lm@chemicalmanagement.co.uk

www.chemicalmanagement.co.uk

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Certainty of tank container availability a key anxiety among GCC producers

GCC¹ producers look for guaranteed tank container availability

AS **demand for ISO tank containers** increases significantly in the GCC, the key worry for producers is their guaranteed availability. Demand has intensified as a result of the start up this year of several downstream liquid derivatives projects. Start-ups often require large volumes of product to be moved in tank containers, as a temporary measure, before the downstream units consuming the product subsequently come on line. This has led to some intermediate product projects in the region requiring 250 tank containers a month for a relatively short period of time.

..... as demand is driven by liquid-based downstream plants starting up

Tank container demand in the GCC is being driven by new liquid products from new start-ups, by expansions of existing petrochemical capacities and by surging demand from the oil and gas sector. The demand from this sector for cryogenic tanks for the off-shore oil business is a valuable niche for some providers. Standard tank containers are also in strong demand by the oil and gas sector. These are used to import products such

¹ GCC member states = Saudi Arabia, Kuwait, Bahrain, United Arab Emirates, Qatar, Oman.

as 2,2' methyliminodiethanol, which is for gas sweetening i.e. removing hydrogen sulphide and carbon dioxide. One company alone needed 300 tank containers for this product in 2012. Another company which produces for the oil and gas sector has increased its tank container demand from 30 tanks/month in 2011, to 200 tanks/month in 2012, to a planned peak of several hundred/month in 2013.

Demand for tank containers has accelerated not just because of the move downstream in the GCC to liquid specialty products but also by the increased number of grades for each product. Although T11 is of course the workhorse, different grades of a product may have conceivably have their own tank instructions. The logical implication of having more product grades is that the number of customers will increase, which increases operational complexity and, arguably, increases costs.

Having the **certainty of tank container supply** remains therefore a challenge for producers and an opportunity for tank operators and, increasingly, tank leasing companies. Several tank container leasing companies have set up offices in the region recently.

Quality of tanks remains one issue; quality is another. There is a risk that excess demand may draw in lower quality tank containers from opportunistic suppliers so the industry needs to be vigilant in maintaining its excellent global safety record.

Following recent explosions, the safe transport of hazardous cargoes is a top priority.....

The safe transport of hazardous cargoes in general in the GCC has jumped up the agenda following two tragic incidents in Q4, 2012. An LPG road tanker explosion in Riyadh on November 1, 2012 resulted in the deaths of 22 people and injured 131. This was followed by 6 deaths in Jubail on December 23, when an explosion occurred in one of the reservoirs of the Environmental Development Company. The explosion occurred while welding work was under way on a bulk liquid storage tank (*not* a tank container) containing benzene and blended diesel. These incidents followed the latest warehouse fire in Sharjah – one of many in the textile units and warehouses in Sharjah - which spilled over into an adjacent chemical storage area.

..... leading to tighter controls by authorities

The Riyadh and Jubail incidents have **accelerated local authority plans to eliminate unregulated practices** in Saudi Arabia in the logistics and the hazardous handling of goods sectors. Enforced regulations, rather than statements of intentions are, as anywhere in the world, the key and the evidence on the ground seems to be that respected, self-regulated local and international supply chain providers with high safety, health, environmental and quality reputations are the only companies that will be granted permits and licenses.

This standard of quality usually comes at a cost so it is vital that GCC producers continue to protect their business and employees by accepting appropriate rates. The strong demand has led many operators to successfully increase rates recently, despite the occasional weak price offer that may have been more to do with personnel changes than with the competitive reality. Unfortunately, as in any market, a single 'sweetheart' deal can often have a toxic effect on the overall market.

The GCC market rates for tank containers are less uniform than those in Europe. This is due to a number of factors but the very price sensitive customers are well-known to those in the industry.

Tank operators can also help optimise a customer's supply chain

Several recent 'invitations-to-bid' (ITB) for tank container business came from GCC petrochemical producers who acknowledge that their European distribution networks are inefficient. This provides opportunities for European tank container operators to make a response that combines both a transactional offer for the business being offered with a **wider proposition for an improvement in the producer's European network** (perhaps based on sharing any cost reductions achieved).

Saudi Arabia steps up gas exploration.....

More generally, Aramco has **stepped up efforts to develop gas** wells to meet its rapidly increasing power generation needs. Custodian of the Two Holy Mosques King Abdullah has given instructions to use gas instead of oil for Saudi Arabia's power generation. The opportunity cost of burning crude oil is clearly its export value. This value is huge, given today's benchmark price of Brent crude oil of \$111/barrel (and Aramco's extraction costs of \$2-\$5/barrel). The focus for gas exploration will be Saudi Arabia's Tabuk region and in its off-shore waters in the Red Sea.

Longer-term, excitement is building at the prospect of **shale gas** discoveries in the north of Saudi Arabia. Early studies indicate that it is 'wet' gas i.e. gas which is rich in ethane, one of the key feedstocks for crackers. However, to be exploited, large amounts of purified water are required – not plentiful in Saudi Arabia. One concept would be to extend the current water pipeline from Yanbu to Medina to the shale reserves in the north. The extracted natural gas would be used to produce electricity for desalination in Yanbu and to use the ethane as feedstock for much-enlarged petrochemical activities in Yanbu (which is already connected to Jubail by the 5 million barrels/day 'Petroline' pipeline, carrying crude oil, and a 555,000 barrels/day Natural Gas Liquids pipeline).

... with gas prices remaining the source of much speculation

Much depends on the sensitive issue of **gas pricing**. Rumours circulated recently of an increase in Saudi gas prices from \$0.75/million Btu to \$2-\$3/million Btu. One producer is said to have lodged a protest. A two-tier pricing regime might be considered – a lower gas feedstock price for projects that have employment-rich downstream opportunities and another, higher price, for those offering fewer jobs.

Cracker feeds will not be 100% gas

What remains clear is that future projects will be 'mixed feed' i.e. using a mixture of liquids and gas feedstock. Sadara, for instance, will be 70% naphtha (liquid) and 30% gas. The significance **of this sort of mixed cracker feed is that the cracker will produce a range of specialty liquids which will require tank containers** for local and international export. Sadara will produce 3 million tonnes p.a. from its 26 production units. Of the 22 products produced, 14 will not have been produced in the region before. 20% of production will be exported by pipeline via King Fahad Industrial Port in Al Jubail

or fed by pipeline into the local network for consumption by downstream producers in Al Jubail. The remaining 80% will be exported by sea bulk or via containers.

The move to more liquid-based feedstocks should open up interesting opportunities for some companies that have been noticeably absent from the region. These would include European-based BASF and Lanxess. The products that these companies could produce in the GCC would **require large numbers of tank containers** and most European-based tank operators have good working relationships with these companies.

Company news

In other company news, NAMA Chemicals recorded the highest share increase among chemical companies on the Tadawul stock exchange in 2012. Shares increased by 29%. The biggest faller was Saudi Kayan, which fell 30%. SABIC fell 7%.

Kayan/Sadara/Sahara Acrylic Acid announced two expansion projects (a 330 ktpa butanol/11 ktpa isobutanol plant – the world’s largest - to be operated by Tasnee following start up in Q1 2015, and a 35ktpa UHMWPE plant). Advanced Petrochemical and Bayegan have terminated their MoU to construct a 450 ktpa polypropylene plant in Turkey. Petro Rabigh had yet another unscheduled shutdown (caused by a power and steam outage on December 29). The new Saudi Polymers cracker remains offline (following its shutdown for technical reasons on November 10) and NAMA Chemicals successfully started commercial operations at its new calcium chloride unit, part of its Hassad Project, on December 5.

Major changes in product sales and distribution for companies in Qatar

Qatar has established a company that will maintain exclusive rights to purchase, market, distribute and sell all specified regulated chemical and petrochemical products produced in Qatar. Until now, the country’s joint venture partners have made arrangements with Qatar for the distribution of products from their respective joint ventures. These arrangements will terminate in June 2013, after which the new entity (Qatar Chemical and Petrochemical Marketing and Distribution Co. will be responsible. Qatar intends to invest \$25 billion in its chemical sector by 2020, as part of its planned economic diversification programme..

Bulk liquid investments in the region continue.....

Vopak, the world’s largest independent tank storage service provider, announced its latest joint venture with Sabic, and will jointly invest in a new terminal in King Fahd Industrial Port at Al Jubail, Saudi Arabia. The initial storage capacity will be approximately 250,000m³ after completion early 2015. The first phase will have 40 commodity and specialty chemical storage tanks, complete with truck handling and ship loading facilities for 5 berths.

The new joint venture - Jubail Chemical Storage and Services Company (JCSSC) – will be 75% owned by SABIC and 25% owned by Vopak 25%. According to Vopak, JSSSC “will provide the petrochemical industry in Jubail with a critically important export facility, designed to the highest safety standards, and will enable the continued growth of the petrochemical and downstream industries in one of the largest petrochemical production locations in the world”.

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- For those tank operators which also move polymer in the GCC, a new 210-page ‘Plastics Processing in the GCC’ report will be published by AMI Plastics this month (\$8,000). The report lists the high growth ‘Top 50’ GCC polymer processing companies and details their consumption by polymer, by end-use and by process (blow moulding, pipe extrusion, etc). Profiles of each Top 50 processor are provided and there is comprehensive information on the GCC’s polymer production, the market dynamics of the GCC plastics processing sector, industrial parks, processing equipment imports, etc.

A 1-day seminar will be given by Leslie McCune (on behalf of AMI Plastics) in Riyadh, Jeddah, Dammam, Dubai in May (\$1,200).

- A ‘**Competitive Assessment of the Tank Container Industry**’, from a tank operator’s perspective, has been developed in a short PowerPoint presentation. This applies Professor Michael Porter’s well-known ‘5 Forces That Shape Industry Competition’ model. Presented by Leslie, it is an ideal, interactive scene-setter for a strategic workshop and addresses the bargaining power of tank container users and tank container suppliers, the threat of new entrants, the threat of substitute products and the extent of the tank container industry’s internal rivalry.
- Details on both the above from [lm@chemicalmanagement.co.uk](mailto:lm@chemicalmanagement.co.uk) or call + 44 7783 042 664

## شكراً

Leslie McCune is an independent petrochemical and petrochemical supply chain expert, focused on the rapid growing Middle East. He produced the global assessment of the **tank container** market in 2010.

An acknowledged expert on the Middle East’s supply chain infrastructure, he works on a short-term, project-specific basis for supply chain providers, petrochemical producers and business advisory firms. Clients include ITCO, Gulf Petrochemicals and Chemicals Association (GPCA), Royal Commission for Jubail and Yanbu, Saudi Aramco, Abu Dhabi National Oil Company, Qatar Petroleum, Petro Rabigh, ExxonMobil Chemical, Mubadala, KPMG, Vopak and several leading **tank container** operators, leasing companies and ISO tank manufacturers.

Unusually, he combines an intimate knowledge of the Middle East with in-depth petrochemical and supply chain expertise. Projects include Middle East market entry, partner selection, market feasibility, independent assessments of business plans, competitive intelligence and strategic supply chain options. Project examples can be found on [www.chemicalmanagement.co.uk](http://www.chemicalmanagement.co.uk).

In 2010, Leslie produced the seminal study on the GCC/Iran supply chain infrastructure, assessing its ability to meet the huge growth in petrochemical capacity and exports from 2005-2015. The study was commissioned by the highly-respected GPCA, whose members represent 90% of all Gulf petrochemical production. He has also chaired and presented on several occasions at the GPCA Supply Chain Forum and chaired the first 500-delegate ‘Saudi Downstream Strategic Forum’ in Yanbu in 2011.



Chemical Management  
Resources Limited

Chemical Management Resources Limited + 44 7783 042 664 [www.chemicalmanagement.co.uk](http://www.chemicalmanagement.co.uk)

*“Short-term expertise for Middle East petrochemical and petrochemical Supply Chain projects”*