

OPERATIONS BULLETIN

ISSUE 16 AUGUST 2016

Local storybook brings QCLNG operations to life



▲ *My Dad Works on an Island, an LNG storybook which brings QGC's Gladstone operations to life, was launched in front of hundreds of local school children at the Curtis Coast Literary Carnivale on 25 July.*

A beautifully illustrated, locally produced storybook telling the tale of how QCLNG operations on Curtis Island have become part of the Gladstone community was launched in front of hundreds of local school children at the annual Curtis Coast Literary Carnivale on 25 July.

QGC Gladstone Social Performance Manager, Lorna McGinnis, said the storybook called "My Dad works on an Island" provides a behind the scenes look at the region's newest industry. "QCLNG is now well and truly part of Gladstone's story, but being across the harbour on Curtis Island where most people don't have the opportunity to experience it firsthand, means the plant is largely an unknown," Ms McGinnis said.

"Many people still ask us "What is LNG?" and "What happens on the island?" The storybook helps build a broader understanding of how and why LNG is produced and highlights Gladstone's importance as a major energy exporter to the world."

"Not only does My Dad Works on an Island provide an overview of QGC's operations on Curtis Island, it also showcases our region and the fantastic local talent who live and work here," Ms McGinnis said.

"We are particularly proud that the book is a local product. It was developed, written, illustrated and printed here in Gladstone by local artists including author Heidi Jones and illustrator Ping Carlyon, local businesses and the QGC team."

QGC Vice President Tony Nunan, who joined QGC's Gladstone team in celebrating the unveiling of the storybook, thanked the Gladstone community for responding so enthusiastically since its public launch.

"We've been very focused and proud of being the first plant in the world to produce LNG from natural gas sourced from coal seam and all the milestones that have come with it. But I rate this book

and its importance to the Gladstone community up there as one of the most important things we've done here."

"This is the first time I've had something I can easily share with my kids to explain what I do for work," Mr Nunan said.

QGC is providing copies of My Dad Works on an Island free of charge to Gladstone schools, families and the community. To collect your own complimentary copy, simply email community@qgc.com.au.

Surat Basin

This section features information about activities in our natural gas development areas that cover more than 4,900 square kilometres and span from south of Tara to north-west of Wandoan.

Drilling rigs

We are currently drilling about 25 wells a month to expand our inventory.

The following activities are planned for August:

- two rigs drilling new CSG wells and associated activity
- nine rigs completing new wells and servicing existing wells
- three crews building new access roads and well pads and two crews rehabilitating existing and old well pads
- two mobile fluid treatment plants servicing these rigs. Mobile fluid treatment plants clean the fluids from drilling operations for reuse on the rigs
- one crew completing well and surface equipment maintenance.

Rig crews stay in small mobile camps that are set up near the rigs. On average, rigs are relocated every three to four days and require 11 to 20 truck movements. Rigs and camps are moved in accordance with travel management plans that are approved by local governments and the Queensland Department of Transport and Main Roads.

Well site inspections

A team of 50 operators inspect each of QGC's more than 2,500 wells once a fortnight. Operators are required to adhere strictly to land access and weed management rules for individual properties. This team, who drive utility vehicles, represent a major proportion of our light vehicle movements around the region.

Gathering

This work is in addition to ongoing installation of gas and water gathering pipelines to connect new wells to our existing processing networks. The following activities will occur in August:

West and north-west of Wandoan

- Pipe trenching, pipeline laying and backfilling and tying-in connections.
- Construction of gathering risers into well pads.
- Rehabilitation of construction sites and pipeline easements.

Pipeline inspections

QGC operators work in small teams to inspect the 543 kilometres of Wallumbilla Gladstone Pipeline easement to monitor the infrastructure and progress of vegetation rehabilitation.

In August, the following activities will occur:

- Aerial inspections from west of Dalby (Ruby Jo site) to west of Wandoan (Woleebee Creek site) and between Chinchilla and Gladstone during the first half of the month.
- Daily, on-ground easement inspections from west of Dalby (Ruby Jo site) to Gladstone.

Water Treatment

The Northern Water Treatment Plant, at Woleebee Creek south-west of Wandoan, and the Kenya Water Treatment Plant, south-west of Chinchilla, are successfully processing water produced in the surrounding gas fields for beneficial use within these regions.

These two water treatment plants enable QGC to make available 97% of produced water for beneficial use.

The following table summarises the average daily production at each water treatment plant and the total volume of water processed to date in 2016.

Water Treatment Plant	Average daily production (July 2016)	2016 Year to Date Production (as at 20 July)
Kenya	45 ML/d	10,695 ML
Northern	15 ML/d	3,303 ML

Charlie project update

Construction works on the Charlie project are progressing, although some short delays were encountered as a result of inclement weather during July. The overall project is over a quarter of the way through construction.

Deliveries of major equipment to the main site and laydown yards near the Woleebee Creek central processing plant will continue regularly throughout the next three to four months. Where required, specialist transportation companies have been engaged and police escorts deployed to ensure safe delivery.

Construction of the Charlie field compression station is underway with all major foundations expected to be complete by the end of August. Construction of the two flares, the erection of structural steel, as well as earthing and cable ladder installation are all underway. Major equipment deliveries have included four of five electrical buildings, a 132 kV 75 MVA transformer, weighing 95 tonnes, as well as several pre-assembled modules and vessels. Further equipment and module deliveries will continue throughout the month.

The pipelines team is advancing construction of the 34km gas and water pipelines that will connect the Charlie field compression station, when completed, with existing facilities at Woleebee Creek.

The stringing and bending of the gas pipeline is complete. The welding team have been progressing with approximately one kilometre per day completed. Coating of the welded field joints and trenching of the main pipeline has also commenced.

The water pipeline lengths are now being delivered from Toowoomba to the easement on the pipeline route and welding of these pipe sections has commenced.

The Charlie pond and pump stations are a third of the way through completion. The pond earthworks are complete and the pond liner has been installed to ensure no loss of water from the pond. The Philip Pond earthworks are close to completion, with the lining of the pond commencing late July. The piling at both pump stations is complete and excavation for below ground services and foundations has commenced at Charlie pump station.

The Woleebee Creek central processing plant substation is being expanded to accommodate the Charlie development. A new substation adjacent to the Charlie field compression station as well as an overhead transmission line connecting the two substations is under construction.

Drones benefitting QGC and communities



▲ *Shell Vice President QGC, Tony Nunan, joined Premier, The Hon. Anastacia Palaszczuk MP and Queensland Minister for Innovation, Science and the Digital Economy and Minister for Small Business, The Hon Leanne Enoch MP, and Insitu Pacific project partners at a Queensland Government event which announced \$1 million support for a major research project that builds on QGC's adoption of RPAS.*

QGC's partnership with Insitu Pacific to develop and implement remotely piloted aircraft systems (RPAS) or drones, was centre stage at a Queensland Government event attended by the Premier, The Hon. Anastacia Palaszczuk MP.

Shell Vice President QGC, Tony Nunan, joined Government representatives, and Insitu Pacific project partners at a Queensland Government event which announced \$1 million support for a major research project that builds on QGC's adoption of RPAS.

The funding, part of an Advance Queensland Project, follows the successful project between QGC and Boeing that has developed the world's first commercial use of the beyond-the-line-of-sight RPAS.

The RPAS monitor natural gas wells and associated infrastructure which, until now, have mostly been inspected on the ground by four-wheel-drive.

Tony Nunan said the company was proud to be introducing into our operations an emerging technology that will benefit both the resources and agriculture sectors.

"Landowners will benefit, over time, from fewer visits to their properties while QGC and the community will benefit from fewer vehicles on the roads.

"Our remotely piloted aircraft is operated by a world leader in this field and in strict compliance with air safety regulations and following 18 months of successful trials," Tony said.

Driving safely and to conditions – could this be you?

During July there were four separate work related single vehicle roll-over incidents in the Queensland CSG industry. Some of these incidents were at a relatively slow speed and all could have been avoided. While the drivers and passengers in the vehicles were not injured the consequences could have been much worse.

A vehicle associated with the QGC's upstream projects was involved in an incident on 6 July when the vehicle, containing the driver and one passenger, was travelling on a public road. The vehicle entered a left hand bend that had been impacted by a recent rain event at 55 kilometres per hour. The driver lost control resulting in the vehicle spinning 180 degrees and rolling onto its roof. Fortunately both occupants were unharmed in the event.

An investigation into the accident has reported that while the driver had completed Defensive Driving training and was abiding by both QGC safe driving requirements and the legal speed limit, the vehicle was travelling too fast when entering a hazardous area. The independent investigation determined the safe speed for driving in the conditions was less than 20 kilometres per hour.

This could have been prevented by driving to conditions. Before travelling, plan your journey, assess hazards and select the safest route. Should road, traffic or weather conditions change, reassess the route and drive appropriately. This may include decreasing speed, increasing distance from the vehicle in front and turning on lights.

For more information and specific tips from Queensland Road Safety visit: <https://www.qld.gov.au/transport/safety/road-safety/driving-safely/driving-conditions/>

The latest road conditions across Queensland including road closures, road hazards, incidents and events are available on the RACQ app.

Checklist for Safe Driving

Before you drive

- Ensure you have completed driver training requirements
- Make sure your vehicle is safe to drive
- Plan your trip, and be fit to drive
- Include rest stops on long trips so you don't drive tired
- Check for traffic updates and changes to road conditions
- Passengers, it is your duty to intervene

On the road

- Wear your seatbelt
- Slow down, drive within the speed limit and to conditions
- Stay focused and look out for changing conditions
- Don't talk or text on your mobile phone
- Follow the road rules and obey traffic signs
- Share the road safely with other road users
- Drive safely through roadworks, school zones, and rail crossings
- Report dangerous driving
- Understand and apply your company's 4WD procedures

Gladstone

Train 2 outage complete after 16,000 man hours and eight days

Eight days and 16,000 man hours in the execution, last month's Train 2 planned outage at QGC's LNG facility on Curtis Island, will underpin the plant's best-in-class performance and should further boost production efficiencies.

The scheduled works followed the achievement of several production milestones in July, when the plant recorded its highest daily production to date and set a Train 2 daily production record.

The eight-day schedule of works focused on the Train 2 turbo-compressor platform where five gas generators' engines were

changed out. The generators power the compressors which cool incoming gas to minus 162 degrees, compressing it into a liquid form before it is stored and transported as LNG.

QGC Midstream Shutdown Superintendent Hazem Abdelati explained the upgraded engines should further improve plant reliability and integrity.

"Just like in your own car, we need a reliable engine. These new units are more advanced in their design, which will help us achieve continuous improvement," Mr Abdelati said.

Working to a carefully planned, 24-hour schedule, the team also undertook mandatory time-based servicing, warranty work and preventative maintenance.

Approximately 130 people worked across the shutdown, with the diverse team including members of the QGC maintenance, production, engineering, projects and HSSE teams. The team included 110 contractors, including mechanical fitters and E&I technicians, the vast majority of whom were Gladstone locals.

Scheduled maintenance is expected to occur a few times a year at the Curtis Island facility, with the next outage planned for November 2016.

Careflight ‘drops in’ for emergency response exercise



A fictional explosion, resulting in blast injuries and burns to a worker and a hazardous situation for rescue crews, was the scenario for a recent simulated emergency response exercise at QGC’s LNG facility on Curtis Island.

The two-hour exercise tested the knowledge and skills of our Curtis Island Emergency Response Team (ERT) and the local Careflight crew.

QGC Emergency Service Coordinator Allan Harper said utilising the scenario of an explosion caused during the reactivation of hot oil heaters following maintenance, created a challenging exercise.

“First and foremost it was about our team and Careflight testing their skills, and the systems we have in place, for rescuing a badly injured worker from a hazardous area where there was both hot oil and heat, treating them, and safely removing them back to our medical centre before being evacuated by chopper.

“At the same time, it tested the skills of our team in the Central Control Room, who had to identify and isolate the cause of the explosion to protect the injured worker, the rescue team and the plant from further potential injury or damage.”

Mr Harper said the exercise also marked the first time Careflight accessed the site using QGC’s helicopter pad, having previously used the Bechtel facility during construction and commissioning.

“This enabled Careflight to familiarise themselves with our operational site and the QGC team gained a better understanding of Careflight’s challenges when landing here and extricating patients”.

Mr Harper said the exercise demonstrated the groups’ exceptional teamwork and, with the learnings being incorporated into the site’s procedures, training and future exercises.

“Aside from testing and building our skills and knowledge, exercises like these demonstrate the integrity of our Emergency Response Plan,” he said.

Additional emergency response exercises, utilising the same scenario, will be repeated in coming weeks to involve all Production Team shifts.

QGC has invested \$20 million in Careflight and it has been involved in 126 aero medical retrievals in the gasfields and Gladstone. Almost half of these retrievals were community members benefitting from the service and 65 were for the industry.

Becoming a supplier

QGC supports the long-term, economic sustainability of the regions in which we operate through a focus on local content participation.

Our Local Content Policy targets four goals: supporting competitive procurement, facilitating job creation, promoting reconciliation and building economic sustainability.

We actively encourage our employees and contractors to source quality, cost-effective goods and services locally, based on full, fair and reasonable opportunities.

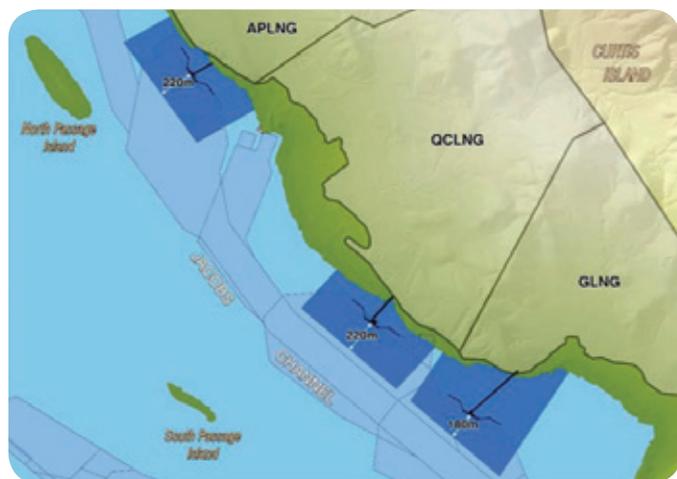
This is in line with our participation in the voluntary Queensland Resources and Energy Sector Code of Practice for Local Content administered by the Queensland Resources Council and as required, project-based Australian Industry Participation Plans.

Visit <http://www.bg-group.com/australia/becomingasupplier> to register your interest in becoming a supplier or for a fact sheet on how to access our supply chain.

Waterside Restricted Zone

The following information is provided on behalf of QGC and Gladstone Ports Corporation to users of Gladstone Harbour near the LNG facilities on the south-eastern corner of Curtis Island.

- A waterside restricted zone (WRZ) is an area of water where ships may berth, moor or anchor to which access to other vessels is restricted and to which unauthorised entry is an offence.



For up-to-date information on activities in Gladstone Harbour, please remember to always check the Gladstone Ports Corporation website www.gpcl.com.au, which includes information about hazards and safety zones; and the Maritime Safety Queensland notices to mariners at www.msq.qld.gov.au. Vessel Traffic Service broadcasts can be monitored using VHF channels 13 or 15.

- A WRZ is activated at the QCLNG wharf one hour before the arrival of an LNG carrier and remains while the vessel is berthed and until it is 400m from the berth after departing.
- The zone extends 220m from the wharf, 220m from its most northerly and southerly points and back under the jetty towards the shore.
- As port operator, Gladstone Ports Corporation (GPC) is responsible for managing and enforcing WRZs to meet standards set by the Maritime Transport and Offshore Facilities Security Act 2003.
- Commercial and recreational users must not enter, stop, or anchor within a WRZ unless authorised to do so by GPC.
- A 250m safety zone around the wharf is also active while a vessel is berthed.
- For more information about WRZs please contact the Gladstone Ports Corporation Security Office on **07 4976 1350**.

Pipeline

Landholders planning to do any digging around buried pipelines should call **'Dial Before You Dig'** (call 1100, <http://www.1100.com.au>) to obtain the specific location of the pipelines and associated infrastructure.

Call the **QGC Operations Centre (1800 77 88 98)** to report any emergencies, damage or vandalism, flooding, subsidence, washouts or erosion, unauthorised access to easement facilities or uncontrolled fire.

Communities

Date	Location	Activity
Monday 1 – Wednesday 31 August	Miles	Art exhibition: Ping Carlyon, <i>My Dad Works on an Island – our Gladstone lifestyle and landscape</i> , Tondoon Botanic Gardens Art Gallery. Cost: Free
Tuesday 16 August	Gladstone	2pm – 3pm, Gladstone City Library. QGC Seniors Week event featuring an overview of QGC's LNG facility and a reading of the new Gladstone LNG storybook, <i>My Dad Works on an Island</i> . Afternoon tea will be provided and attendees will receive a complimentary copy of the book. Cost: Free
Saturday 20 August	Gladstone	8.30am – 6.30pm, Quoin Island, Gladstone (transport provided). Science Education Experience. University students, school teachers, youth group teachers and community educators are being invited to attend this hands-on professional development training in real world science applications. Cost: \$82.50 - \$104.50 includes all activities, lunch, morning and afternoon tea and transfer to Quoin Island. https://www.eventbrite.com.au/e/science-education-experience-tickets-25663415968?aff=es2#

Opportunities for local groups in QGC Communities Fund

Western Downs and Gladstone community groups can apply for grants from the second round of the QGC Communities Fund.

Eligible not-for-profit organisations and local governments can apply for \$10,001 to \$50,000 for projects up to 12-months that enhance regional liveability by building the sustainability of community groups and organisations.

The funding round opened on 1 August and closes on 30 September 2016. Applications will be assessed by panels comprising QGC and community representatives.

An application form and guidelines can be downloaded from the Communities section of our website.

The latest round of the QGC Communities Fund will help deliver 12 new community projects, with a strong focus on Science, Technology, Engineering and Maths education resources and new infrastructure.

The grants announced in July total \$370,124 include \$201,879 to five groups in Gladstone and \$168,244 to seven groups in the Western Downs.

Western Downs grant recipients July 2016

Recipient	Grant	Grant Amount
Dalby Girl Guides QLD Support Group	Upgrade to the Dalby Girl Guide hut facilities	\$11,237.32
Lions Club Chinchilla	Construction of BBQ area including seating at Lions Park	\$25,500
Chinchilla Netball Association Inc	Lighting of netball courts	\$36,035
Wandoan Community Commerce & Industry Inc	Replacement roof and shop front revamp with painting and new signwriting	\$11,853.60
Juandah Heritage Society Inc	Creation of an overnight visitors area at the Juandah Historical Site	\$24,941.85
Beef Bells & Bottle Tree Inc	Miles Antique Roadshow 2016	\$10,789.64
Meandarra State School	Meandarra pool facilities upgrade	\$47,887

Gladstone grant recipients June 2015

Recipient	Grant	Grant Amount
CQ University	CQU drone races	\$41,278
Gladstone South State School – The NAO effect	Combined schools extended learning program using humanoid robotics	\$28,485
Gladstone Gymnastic Club Inc	OMG we need a new floor	\$50,000
Nagoorin Progress Association	Replacement of roof and installation of concrete access area between the hall and toilet block at Nagoorin Hal	\$36,850
Facing Island South Rural Fire Brigade (QFES)	Facing Island South Rural Fire Brigade building	\$45,266.60

QGC and Wandoan State School celebrate NAIDOC week



▲ QGC proudly celebrated NAIDOC week in July with various events across the communities where we operate as we show our respect for the customs and traditions of Aboriginal and Torres Strait Islander Peoples. QGC's Indigenous Relations Team sponsored Wandoan State School's NAIDOC celebration and facilitated various cultural activities for students including storytelling, bead making, traditional painting and games.

This *Operations Bulletin* is designed to provide communities in the Surat Basin and Gladstone with a variety of information about our activities. It has been developed in response to feedback from community members interested in understanding what to expect from our operations.

Visit the QGC website (<http://www.bg-group.com/qgc>) to read *Links Australia*, our quarterly magazine. You can also sign-up to our subscription list to receive copies of both publications.

We look forward to your feedback at community@qgc.com.au

Enquiries

For all general enquiries, please call **1800 030 443** (24-hour-toll-free) or email community@qgc.com.au

Visit our information centres at:

Chinchilla

Woolworths Complex,
Shop 18-20 Nrll Dytry,
Chinchilla, QLD 4413

QGC PO Box 266,
Chinchilla, QLD 4413

Gladstone

72 Goondoon Street,
Gladstone, QLD 4680

Wandoan

27 Royd Street,
Wandoan, QLD 4419

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