



QAL Media Release

26 November 2020

QAL progresses \$400M investment on environmental improvements

Two years into Queensland Alumina Limited's \$400M 5-Year Environment Strategy (5-YES), the refinery has completed more than a third of the 60 projects underpinning the strategy and finished engineering solutions on the remainder.

Queensland Alumina's (QAL) wide-ranging capital improvement projects will reduce environmental emissions and limit the risk of equipment failure that could impact the environment in the strategy's focus areas of air quality (dust, odour and alkali), water, land and noise. QAL is also well progressed on significant Process Safety management and cultural change programs that are also key to the success of the 5-Year Environment Strategy.

QAL general manager Pine Pienaar said the huge focus on improvement has been embraced across the site.

"We have learned a lot in our 53-year history in Gladstone. Our employees are locals and care about the footprint we leave behind. Our continuous improvement in environmental management is critical in us all taking pride in where we work," he said.

QAL has spent \$85M to date on the projects, half of which has been spent with local Gladstone suppliers. More than 100 additional contractors have been employed on site to complete the environmental projects, bringing QAL's total number of contractors to 700.

"Our teams are currently working on 21 construction projects simultaneously across all areas of the plant. It's been difficult for many to grasp the sheer magnitude of this scope of work and the complex nature of problem-solving taking place," Pine said.

"Some projects are 'just do its', involving swapping out old for new concrete, tanks, drains and equipment. But others involve using new methods that improve how we operate, or trialling technologies never before used in an alumina refinery."

Some key 5-YES achievements to date:

- \$3.3M of new equipment installed to destroy odorous gases. A new thermal oxidiser will be commissioned in December, replacing the existing unit and ensuring QAL has continuous odour-destroying capability.
- Implemented a Process Safety Management system to add additional checks, reducing the risk of equipment failure or process incidents.

- Trialled odour destruction technology never used in alumina refining. Installed new alumina transfer conveyor to Boyne Smelters Limited to eliminate dust.
- Upgraded two of QAL's four caustic storage tanks.
- Ongoing workforce support through employee-driven initiatives including recycling, reusing and reducing or eliminating single-use consumables.
- Installed a \$4.5M new airslide alumina conveyor to eliminate dust emissions from a transfer point.
- Implemented a conveyor washing station that will reduce bauxite dust by removing residual bauxite from the conveyor after it is unloaded on the bauxite stockpile.
- Commissioned a new oxalate vent tank system to reduce alkali emissions on site.
- Ongoing research and development on coal dust suppression, with projects starting construction this year.

Further information on project progress, including videos, can be found [here](#) on the QAL website.

Interesting statistics

- 2,000 tonnes of steel has been used so far
- 22,000 metres of pipe has arrived on site
- More than 10,000 hours of research and development has been put into odour reduction projects

Background

- For 53 years, QAL has been producing alumina in Gladstone. As one of the largest employers in the region, QAL has generated billions of dollars of value for the Queensland economy.
- In 2018 the refinery embarked on the 5-Year Environment Strategy, initially estimated to cost \$260 million. Now that most of the projects have been fully engineered, QAL has increased its investment commitment to \$400 million.
- More than \$150 million of the total investment is expected to be spent with Gladstone-region suppliers.

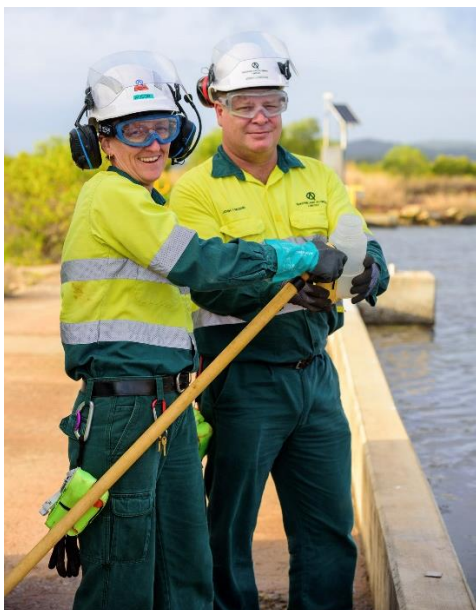
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\$4.5M – QAL replaced an alumina conveyor with a sealed airslide, eliminating airborne alumina during transfer at this point



Specialist - Environment Alison Green conducts water quality monitoring at QAL



Specialist - Environment Alison Green and Superintendent – Environment Josh Lobodin review water sampling at QAL