

Saved by smart thinking

Brisbane-based Ausenco was able to transform the struggling Isaac Coal Handling and Preparation Plant into a thriving and sustainable project within just six months of taking over operations. By **Sadie Davidson**

In 2008, the Isaac Coal Handling and Preparation Plant (CHPP) in Northern Queensland was only partially commissioned and unable to meet its nameplate capacity.

Just six months after the project was handed over to management service provider Ausenco, not only had it reached capacity, but its yield had also increased by a further 2%.

Five years on, Ausenco is still focused on delivering continuous improvements to the plant and has set itself another challenge to review the existing CHPP operations and maintenance service agreement, in order to implement a sustainable saving of 20% across the plant without impacting on its reliability.

The team worked with Ausenco's global management and reliability engineering arm, undertaking several audits to determine ways to enhance the maintenance strategies and practices.

Ausenco found opportunities to further reduce unplanned maintenance by adopting a different maintenance strategy based on reliability-centred maintenance practices.

It also adopted routine maintenance activities for each component based on operating statistics and actual failure data.

Ausenco president Asia Pacific and Africa region, Simon Cmrlec, said that by using Rylson8, a proprietary asset management solution, the teams updated CHPP's agreement systems to better plan and schedule maintenance activities across the site.

"The net result was a reduction in the number of regular shutdowns per year from 17 to 10 and a reduced reliance on sub-contracted labour," he said.

Despite reduced maintenance spend, plant availability increased from 91% in 2012 to 95.1% in 2013.

Importantly, unplanned maintenance

decreased by 40% from 33.1 hours per month to 23.8 hours/month over the same period.

Ausenco was able to successfully implement a revised labour model, supply agreements and a maintenance regime.

Using the new models Ausenco assisted Isaac's Plains Coal Management to attain an increased return on capital expended, through a 24% reduction in operations and maintenance costs per tonne, with no negative impact on the plant.

"The team delivered a result that exceeded the client's original target, which was an excellent outcome for everyone involved," Cmrlec added.

Ausenco forecasts a decrease in maintenance costs – expressed as a percentage of the annual maintenance spend – of 45% in 2014, 34% in 2015 and 21% in 2016.



sadie.davidson@aspermont.com

The Isaac Coal Handling
Preparation Plant in
Northern Queensland.

