


Building our Regions

Julia Creek Sewage Treatment Plant Upgrade

 Funding*	
Total project cost	\$550,000
BoR funding	\$275,000
Council funding	\$275,000

(Funding note: Council contributed \$144,546 over the original budget due to selection of the BioKube rather than Membrane Bioreactor.)

Danish technology that looks like stacked Lego blocks has been used for the first time in Australia to deliver a sewage treatment plant with no smell, no noise and a smaller footprint.

It was an innovative solution to a rather messy problem for McKinlay Shire Council and the 400 residents of Julia Creek, situated 664 kilometres west of Townsville.

Ongoing failure of the town’s 50-year-old Sewage Treatment Plant resulted in an infringement notice from the Department of Environment and Heritage Protection (DEHP), with a potential penalty of more than \$500,000—the cost of a new system.

Increasing maintenance costs and a possibility that airborne viruses and bacteria could be carried downwind from the plant’s lagoon presented a genuine health risk.

A new sewage treatment plant funded in partnership with the Queensland Government’s Building our Regions program has addressed both the health and safety issues, and added greater capacity and efficiency. A membrane bioreactor system, which was originally proposed, would have produced high quality effluent suitable for reuse for mining and agricultural as well as local irrigation.

However, an alternate tender solution—a BioKube plant—has delivered an even better outcome. Using Danish patented technology to control hydrogen sulfide formation, the BioKube plant is free of the smell commonly associated with sewage treatment plants.



BioKube plant



BioKube plants have proven versatility and reliability with more than 5,000 installations in over 40 countries—in sub-zero temperatures of northern Scandinavia to the heat of the African desert.

It's the first Australian installation for the international water solutions company and will require less ongoing maintenance and manual labour for plant operation, as well as fewer chemicals. This means lower costs for council in the long-term and it also paves the way for residential and commercial expansion, with an improved environmental outcome.

Plant operation training has been provided for two full-time staff and council is continuing to work with DEHP to ensure that all licencing conditions are met.

* Funding amounts referenced are as approved.