

Allanooka chlorination reconfiguration

(reference site only)



Design, manufacture and installation of a chlorination system to ensure future chlorination demands can be met with minimal modifications



The chlorination reconfiguration works comprised of the detailed design, manufacture, supply, construction, installation, testing and commissioning of the chlorination infrastructure assets



A chlorination reconfiguration project with automatic generator power in the event of a power failure. Safe withdrawable injection quills and chemical barrier protection to enhance operator safety.

Allanooka is a gas chlorination plant that disinfects the groundwater from a borefield that supplies Geraldton, a major regional city of 38,000 people, approximately 300km north of Perth.

TRILITY was contracted to provide new duty/standby reservoir inlet and outlet flow-paced chlorine dosing, chlorine residual monitoring and outlet flow monitoring for the Water Corporation. To comply with the client's stringent safety requirements, safe withdrawable injection quills were installed, along with chemical barrier protection at the new chlorine dosing points.

Additional SCADA and electrical works allowed for an on-site generator to be connected to the chlorination module such that the chlorination plant automatically switches over to generator power in the event of a power failure. Once power is restored, it automatically switches back to mains power. All of this occurs without the need of an operator to attend site.

We also provided training for the plant operators, troubleshooting support, and ensured the provision of all operations and maintenance manuals and other handover documentation.

The site works included civil and structural works and were undertaken during COVID-19 restrictions, with the whole project being successfully managed remotely.



Who

The Water Corporation of Western Australia is the principal supplier of water, wastewater and drainage services throughout Western Australia, serving a population of two million.

What

TRILITY designed, manufactured, supplied, constructed, installed, tested and commissioned a chlorination system to meet future chlorination requirements.

Where

Allanooka is a small Western Australian rural location approximately 333kms from Perth. The gas chlorination plant disinfects the groundwater from a borefield that supplies Geraldton, a major regional city of 38,000 people.

Why

The Allanooka chlorination process requirements will vary over the next few years as more assets are added to the Allanooka site and it was imperative that the chlorination reconfiguration ensured that it will meet all future chlorination requirements as they are currently understood.

Snapshot

Client	Water Corporation
Type of Contract	Modular solutions
Facilities	Chlorine gas dosing system featuring safe withdrawable injection quills and chemical barrier protection
Technology	Gas chlorination
Design Capacity	65ML/d

For further information