

Gas Chlorination Facility

Challenge the client faced:

The water treatment facility that supplies water to the Jigalong Indigenous Community, located in the Pilbara region of Western Australia, was deemed to be in need of an upgrade.

Jigalong is a remote Aboriginal community of approximately 333 people. The traditional owners of the land are the Martu people.

Upgrades were required to improve the security of supply and provide better control of the chlorine residual in water supplied to the local community.

The WTP upgrades also included telemetry and SCADA improvements to enable full remote visibility and control of the plant by operations.

Solution provided:

WestWater have designed, supplied and commissioned a new gas chlorination module and pump stations, consisting of:

- Two (2) 33kg chlorine gas cylinders
- Duty/standby chlorinators
- Duty/standby ejectors
- Duty/standby dose pumps
- Transfer pump skid
- Recirculation pump skid
- Ancillary equipment and instrumentation
- Telemetry hardware

Conclusion / project outcome:

This new gas chlorination facility enables reliable disinfection of process water from the ground level storage tanks (or elevated tanks if ground level tank is bypassed).

Chlorine levels are topped up by a recirculation dosing system to match similar processes operations use on other community sites.

The telemetry and SCADA upgrades to the site now provide operations vastly improved remote visibility and control to manage the tank levels, disinfection, and analytical processes.

