

Challenge the client faced:

The water treatment facility that supplies potable water to Punurunha Village (also known as the Rio Tinto Marandoo Mine Camp) was deemed to be in need of an Ultraviolet (UV) Disinfection System upstream of the chlorination facility, to reduce potential biological risks in the potable water supply, and to achieve acceptable health-based targets.

Solution provided:

WestWater have installed a new ATG UVLX Disinfection System, as well as a HACH TU3500 Turbidity Analyser between the Filtration Plant and UV system, and a Statiflo Static Mixer at the chlorination point.

The UV system has also been configured to communicate with the existing site PLC and SCADA system, to allow for remote monitoring and control by Rio Tinto operators.

Conclusion / project outcome:

The upgraded UV Disinfection System that WestWater has installed acts as a pathogen barrier, to treat the potable water supply to Punurunha Village.

The UV reactor itself has been installed in a way that allows for safe and efficient access to enable operators to perform routine maintenance, inspections, and testing, including replacement of the UV lamps or sleeves as and when required.

The work completed by WestWater ensures that the UV Disinfection System complies with all Building Code of Australia (BCA) requirements and meets Rio Tinto's minimum standards, as well as complying with Australian Standards.

