

# Application Note

## Project Images



## Client

Sydney Water,  
Rouse Hill, NSW, Australia

## Application

PLC and SCADA based control system to control the processing of sewerage to recycled water and its subsequent distribution to suburban reservoirs

## Project Description

Tech Control Systems, a business unit of Itech Corporation, was awarded the contract to upgrade the control of the recycled water treatment plant ( RWTP ) and its distribution.

The new process included Micro Filtration ( MF ) and Ozonation, plus an extra Chlorination stage as well as other process improvements.

Given that recycled water ( RW ) is pumped to people's homes, it's quality is paramount. The project was the first large scale RW venture by Sydney Water and is seen as a major factor in the growing city of Sydney's conservation of such a vital resource.

( The use of recycled water reduces the demand for clean ( potable ) water from dams. )

The SCADA system software developed by Itech Corporation allows the complete control and monitoring of all parts of the system from any connected node, plus via dial-in by Sydney Water staff. Critical alarms are communicated to Sydney Water's central alarm handling facility for action.

The system architecture includes Citect based SCADA on a dual redundant Ethernet network, communicating with Siemens PLC's each with a hot-standby controller. The PLC's are located at each section of the plant and at each suburban reservoir. The system is completely automatic, operating unattended outside business hours.