



Potable Water Treatment System – Natural Gas Project

Customer: Broad Construction Services

Location: Condabri, QLD

Case Study ID: CS-79

Date: October 2012

Overview

Broad Construction Services hired Dowdens Pumping & Water Treatment to construct a potable water treatment and pumping system.

The Problem

The water processed through the Water Treatment System needs to be potable grade water as it will be used for drinking, cooking, and washing requirements throughout the camp. Broad Construction Services needs a daily treated water production of 60kL. The water produced needs to conform with Australian NHRMC Guidelines for potable water.

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Our Solution

A water treatment plant was supplied complete with ultra-filtration membrane technology utilising state of the art equipment followed by carbon filtration to produce potable water that meets Australian drinking water guidelines.

A robust construction was required for the arduous environmental conditions with off the shelf components to facilitate easy servicing and spare part replacements. Minimum operator requirements were achieved by utilising PLC control with built-in HMI and Data Logging capabilities.

Key Components

Containerized, packaged, plug and play automatic high purity water treatment plant comprising of:

- Disc filters for coarse filtration
- Media filtration for turbidity reduction
- Ultrafiltration (UF) for filtration to <0.2 micron
- Turbidity analyser
- Carbon filtration for taste, odour and organic removal
- Monitored chlorine dosing for disinfection
- Raw, backwash and treated water storage tanks included in the scope of supply and installation.

Project Design Philosophy

Dowdens Pumping & Water Treatment's design philosophy for this project was:

- Cost-Effectiveness
- Current Best Practice
- Ease of Installation
- Simple & Effective System Operation
- System Reliability

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Brands used in this project



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