Salt Separation Services

# Project Case Study

## FINAL EFFLUENT TREATMENT

**Client:** CAP Technology

**End User:** Undisclosed

**Capacity:** upto 54 $m^3$/h influent

**Contract Value:** circa £100K

**Scope:** Design, manufacture & commission

**Contract Completion:** June 2012 to December 2012

## General

A major dairy is installing waste water treatment and re-use at a number of its operations in the UK. Our client was successful in being awarded the turnkey contract for the waste water treatment and re-use scheme at one of these dairies.

## Package Description

The skid-mounted plant includes antiscalant dosing, bag filtration, cartridge filtration, pumping and the RO stack. In addition, the plant included a CIP system and the facility for auto-flushing of the RO membrane elements on plant shutdown.

The high pressure pump motor is controlled via a VSD which, in conjunction with the automatic reject control valve, enables the operator to set the RO plant flow and recovery via the HMI or remotely via Ethernet.

The package is fully self-contained and includes electrical controls, analytical instrumentation and a CIP system. Prior to despatch, the package was subject to a comprehensive Factory Acceptance Test.

The plant has been designed to require minimal man power during usual operation and is highly automated. Operator interface is via a touch-screen Human Machine Interface that also provides alarm history and logs plant operating parameters. Ethernet connectivity has been integrated into the control system to enable remote monitoring and control.

## Process Flow