

Case Profile: Industrial Effluent



Client: Sauce & Food Manufacturer

Project Background

Our client manufacture's a range of quality pre-packed sauces, mayonnaises and dressings for Blue chip companies throughout the UK. In order to maintain a consistently good effluent quality Pollution Control were commissioned to provide a proposal to modify and upgrade their existing effluent treatment system and where possible re-use any redundant plant which was on site. Another requirement was to maximise oil recovery as this could be sold on and provide additional revenue.

Project Scope

To audit the assets of the site and design/build an appropriate treatment system .

Scope of Work

It was identified that there were two storage tanks suitable for modification to an (SBR) sequence batch reactor system and that the existing primary settlement tank could be reused as an in-flow buffer. To complement these an additional oil storage tank would be required. It was agreed that throughout the installation full productivity would have to be maintained.

Installation

The rescued tanks were converted for the aeration (SBR) process (Fill, Aerate, Settle, Draw) and new pumps and actuator valves were fitted with all the associated pipe work. Access ladders and platforms were also supplied and fitted. Whilst the buffer tank was being overhauled and a new oil storage tank was installed the incoming flow was diverted to the SBR system as a temporary treatment system. As oil recovery was a primary consideration, a heavy duty polypropylene rope type oil skimmer was fitted to the buffer tank and floating pump/skimmer devises were fitted to the SBRs. Flow meters and composite sampling equipment were commissioned to provide easy monitoring of the process.

Automated Control

To optimise the efficiency of the process a dedicated plc control panel was provided and the combined requirements of the client, our panel builder and our own engineers ensured that every possible scenario was covered giving full run status, fault indication and the ability to fine tune the various stages of SBR process to maximise energy savings .

Results

Since commissioning the plant has maintained a compliant effluent discharge quality .

