

Industrial Waste Water Treatment

Wickwar Brewing Company, England

Background

Wickwar Brewing Company is a high quality regional brewery producing hand crafted, award winning, premium bottled and cask ales to free trade customers and national distributors. For many years the brewery had experienced problems with excessive sludge accumulation within their effluent treatment system. This had increased their operational costs with excessive daily attention being required to maintain the serviceability of the plant and ensure environmental compliance.

Excess sludge had to be removed on a regular basis by an approved licensed waste carrier at considerable expense, and blockages of the interconnecting pipe work in the system were a common occurrence. Remedial maintenance work was invariably accompanied by offensive odour. The confined environment of the treatment plant, sited within the brewery building, meant that any modification of the plant would have been both undesirable and expensive. The business was desperate to identify a satisfactory low-cost solution to their effluent treatment problems.



The Brewery



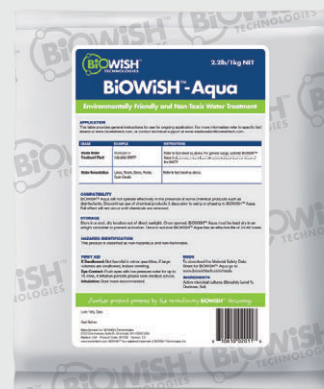
Cask Conditioning Store

BiOWiSH™ Aqua Benefits

- Reduces sludge production and handling
- Increases plant capacity by reducing contact time (capital avoidance)
- Eliminates odorous emissions
- Delivers substantial energy savings due to reduced aeration
- Minimizes need for chemical additives
- Stabilizes and improves plant treatment performance
- Lowers hydrogen sulphide, ammonia and nitrate levels
- Pre-treats influent in collection systems
- 100% natural and non-toxic

Available Sizes

- 100g
- 1kg



Challenges

The brewery's effluent treatment system has an average daily flow rate of approximately 4,500 litres and utilises a simple two-stage settlement system without aeration. Typical retention time is 24 hours before discharge to foul sewer; therefore a fast-acting, tolerant, cost-effective technology was required to achieve the client's goals of plant stability, sludge reduction, odour control and reduced operating costs.

BiOWiSH™ Aqua Application

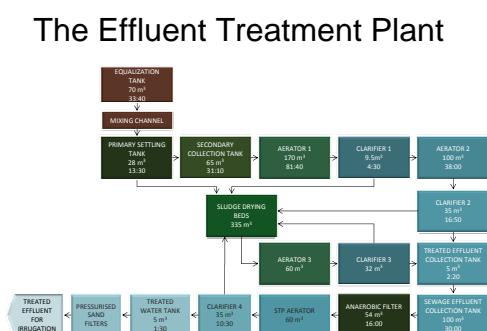
Initial consultations were undertaken with Wickwar Brewing Company in early July 2009 and they subsequently commenced dosing with *BiOWiSH™ Aqua* towards the end of that month. The company's willingness to understand, accept and implement the *BiOWiSH™* proposition, when others were reluctant to do so because it was a technology new to the UK, should not be underestimated. The brewery mixes 20 grams of *BiOWiSH™ Aqua* with approximately 20 litres of water every day, leaving the solution to mature overnight. The matured solution is then simply added directly to the primary settlement tank every day.

The pre-mixing and activation of *BiOWiSH™ Aqua* for 24 hours prior to dosing is recommended to achieve optimum results and economics of use. Pre-activation effectively increases the dosage rate without cost – the cost of treatment in this instance being little more than £1 per day. Studies have shown that concentration of the active constituents increases approximately 100 fold utilising this method. This enables low ongoing dosage rates to be highly effective. Pre-activation also ensures that *BiOWiSH™* has an opportunity to mature prior to introduction into the influent stream, enhancing overall performance.

Results

Within a few weeks of starting to use *BiOWiSH™* the client sent us the following in an e-mail; *"First the bad news, we have run out of BiOWiSH™! The good news is that Neil does think that there is now a noticeable improvement in the system with a reduction in the sludge levels"*.

Since the implementation of a *BiOWiSH™* treatment regime no settled sludge has accumulated within the treatment system, pipe work blockages have been eliminated, and the working environment is no longer adversely affected by odour. Furthermore, trade effluent samples are indicating the strength of effluent is being reduced by *BiOWiSH™*, which should lead to a reduction in discharge costs.



"BiOWiSH has been the ideal solution for Wickwar Brewing, no capital cost, easy to apply, and it has saved us a great deal of effort and cost"

Phillip Downes

Head Brewer

Wickwar Brewing Company

About BiOWiSH™ Aqua

The result of over 18 years of research and development, BiOWiSH™ is a powerful blend of biocatalysts that breaks down complex organic molecules to help eliminate waste, reduce odors, improve soil fertility and enhance water quality, among other uses. 100% natural and non-toxic, BiOWiSH™ is safe for everyday use in a wide range of consumer and industrial products. It has been proven to solve problems in environmental management (including wastewater, solid waste, soil and water remediation and industrial emissions), as well as agriculture. BiOWiSH™ products are used extensively and available in Asia, Australia, Europe, North America and Latin America.

Developed specially for the Wastewater Treatment industry, *BiOWiSH™ Aqua* accelerates the biological removal of nutrients, pathogens, suspended solids and other contaminants from wastewater.

Contact

Mr Phillip Downes
Head Brewer
Wickwar Brewing Company
The Old Brewery
Station Road
Wickwar
Gloucestershire
England GL12 8NB

Biological help for the human race



www.biowishtech.com

BiOWiSH™ is a registered trademark of BiOWiSH Technologies Inc.
CSWT15MA11INT

Biological Help for the Human Race™