

## CASE STUDY

### Wastewater treatment for a caravan park expansion

# REWATEC<sup>®</sup>

Submerged aerated filter (SAF)



## QUICK FACTS

### Application

Castledene Holiday Park, County Durham

### Requirements

- A system to cope with increased flow loads due to the planned expansion of the caravan park
- A sewage treatment plant to meet a conventional discharge consent (20mg/l, 30mg/l, 20mg/l) for BOD, TSS and NH4-N respectively
- A highly reliable system that is suitable for a site of special scientific interest (SSSI)

### Solution

Rewatec submerged aerated filter (SAF)

## SITUATION

Castledene Holiday Park, one of County Durham's most picturesque static caravan parks, came to Premier Tech with a request for a wastewater treatment solution.

With a proposed expansion plan to increase the number of static caravans from 50 to over 100, the solution, whether it be an upgrade or a completely new system, had to cater for a population of approximately 250 people.

Seasonal fluctuations, a common consideration for all campsites and caravan parks, also had to be taken into account, with a maximum daily loading of 37.5m<sup>3</sup> dry weather flow (DWF) calculated for the expected peaks in traffic throughout summer.

In addition, due to its remarkable variety of plant life and its diverse range of wildlife habitats, the park is designated an SSSI. As such, the system had to be extremely reliable and efficient, it had to produce a consistent effluent quality, and it had to have a low carbon footprint to fully preserve the 18-acre surrounding woodland.

With a tranquil surrounding proving to be a key driver in bringing visitors from all over the UK to the park, a prerequisite of any new plant was a quiet operation.

## SOLUTION

After reviewing the new loadings design data and discussing their options with the experts at Premier Tech, it became apparent that upgrading their existing wastewater treatment system was financially unjustifiable. As such, Castledene Holiday Park, in conjunction with their engineering consultants – Thomas Contracting, opted for a new, more advanced sewage treatment solution, and installed a Rewatec SAF (SAF250N20).

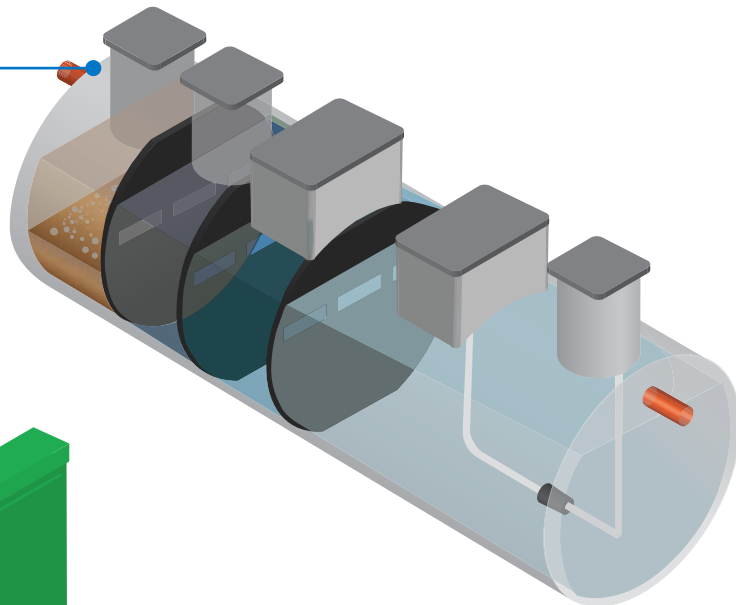
A robust steel kiosk, supplied as standard with the Rewatec SAF, was installed to house the electronic and mechanical components of the plant. An optional acoustic hood and silencer was also included, further preserving the peaceful surroundings of the site.

**INSTALLING A NEW SYSTEM  
WAS UP TO 35% MORE COST  
EFFECTIVE**

## REWATEC®

### Submerged aerated filter (SAF)

To provide energy efficient wastewater treatment that could cope with the sites increased loading



## REWATEC®

### Kiosk and control panel

Supplied as standard with the Rewatec SAF



## CONTACT US

Premier Tech provide expert consulting and bespoke solutions to meet the exact needs of our customers and professional partners. Talk to one of our experienced in-house engineers to discuss your project requirements today.



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