

# 10 YEARS OF TRULY SUSTAINABLE WASTEWATER TREATMENT IN THE UK

For the past 10 years, the Aero-Fac® wwtp at Errol has not required a single sludge tanker. The unique self-digesting sludge system at Errol ensures that it operates at a fraction of the cost of a typical wwtp.

With 6 years of successful use of an Aero-Fac® wwtp on the Sandringham Estate, The Crown Estate contacted Gurney Environmental, the supplier of Aero-Fac®, to replace a filter works in Windsor Great Park. A two cell Aero-Fac® system was designed for Cumberland Lodge and a housing complex to meet quality suitable for discharge into Great Meadow Pond.



New low carbon footprint Aero-Fac® Treatment Works at Roundwood replaced old filter works.

At approximately £350,000 constructed price, the Aero-Fac® plant was more competitive than an equivalent package plant. More important to the owner, Aero-Fac® was able to meet the concerns of intermittent flow and long-term operating and maintenance costs offering a more sustainable solution.

Option	Construction	Operation (pa)	Total (over 40 yrs)
Aero-Fac Lagoons	104	9	458
Local Treatment	1057	56	3297
Pump Away	2874	6	3114

Measured in tonnes CO<sub>2</sub> equivalent

Table 1 — Estimation of Relative Carbon Footprints (Note: Figures reflect Sutton St James scenario and are not necessarily representative of the options in general terms)

At Sutton St James, Anglian Water Services weighed the merits of three options: 1) Aero-Fac®; 2) construct a conventional treatment works; 3) pump away to another wwtp. Months of research supported that Aero-Fac® would provide the least expensive long term option and the lowest carbon footprint.

The success at Sutton St. James led to the construction of three additional Aero-Fac® and Accel-o-Fac® treatment



The Aero-Fac® Treatment Works at Errol, Scotland has been operating for 10 years.

plants at East Harling, Welney and Saltfleetby. Each additional wwtp has offered the same low carbon footprint benefits.

The Accel-o-Fac® wwtp at the village of Holkham has been treating sewage since the spring of 2006, and does so with virtually no significant ongoing operating cost by utilising wind as its main energy source.

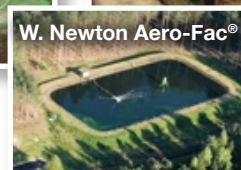
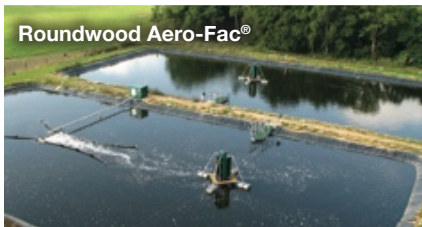
Visitors to the Errol site over the 10 years have been pleasantly surprised by the lack of odour, remarking that it is hard to believe that they are at a sewage treatment plant! Errol is an example of just how good a long-term neighbour an Aero-Fac® plant can be.

The Aero-Fac® and Accel-o-Fac® systems are unique in their ability to meet today's wastewater treatment requirements through lower CAPEX, low operating costs, use of renewable energy, elimination of sludge handling/disposal, simple maintenance and operation, plus a low carbon footprint.

For more information: [GurneyEnvironmental.com](http://GurneyEnvironmental.com)

PROVEN PERFORMANCE

Over 10 Years  
IN THE UNITED KINGDOM



Low CAPEX. Low OPEX. Low carbon footprint. True sustainability. These are the benchmarks for Gurney Environmental Ltd. We offer unique wastewater treatment systems, equipment and design including zero-to-low energy www, waste-to-energy systems, reservoir destratification systems and ammonia-nitrogen removal.

Contact us for more information

1 Bryggen Road, North Lynn Industrial Estate  
King's Lynn Norfolk PE30 2HZ UK

T: +44-(0)1553-776202 • F: +44-(0)1553-776335

E: [info@GurneyEnvironmental.com](mailto:info@GurneyEnvironmental.com) • W: [www.GurneyEnvironmental.com](http://www.GurneyEnvironmental.com)

**GURNEYENVIRONMENTAL LTD**  
FROM WATER SUPPLY TO WATER RE-USE