

# FilterClear®



A BLUEWATER BIO TECHNOLOGY

## Harby STW, Phosphorus Removal

### Project Description

Harby STW is a small trickling filter works in Nottinghamshire, treating domestic sewage and trade effluent, containing dairy wastewater from a cheese factory.

In AMP6, under the Water Framework Directive (WFD), the site was upgraded to meet more stringent discharge standards, including a new total phosphorus (TP) consent of 0.25 mg/l, and Fe of 2.5 mg/l. To achieve these new consent standards, Nomenca (Severn Trent's main contractor) installed a chemical dosing facility and a **FilterClear®** plant. The decision was based on a comprehensive whole life cost (WLC) assessment of various tertiary solids removal (TSR) plants.

The **FilterClear®** skid was fully assembled, tested and commissioned off-site at **Bluewater Bio's** works, before being transported to site for installation on a flat concrete slab.

### Scope of Works

Design, procurement, manufacture, installation and commissioning of **Bluewater Bio's** proprietary **FilterClear®** 3v2040 plant. Fully automated and instrumented tertiary filtration system for Total Phosphorus removal.

### Project Duration

Award to delivery to site ~ 12 weeks

Installation time ~ 4 days

Commissioning time ~ 8 days

### Client Contact

Client organisation: **Severn Trent**

Contact person: **Kevin Fobbester** (Project Manager)

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Project Name:	Harby STW
Client:	Severn Trent
Capacity:	36 L/s
Main Contractor:	nmcn Plc
Project Scope:	Design, supply & commission

### Project Highlights

- Off-site manufacture
- Consent of 0.25 mg/l TP and 2.5 mg/l Fe
- Rapid installation and commissioning
- No separate flocculation tank needed

### Harby STW Process Parameters

DWF	1,200 m <sup>3</sup> /d
FFT	3,076 m <sup>3</sup> /d (36 l/s)
Design Influent TSS concentration*	49 mg/L ave 111 mg/L 95%ile
Influent TP concentration	1 mg/L 95%ile
Effluent TP consent	0.25 mg/L (average)
Effluent Fe consent	2.5 mg/L

\*includes allowance for chemical dosing

## BLUEWATER BIO



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