

Case Study

West Felton Sewage Treatment Works



Client:
Severn Trent Water

Principal Contractor:
Mott MacDonald Bentley

M&E sub-contractor:
Colloide

Location:
Shropshire, England

Project:
Chemical Dosing

On this project Colloide acted as Mechanical and Electrical sub-contractor, working under principle contractor, Mott MacDonald Bentley for Severn Trent Water as part of overall upgrade works at West Felton Sewage Treatment Works.

This work is essential and part of a £5million investment project by Severn Trent. It will ensure STW continues to meet the needs of a growing population and that a reliable and resilient wastewater service is provided to customers.

Scope of work included:

A 2m³ Tank 1 Pump Chemical Dosing Alkalinity System was installed by Colloide to satisfy the pH reduction requirements of this project.

The chemical dosing system consisted of a chemical storage tank, chemical fill point, dosing kiosk, Emergency Safety Shower and Hose Reel.

Project Deliverables

The main components of the system

- All pumps, pipework, valves and controls are housed in a pre-fabricated weatherproof kiosk with lockable access doors. Lockable fill-point is also included.
- This package included all necessary instrumentation, flow/pressure measurement and tank level instruments. Flow monitoring of chemical dosing pumps required to ensure effective dosing is achieved.
- A pH measurement system, made up of three separate PH probes operating within triple validation mode, mounted on the outlet of the contact tank.
- Ferric Sulphate storage and dosing system including 2000L tank and bund, duty/standby dosing pumps, pipework, etc.
- An emergency safety shower and eye bath, along with heated hose reels were supplied. Designed to meet high safety standards, ensuring a rapid and effective response to chemical exposure incidents.
- This Chemical Dosing Alkalinity system shall be suitable to integrate with the existing Plant automation - in SCADA, telemetry, Fire, and safety plans.

