

Case Study

Homesford Wastewater Treatment Works



Client:

Severn Trent Water

Principal Contractor:

MWH Treatment Limited

M&E sub-contractor:

Colloide

Location:

Derbyshire, England

Project:

Chemical Dosing

Colloide have been sub-contracted by MWH Treatment LTD to provide a chemical dosing system to satisfy the phosphorus removal requirements of the project for Severn Trent Water LTD.

The chemical dosing system will consist of a 7.5m³ Tank 2 Pump Chemical Dosing System with chemical storage tank, chemical fill point and dosing kiosk.

Chemical dosing is the adding of chemicals into water/fluid or sludge to achieve required conditioning and in this case Orthophosphate is used in removing phosphorus.

Technical information

The main components of the system

Chemical Fill Point Kiosk

The fill point kiosk functions as the designated area for chemical delivery into the storage tank. Its primary purpose is to ensure that chemicals are introduced at the right location, thus maintaining the dosing process's efficiency. The kiosk is equipped with various control and warning systems to ensure the smooth operation of the dosing process.

Chemical Storage Tank

Inside the storage tank, you'll find additional equipment, including fill pipework, outlet pipework, an overflow pipe, a drain valve, a vent, a level transmitter, and a pressure gauge. These components facilitate the tank's proper functioning, chemical handling, and safety during dosing.

Dosing Kiosk

The dosing kiosk is designed to handle the precise and safe dosing or dispensing of chemicals. It consists of the following components:

- Dosing pumps
- Storage tanks for chemicals
- A control system
- Sensors for measurements
- Safety features (leak detection, pressure relief)
- Pipework
- Valves
- User-friendly interface.

