



Driving Operational Efficiency with Advanced Water Solutions

Background

This state-of-the-art facility processes household waste across North Yorkshire county and became operational in March 2018. Through a unique combination of three technologies, recycle, energy recovery and biogas the facility reduces the amount of household waste from North Yorkshire sent to landfill by at least 90%.

This is achieved by:

- Sorting waste using mechanical treatment technology to extract and recycle items
- Processing around 40,000 tonnes of food and organic waste annually to generate renewable energy
- Using the remaining non-recyclable waste to generate enough energy to power at least 40,000 homes

The Challenge

The water treatment plant was suffering from fouling on the reverse osmosis membranes. Failure of the water treatment plant would not only result in site closure and revenue loss but, more critically, impact waste management across the region.

The Solution

WCS provided a team to replace the Reverse Osmosis membranes, and reset the plant to return it to optimal operation. This allowed the plant to continue operating as well as protecting the steam turbine.

Value Added

The site was facing a monthly cost of £10,000 due to importing tankers of demineralized water, along with the loss of gate fees for waste and generation. Thanks to WCS, we were able to resolve the issue and prevent further expenses and losses for the customer.