

CASE STUDY TRADE EFFLUENT MONITORING

NCH CHEM-AQUA

A number of projects we work on at Detectronic, are delivered as a partnership. When global water, energy and maintenance solutions providers, NCH CHEM-AQUA, were tasked with helping a Yorkshire-based brewery better understand their wastewater network, they contacted us to assist with technology and equipment for the monitoring project.

The brewery had initially approached NCH with a view to saving water within the plant and further improving operational costs and efficiencies. NCH suggested the implementation of a six month industrial and trade effluent monitoring project at the plant to gain a comprehensive insight into exactly what was happening in the network.

INDUSTRY

Brewery

PRODUCTS & SERVICES

MSFM S2U

Raingauges

Detecdata

OBJECTIVES

- To measure the flows across the site to work out what quantity of effluent was coming from where
- To ascertain if any rain water was entering the sewer
- To discover if effluent was coming in through known connections into the adjacent football ground and small housing estate, along with a potential cross connection with the neighbouring industry.

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PLANNING

We have worked with Neil Richards, NCH CHEM-AQUA's regional sales manager UK North, in the past and the first step of the process was for our technical support manager, Phill Tuxford, to meet with Neil at the site to discuss the best way to approach the project. The focus was on gathering the robust and reliable data required to deliver the savings and efficiencies required by the client.

IMPLEMENTATION

Following discussions with Paul and his team, we implemented a tailored flow survey which included the installation of five of our MSFM flow monitors and two rain gauges at pre-designated locations within Jacobs' scope of works.

As chambers can sometimes be unsuitable for flow monitoring, we identified a few alternative locations for each monitoring site prior to visiting site. This planning saved valuable time as two of the pre-designated locations were deemed unsuitable.

ANALYSIS AND REPORTING

The highly skilled Detectronic data centre team analysed all of the information the monitors provided and produced a detailed report. This report highlighted the fact that rainfall was entering the sewer across half of the site. The housing estate and football ground were also contributing a nominal amount and there was definite and significant infiltration from neighbouring industrial sites.

We noted that more wastewater was entering the network from a certain piece of equipment at the plant than previously estimated and that during a 'stop-weekend' at the plant, wastewater was continuing to enter the drains. Water from the cleaning towers at the plant was also entering a local river via osmosis.

“ Using the data from the Detectronic monitors and key results from subsequent analysis, we were in a position to offer unrivalled advice and solutions to each of these issues and enable the brewer to achieve its initial objectives. ”

RESULTS

The monitoring project delivered a definitive and detailed picture of what was happening at any given time in the network and highlighted several issues for Neil and his team to work on.

To learn more about Detectronic, get in touch:

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