HYDROK WATER ENGINEERING SOLUTIONS

HYDROK-MECANA

Case Study

Sitename: Rayleigh WwTW

Client: Anglian Water

Installation Date: June 2015



Rayleigh East WRc is a trickling filter works with a large expanse of grass plots to retain the solids discharged from Nitrifying trickling filters, prior to UV disinfection. Anglian Water approached Hydrok to deliver a compact, energy efficient solution to eliminate the failing grass plots and high number of temporary treatment units employed to keep the site compliant.

Hydrok initially installed 1 no. SF15/75 filter with microfibre cloths, which allowed Anglian Water to experience the high performance of the technology first hand, prior to their completing the scheme with the planned second unit. Units were installed within the gravity profile of the works for an ultra-low opex solution.

Key Figures;

FFT: 179l/s,15534m³/d

TSS Consent: 20 mg/l Filter Footprint: 23m²

Surface Loading Rate: 28.1m³/m²/hr

Return flows: 5.3%



Figure 1 & 2: Installed SF15/75 Mecana Pile Cloth Filter including access metalwork







Rayleigh Results

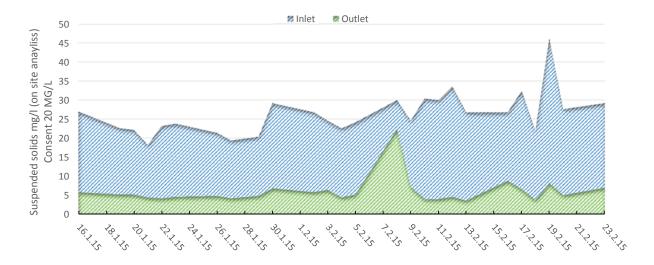


Figure 3: Results of TSS removal



Figure 4: Installed SF15/75 Mecana Microfibre Cloth Filter including access metalwork

