

Filter refurbishment program for Southern Water in Eastrey

Peak flow to treatment:

- PE of site: 2090 (550 m³/day)
- Formula A site

Units supplied:

- 2 off steel 500 pe units (Rental units)

Purpose of rental units:

To allow for the refurbishment of trickling filter beds, initially the SAF units were used for both carbonaceous treatment and ammonia removal. Once the trickling filter beds were refurbished the SAF units were then used to polish the effluent (ammonia removal) from the trickling beds whilst they seeded up, this process typically taking around 4-8 weeks.

MS Fola/Damola (4D Process scientist) confirmed that all 2 WPL SAF units consistently achieved less than 1mg/l NH₄, typically the incoming effluent from the trickling filters was around 10mg/l meaning the WPL units NH₄ removal rate was around 90%.

The WPL 500pe units are supplied with a separate GRP kiosk housing duty and standby side channel blower units and our proprietary control panel. The 2 off 500pe units had a 2 way effluent distribution tower installed for accurate flow control. Each of the control panels have the ability to connect to a suitable telemetry alarm system providing details of any failures.

Consent standard required: 3mg/l NH₄



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