



## FILAMENTOUS BULKING

The presence of filaments in aeration treatment works often leads to “bulking” in final settlement tanks. This bulking leads to solids carry-over into final effluent and, in many cases, consent failure.

Historical treatments using biocides or high-acidity inorganic coagulants can now be avoided with the use of the SNF range of FLOQUAT PolyDADMACs – organic coagulants that flocculate the filaments and re-start the settlement process.

A single dosing point, either into the aeration discharge or final settlement tank distribution chamber will ensure total solids capture and a resumption of clean final effluent. Dose ranges of 5-15 parts per million are typical to achieve total capture. All filaments eventually report to the Surplus Activated Sludge (SAS)



thickening process.

SNF (UK) Limited will provide on-site:

- Jar testing
- Application survey and dosing plan
- Product delivery (packaging and delivery format to suit site requirements)
  - Hire (or sale) of dosing pump, pipework, IBC bund
  - On-site technical (application) and equipment support
    - Collection and disposal of empty packaging

## Case Study

A sewage treatment works (FFT 120l/s) with a large filament outbreak was unable to settle any solids and the tertiary sand filter plant had blocked and become unusable.

SNF (UK) Limited selected, via on-site jar testing, FLOQUAT FL4620 at 10ppm to ensure solids capture and a resumption of clean final effluent. On the same day as the jar testing SNF (UK) Limited was able to install a dosing system and supply 4 x 25kg kegs of FLOQUAT FL4620 to trial and confirm the performance indicated in the lab.

Within 45 minutes of the trial the final settlement tanks were producing clear supernatant and the final effluent return to within consent. The next day SNF (UK) Limited supplied a number of 1050kg IBC's of FLOQUAT FL4620 to ensure the maintenance of improved plant performance.

Within a couple of weeks all traces of the filaments had gone which had been captured in the normal SAS thickening process.