

## Improving Resilience at Guestling Green WwTW

Installation of the McGill Distributor addresses frequent sparge hole blockages.



McGill Distributor installation at Guestling Green WwTW

*“The McGill Distributor was installed to keep rotations more consistent and prevent sparge holes blocking.... since installation underlying ammonia has definitely improved”*

**Southern Water Process Scientist**

### Scope

Two McGill Distributors were installed to replace existing syphonic driven rotary arms at Guestling Green WwTW.

### Challenge

The work's operation, and compliance, was being handicapped by the regular blockage of sparge holes in the rotary distributors. This was curtailing the even distribution of effluent and reliable rotation of the rotary arms. The subsequent back up of flows was also causing the surcharging of the primary settlement tank weir. A solution was required capable of delivering reliable distribution across all flow conditions without effect on the primary settlement tank's operation.

### Outcomes

Installation of the McGill Distributor has delivered a reliable distribution solution within a tight hydraulic profile. The benefit of a fully activated filter media has been seen in the improved nitrification occurring within the filter beds.

