

Worthing Secondary Treatment Scheme Southern Water

*Construction
management for
major site upgrade
programme*



Worthing Wastewater Treatment Works is a sewage and sludge treatment centre, treating sewage from a population equivalent of approximately 135,000, the resultant sludge and imported sludge from Shoreham Wastewater Treatment Works.

The main contract, let under Southern Water's modified IChemE "Red Book" Conditions of Contract, was for the provision of secondary treatment and associated modifications to the existing works. This was necessary in order to meet the new consents imposed by the Environment Agency. The contract also included the extension of the existing sludge digestion facilities to cater for increased sludge throughput.

Entec was invited to submit a competitive tender to provide construction management services for the UWWTD Secondary Treatment Contract. The brief included post-contract award site supervision, contract administration, the checking/audit of the contractor's design and the role of planning supervisor as defined in the CDM Regulations 1994. In addition Entec co-ordinated and

managed the contractor-client interface and the testing and commissioning of the new plant and equipment.

The works included the replacement of the existing screens (each with a capacity of 2100 l/s) and screenings handling facilities, the provision of a new ferric dosing system to suppress septicity and a new activated sludge plant. The secondary treatment process was a contact stabilisation system with rectangular final tanks and a treatment capacity of 830 l/s. In addition, modifications and enhancements were required to the sludge handling and treatment facilities.

These included the provision of a second digester, with storage and feed tanks. The new digester together with new boiler, heat exchanger, gas booster, sludge re-circulation and gas draw-off system was installed and commissioned such that full digestion facilities in the existing digester were retained. This allowed normal operation of the existing processes during the construction of the new works.

