

WPL and Watling Hope Partner to Supply a Wastewater Treatment System Upgrade to The King Edward VII

WPL and Watling Hope Partner to Supply a Wastewater Treatment System Upgrade to *The King Edward VII Memorial Hospital* in Bermuda

The King Edward VII Memorial Hospital on the beautiful island of Bermuda will benefit from an exciting expansion program which includes 90 new single occupancy en suite patient rooms, a day surgery unit, ambulatory care facilities, diagnostic imaging services and a new emergency room. Due to this extensive development there is a need to include an upgrade to the existing wastewater treatment system as part of the project.



Since the early stages of the project, specialist sewage treatment plant manufacturer WPL Limited worked closely with Watling Hope, an independent wastewater treatment specialist company, with experience of similar projects in Bermuda and the UK.

Due to the size and position of the hospital the system had to achieve the very high standard of discharge to 10mg/l suspended solids, 10mg/l Biological Oxygen Demand and 10mg/l Total Kjeldahl Nitrogen with a flow of 460m³ per day, and the population equivalent was increased to 1755. Over three years, Watling Hope instigated a series of flow and load trials, which provided the design data for WPL to use to correctly size the plant.

WPL's Specialist SAF technology was selected as the best solution to achieve this strict consent due to its process capabilities, and the bespoke, flexible nature of the design has enabled the engineers to maximise the available space on site, by locating the sewage treatment system in an underground chamber beneath the car park. This is an enclosed space for which WPL's engineers have had to design and specify an ATEX approved system, to counter the effects of potentially explosive gases that could build up.

The final solution includes eight WPL Specialist SAF units, each 6.2m long. A flow splitter separates the stream from the primary treatment into two, with each stream then passing through four WPL Specialist SAF units. A lamella plate separator would be used for final clarification, and a Microscreen with a 40 micron filter cloth for final polishing of the effluent prior to discharge.

The project is currently underway with the delivery and installation of the new plant equipment starting in July 2013.

WPL Ltd is an internationally-recognised leader in the design, manufacture and supply of standardised and bespoke environmental sewage, wastewater and commercial kitchen grease management process solutions.



www.wplinternational.com