

**PROJECT NAME**

Refurbishment of the Flip Human Wastewater Treatment Works

**CLIENT**

ProPlan Consulting Engineers *on behalf of Mogale City Local Municipality*

**LOCATION**

Krugersdorp

**PROJECT VALUE**

R 6,000,000

**SERVICES**

Detail civil, mechanical and electrical design

**TIME FRAME**

June 2009 (On-going)



The Flip Human WWTW consists of 3 modules; two of 10 M<sup>3</sup>/d and one 30 M<sup>3</sup>/d activated sludge units. The plant includes a balancing tank which receives excess sewage flow during peak periods. During non-peak periods, this flow is blended back to the main process. Another feature of the plant is its sludge handling facility and a methane production unit which can be used for the generation of electrical energy.

Over the years, a lack of maintenance and capital renewal has led to some critical mechanical and electrical components lapsing into a state of disrepair. This has happened due to financial constraints. This, in turn, has resulted in the final water quality deteriorating to such an extent that the final effluent does not adhere to the limits set for discharge. This has serious implications for the quality of the receiving stream.



A tender is currently in preparation for the refurbishment and replacement of mechanical and electrical equipment while the civil aspects such as corrosion on the concrete will also receive attention.

A component of the refurbishment tender will be a maintenance contract for a period of 3 years during which time a Contractor will be on standby on an "as and when" basis to provide maintenance services. This is regarded as an essential service to prevent a similar situation from developing again.