



MARCH 2011

## Molteno Waste Water Treatment Plant



In 2007 Molteno Brothers in Grabouw embarked on an ambitious task to transfer approximately 220 houses to staff members at various managerial levels and in addition service 26 new plots.

In order to do so Molteno Brothers had to provide internal and bulk services to this new extension of Grabouw. As part of the bulk services provision the existing waste water treatment plant was refurbished. This included major concrete repairs to all structures, the replacement of all mechanical and electrical plant and the construction of a new control room and new maturation ponds. In order to meet DWA General Standards the inlet works screens were upgraded, the aeration capacity of the rotating brush aerators in the Pasveer ditch was increased and an additional drying bed was constructed. Today the plant comfortably meets General Standards and the maturation ponds are an oasis for local water fowl and wetland birds. See the latest test results below.



### Molteno Wastewater Treatment Plant: Treated Effluent Results

	pH	EC	COD	SS	E. Coli
November 2010	7.4	33	62	6	10
December 2010	7.0	30	59	6	1
January 2011	7.8	32	30	9	50
<b>DWA General Standards</b>	<b>5.5 - 9.5</b>	<b>150</b>	<b>75</b>	<b>25</b>	<b>1000</b>

EC - Electrical Conductivity; COD - Chemical Oxygen Demand; SS - Suspended Solids



*When drinking water, remember its source.*

- Chinese Proverb

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## Elgin Village Water Treatment Plant



The conventional flocculation plant has finally and successfully been packaged at Elgin Village!

This water treatment plant utilises the conventional method of flocculation with Aluminium Sulphate to remove the "tea" colour caused by tannins in the natural waters of the Elgin Valley. Not only does the plant produce crystal clear water conforming to SANS 241 Class 1 standards, it also uses very little chemicals, resulting in substantial cost savings. The plant comes complete with drying beds for flushing and backwashing water, so that no contamination of the soil or ground water can occur. Please contact us to arrange a site visit.



## &Beyond Ngala Lodge Waste Water Treatment Plant

Sustainable Engineering Solutions was recently appointed to design, supply and install the new wastewater treatment plant at Ngala Lodge in Mpumalanga.

The lodge is situated in an ecologically sensitive area that forms part of the management area of the Kruger National Park. In order to meet the strict standards for effluent disposal, &Beyond has chosen to install a Sustain-Aqua activated sludge wastewater treatment plant. The plant incorporates screening, anaerobic digestion, aerobic digestion, return activated sludge, settling and disinfection to treat the receiving waste water to General Standards. Completion is due in April 2011.



### About our Company

Sustainable Engineering Solutions designs the Sustain-Aqua series of water and wastewater treatment plants. Each treatment plant is customised to suit the specific situation, because no two customers or water sources are the same. Although we standardise our processes we are not married to any proprietary equipment and utilise what best suits the situation, from ozone and UV treatment to Reverse Osmosis and flocculation.

We have a design office in Somerset West and a workshop in Grabouw. We service mainly the Western Cape but have successfully delivered projects and services as far as Mpumalanga and Rwanda.

*We service the tourism industry, food & wine industry, agricultural and residential developments with water and wastewater treatment solutions. Contact us to make an appointment.*

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