Location: Eagles Landing Estate, South-Africa

## Description: $50 \mathrm{~m} \times 20 \mathrm{~m}$ residential pond

Problem Description: Eagles Landing is situated on the banks of Hartbeespoort dam, it has an inland pond surrounded by houses that residence decided to treat with LG Sonic e-line technology. The residential pond plagued with heavy thick green algae had high maintenance requirements and was an eyesore for residents.

The natural plant life and fish was drastically degraded due to the algae infestation.

## Residential Pond

## Before treatment

Thick green algae covers the entire pond, when scooped it returns in just 2 to 3 days. Eagles Landing has a residential pond surrounded by houses where resident's entertainment patios overlook this pond. The pond filled with recycled waste water, plagued with heavy thick green algae and has become an eyesore for residents. Due to the algae infestation fish and natural plant life (Water Lilies) has degraded significantly. The estate management \& maintenance team needed to scoop the algae out often but they were just returning after two to three days after a good algae scoop. The algae infested pond had many other serious disadvantages such as affecting decisions for buyers \& sellers of property. On August 7th 2012, it was decided to install 1 LG Sonic e-Line unit.


Photo 2: Blanket weed covering 99\% of the water surface

## After treatment

Generally after two to three days the dam would be filled with algae again but in this test case after just seven days no algae has come back at all. After 10 days still no algae had returned all that was left were plants (Water Lilies) and a little debris that was scooped off the surface, leaving the pond looking pristine with clear water. In this period a fountain was installed to create some aeration in the pond. Finally, after 31 days a good rainfall flushed out the remaining floating debris and what left was crystal clear water, healthy water lilies and extremely happy residents.


Photo 3:
Pond aspect after 1 month of treatment with the new LG Sonic e-line

## Results

- Up to $90 \%$ reduction of suspended green algae
- Restored plant life and healthy water lilies
- Improved ornamental values for local residents


## Treatment evolution

Before:Thick green algae covers the entire pond, when scooped it returns in just 2 to 3 days.


After 7 days: The pictures clearly show that no algae has come back at all. What we did notice is the bit of algae that was not scooped turned into a foamy light weight substance (floating debris).


After 10 days: Still no algae has returned, all that is left is plants (Water lilies ) and a little debris.


After 17 days: Fountains were suggested and installed to create some aeration in the pond. After 17 days, no algae had returned. What we did notice, was a lot of floating debris, this phase we refer to, as the peeling stage when dead algae peels off rocks and plants beneath the water surface. In most cases the debris will be flushed out of the weir or with the help of a good rainfall.


After 31 days: Fortunately we had a good rainfall that helped flush some of the remaining floating debris, we are now left with crystal clear water, healthy water lillies and extremely happy residents.


