



**Application:** Raw water reservoir Ecuador July 2013.

**Description:** Located in Santa Elena's peninsula, the 42.000 m<sup>3</sup> raw water reservoir are further treated in the local drinking water plant. Then, 250.000 inhabitants can enjoy safe drinking water. The daily water consumption is 132,5 m<sup>3</sup> and it is built in geomembrane HDPE liner. 100 kg of copper sulfate are used every year to get rid of algae.

**Problem:** Green algae covering the sides of the lagoon before entering the treatment process.

## Raw water reservoir

### Before the treatment

Before the installation of the **LG Sonic® e-Line** equipment, algae grew on the surface and settle down on the liner before entering the drinking water treatment plant. See pictures 1.

The images of the right side were taken just before the installation of the **LG Sonic®** devices to evaluate the results before and after treatment.



Picture 1: The sides of the lagoon are covered with green algae.

### After treatment

To cover the 24.000 m<sup>2</sup> of water surface, it was decided to install 3 devices **LG Sonic® e-Line**. The units were connected to a UPS system that protects the LG Sonic devices from over tensions and provides 50 minutes autonomy if power is cut. 24 hours after the installation, the results were astonishing. See picture 2.



Picture 2: Algae has disappeared completely after 24 hours of LG Sonic treatment.

The client is fully satisfied and will install more devices in the future.

### Results

- Algae has completely disappeared from the surface in just 24 hours of treatment.
- Significant improvement in water clarity.
- Total avoidance of chemical treatment.