

Prevention of Mosquitoes & Odours Pond Treatment Plant, Maitencillo, Chile



Resort Marbella, Maitencillo, Región de Valparaíso, Chile

Operation

- 1 OLOID Type 400 in facultative pond with 4300 m³
- 2 OLOID Type 400 in facultative pond with 8000 m³

Period

Since 12/2013

Success

- BOD reduction
- Prevention of odors
- Prevention of mosquitoes

Goal of the OLOID operation

Continue the treatment of water from wastewater treatment plants in poor condition, thus eliminating bad odours.

Description of the ponds

Two facultative ponds, one (south pond) is oval-shaped with 4300 m³ of capacity, and the other (north pond) is kidney-shaped with 8000 m³ of capacity. Both are fed with domestic wastewater and they are not connected to each other.

Process design:

The south pond was fed by water from a secondary treatment plant of domestic wastewater in poor condition, and the north pond was fed by previously sedimented raw domestic wastewater. The goal of the OLOID installation was to continue the wastewater treatment in both lagoons.

OLOID-positioning in the south pond: one OLOID installed in the first quarter of the pond

OLOID-positioning in the north pond: two OLOID, one installed at one end of the pool and another at the other end, so that the current covers the entire pool.

Results

- The circulation in the entire pond was improved through the operation of the OLOID. The entire body of water was stirred as far as the corners leaving no death zones. For this reason, all mosquitoes disappeared.
- The O₂ transfer by diffusion across the interface air / water was enlarged, increasing the treatment of bacteria and reducing BOD. This prevented bad odours.
- The oxygen was uniformly distributed in the entire pond.

The project was carried out by our partner Wetland, Santiago, Chile

Contact person: Carla Germani; <http://wetland.cl/>

