SCD Probiotics

Case Study Summary – California, United States of America

Wastewater - Pathogen Control and Copper Remediation

Industry:	City Government
Application:	Remediate water with pathogens and copper in recreational lake
Customer:	City of Los Angeles, Department Public Works, Bureau of Sanitation WPD
Where:	Reseda Lake Park, Los Angeles, California, USA
When:	March 2, 2009 – June 24, 2009
Products:	OET Magic Sinkers (solid Bokashi balls), OET Impregnated Carbon Bag (Activated Charcoal with Bio Klean) and OET Pond Magician (SCD Bio Klean™)
SCD Partner:	Organic Environmental Technology (OET)

Customer Problem

Reseda Lake is a man-made lake, approximately 2.5 acres in size and 9 feet deep, in a recreational area of Reseda Park. The lake is polluted from the droppings of birds and the decomposition of food that has been scattered in the water by visitors who feed the birds (see chart below for baseline pathogen measurements).

Goal

The lake water in Reseda Lake should meet or exceed the city standards for lake water quality in order to be consistent with the standards established by the Department of Natural Resources (see chart below for standards the pilot project was tasked to achieve).

Methodology

A baseline measure of metals and microbes was established in October 2008 prior to the treatment of SCD Probiotics products and technology (see chart below). All samples were analyzed for total, E. Coli, Enterococcus and Total Colifoms bacteria, as well as copper. The microbial culture formulation and application process, designed and developed by the SCD Probiotics technology team in partnership with California-based Organic Environmental Technology

Product applications began in March 2009. A solid microbial culture (Magic Sinkers) was placed at various strategic locations along with activated wood charcoal (Impregnated Carbon) and a liquid microbial culture (Pond Magician) was injected at the aerator unit. Samples at six locations around the lake were taken on June 24, 2009.

Results

The table below represents the significant improvement in water quality at all levels, with sample results testing far below the City Standards.

Water Quality Improvements at Reseda Lake based on SCD Probiotics Technology application

Parameters	Baseline Average*	After SCD Site No. 1	After SCD Site No. 2	After SCD Site No. 3**	After SCD Site No. 4	After SCD Site No. 5	After SCD Site No. 6	City Standard
	31 Oct 08	24 Jun 09	24 Jun 09	24 Jun 09	24 Jun 09	24 Jun 09	24 Jun 09	24 Jun 09
Copper (µg/L)	235	150	140	140	140	130	140	200
E. Coli (MPN/100mL)	4433	< 2	< 2	240	9	11	2	576
Enterococcus	4333	< 2	4	12	4	< 2	2	104
Total Coliforms (MPN/100mL)	15300	4	14	500	35	34	21	1000

*Average of six samples taken prior to the start of the SCD Probiotics applications, at the north, south, east, west and center of the lake.

**South side of Reseda Lake is where the majority of the ducks, geese and other birds enter the lake.

Next Steps

Due to the overwhelmingly positive results in this test application, the City of Los Angeles has plans to sign a contract with Organic Environmental Technology (OET) Los Angeles to clean up mile-long Cabrilla Beach in San Pedro, California—a popular swimming, surfing, and scuba diving destination. Technical support will be provided by SCD Probiotics technology staff and products and customer service provided by OET.