

## Leachate Treatment

### Interaseo del Valle, Colombia

#### Background

Managed by Interaseo del Valle, the Yotoco landfill services the city of Cali, capital of Valle del Cauca and other nearby towns in Colombia. The landfill currently receives a daily average of 1,700 tons of waste from a nearby transfer station.

#### Objectives

Improve leachate quality at the Yotoco landfill and reduce odors at the transfer station.

#### Application and Dosing

BiOWiSH™-Odor was dosed at a rate of 1.5 grams per ton of waste.

#### Results

Testing was initially conducted at the landfill with very good results.

Preliminary results in COD and BOD were as follows:

COD (mg O <sub>2</sub> /L)		
Sample	Value	Reduction
June 2009	53,460	na
July 2009	30,030	43.83%
August 10, 2009	35,070	34.40%
August 14, 2009	27,946	47.73%

BOD (mg O <sub>2</sub> /L)		
Sample	Value	Reduction
June 2009	23,688	na
July 2009	9,661	59.22%
August 10, 2009	17,466	26.27%
August 14, 2009	22,269	5.99%

#### BiOWiSH™ Odor Benefits

- Removes odors at source
- Reduces Volatile Organic Compounds (VOC) emissions
- Helps break down organic waste
- Reduces waste volume
- Accelerates composting time
- Improves leachate water quality
- 100% natural and non-toxic

#### Available sizes

- 3.5oz/100g
- 2.2lb/1kg

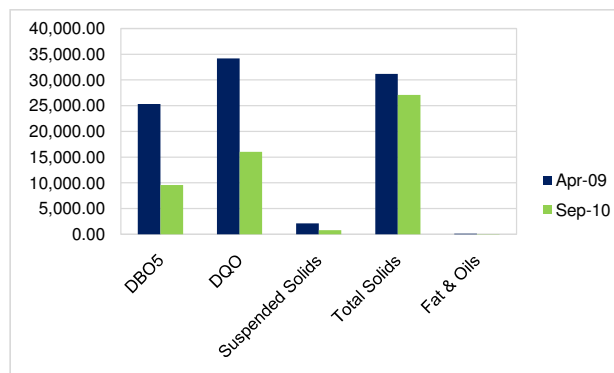




Yotoco Landfill

Based on the results at the landfill, a decision was made to extend the trial to the transfer station and the results were as follows:

Data	Unit	April 2009	September 2010	Reduction
BOD	mg. O <sub>2</sub> /L	25,328	9,613	62%
COD	mg. O <sub>2</sub> /L	34,206	16,040	53%
Suspended Solids	mg./L	2,117	833	61%
Total Solids	mg./L	31,183	27,105	13%
Fat & Oils	mg./L	138	32	77%



Transfer Station

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## Benefits

In addition to the very good results achieved in the quality of leachate, the following were also observed:

- Significant reduction in odors at the transfer station and landfill
- Reduction in the presence of flies in the landfill

## Contacts

### **BiOWiSH Technologies**

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