## New Alternative in the Treatment of Residual Wastewater at Coca Cola Bottling Plant in San Salvador

## Location: The Eco Plant of Nixapa Coca Cola, San Salvador

**Background:** This Coca Cola bottling plant added a new bottling line that doubled its production that, in turn, doubled the organic loading to its activated sludge waste treatment plant.

This plant needed a quick solution to address increased treatment demand. They proceeded to make several source control changes in the facility to reduce organic loading but these changes were not sufficient to handle the demand and the average effluent COD remained over 2000 mg/l as opposed to a regulation guide of 450 mg/l.

Bioaugmentation with MICROBE-LIFT<sup>®</sup> technology was a logical solution. **Ecological Laboratories Inc.** is the developer and manufacturer of MICROBE-LIFT<sup>®</sup> technology.

Pryeasa SA de CV is the exclusive distributor of MICROBE-LIFT<sup>®</sup> in San Salvador. They provided the technical recommendation for addition of MICROBE-LIFT<sup>®</sup> to increase the biological degradation capacity of Coca Cola's waste treatment system.

**Results:** Results were immediate. Dosage of MICROBE-LIFT<sup>®</sup> was introduced as recommended and within two weeks, the plant was operating within the regulation requirement. After three weeks the effluent was below 50 mg/l COD on a regular basis. Even when there was a spike in influent COD, MICROBE-LIFT<sup>®</sup> was able to bring the effluent back into compliance very quickly.

Ing. Danilo Juárez, Head of plant maintenance proclaims,

"We have increased the efficiency of our activated sludge system to more than 90% with the use of MICROBE-LIFT<sup>®</sup>, in conjunction with a reduction of organic loading to the system as well as the application of a heavy weight flocculant. The efficiency levels now being attained have never before been achieved with the use of other bacterial products in our treatment process."



**FIG. 1:** The Eco Plant of Nixapa Coca Cola has experienced much success with the utilization of the MICROBE-LIFT® bacteria. In the photograph is the gentleman in the white shirt, Ing. Danilo Juárez, Head of plant maintenance, and Ing. Roberto Calderón Avelar, Director of PRYEASA de C.V., the exclusive representatives for MICROBE-LIFT® technology in El Salvador.



## New Alternative in the Treatment of Residual Wastewater at Coca Cola Bottling Plant in San Salvador



TIME (days)

**Fig.1:** The chart above shows the COD level of the effluent versus the COD of the influent waste stream. The effluent COD is well below the required 450 mg/l (blue line) with the exception of an influent spike that is quickly recovered.

**Conclusion:** 

The plant management was very pleased with the performance of *MICROBE-LIFT®* technology in resolving their requirements and a testimonial of their satisfaction is on file.

For more information on MICROBE-LIFT® Technology contact Ecological Laboratories Inc. www.EcologicalLabs.com CS14306



256

the U