MICROBE-LIFT® Technology Improves Efficiency of Anaerobic Digesters in Columbia - Preventing Costly Expansion

Location: **Empresas Publicas, Columbia**

Background: **Ecological Laboratories Inc.** was contacted by Empresas Publicas to determine if bioaugmentation with MICROBE-LIFT® technology could assist in the operation of their anaerobic digesters.

The facility consisted of two anaerobic digesters of 7,900 M^3 each. The average flow rate was 1.8 M^3 per second giving an average hydraulic retention time (HRT) of 21 days. The VSS reduction being achieved prior to the bioaugmentation program was approximately 30% for both reactors.

Fig.1: *Anaerobic digesters at Empresas Publicas*

Objective: The objective of the program was to reduce odors associated with the operation of their anaerobic digesters and improve VSS reduction.

After thorough evaluation of their system, a plan was developed using MICROBE-LIFT® technology. On the first day, the reactors were dosed at a rate of 12 mg/l based on the volume of the reactors. Thereafter, a weekly dose of 4 mg/l was applied for the next four weeks, followed by a 1.5 mg/l weekly maintenance dose.

Results Achieved: Six weeks after the initial dosage, VSS reduction had been increased to 37% versus a target of 50%. This improvement allowed the plant to handle the existing load without the immediate addition of a third reactor.

The plant also achieved significant reduction in odors in and around the plant.

For more information on MICROBE-LIFT® Technology contact
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