

Powered by Amino-Carbon Technology® (ACT)

The Results of Using Biofeed Prebiotic Products in a Sewage Treatment Plant in Chennai, India

Biofeed Solutions Inc., USA, offers its prebiotic products for the reduction of BOD, COD, sludge, suspended solids, color and odor in the water treatment plants the world over, and especially in countries where proper waste management is limited due to a lack of technology and funding. Prebiotic products are Pre-biological stimulants, buffers and biologically complexed nutrients, which improves the efficiency of microorganisms. Prebiotics are designed to work with indigenous microbes in wastewater treatment plants to create healthier, more effective microorganisms that are better able to stabilize and reduce the waste.

Biofeed Prebiotic Products assist the microbes in establishing and maintaining a more efficient life function, which is useful in accomplishing many positive environmental objectives. The highly active microbes speed up the natural reduction of pollution by allowing the pollutants to become a food source for the microbes. Solid reduction, reduced BOD, COD, less sludge hauling, and decrease in the use of inorganic chemicals are some of the benefits of using Biofeed Prebiotic Products. We have more than 100 effluent and sewage treatment plants using these products successfully in India alone.

Our product solution comes under the category of pre-biological products and not cultured bacteria. The term prebiotic is just opposite of antibiotic. It will work with and support indigenous microbes, which will help to create an ecosystem to build up the aerobic bacterial population (MLSS/MLVSS) and higher Dissolved Oxygen (DO) levels. It will also create conditions for the proliferation of beneficial types of cyano and other photosynthetic bacteria, that are primarily responsible for digesting sludge matters and waste. Apart from this, our composition, AERO has small enzymatic energy systems, that are capable of splitting water molecules, thereby producing elemental oxygen. It is nothing but rebuilding nature in the effluent treatment plant.

APPLICATION AND DOSAGE

Manually, once or twice a day depending on the size of the treatment plant, apply 0.5 to 3 PPM depending on the influent/feed rate and design adequacy of the ETP. A tank blended combination of these products added at the inlet of the aeration tank.

PRODUCTS

AERO™ is the bacteria stimulant, and NUTREX™, a complex mixture of micro and macro nutrients, and CHETROL™ will detoxify the effluent against any toxicity due to oil, disinfectant, heavy metals, petroleum hydrocarbons, etc. Either one or more products are dosed depending on the nature and characteristics of the effluent.

USEFULNESS

The results of using these products make them a cost effective alternative to enhance the natural attenuation of waste and the byproducts produced during the waste management process. The following test results are in-situ case studies that prove the benefits and true value of these products in the waste management industry.

RESULTS

Case Studies Showing Comparison and Benefits of Using Biofeed Prebiotics in India Waste Treatment

Effluent Parameters			Inlet to Aeration Tank COD/BOD	Outlet of Aeration Tank COD/BOD	Reduction of COD/BOD %	MLSS in Aeration Tank (1 or 2 Tanks)	D.O. in Aeration Tank	Color of treated effluent
S.No.	Type of Industry	Prebiotic Application						
1.	Flavours, Fragrances and Food Acids	Before	3,000/1,450	240/30	92/98	2500/2000	0.6/0.8	Pale Yellow
		After	Same	120/10	96/99	9000/7500	2.5/4.4	Colourless
2.	Sewage / Canteen / Toilets	Before	735/412	175/30	76/92	500	N.M	Turbid
		After	Same	90/6	87/98.5	3500	N.M	Crystal Clear
3.	Milk Processing	Before	2200/1200	548/102	75/91.5	1500	N.M	Turbid
		After	Same	224/10	90/99.2	4500	N.M	Crystal Clear
4.	Molasses based Distillery of Bulk Drug Unit	Before	30,000/14,500	18,500/6,500	38/55	N.M	N.M	Opaque & Dark
		After	Same	9,500/1,800	68/88	N.M	N.M	Transparent & Reddish
5.	Bulk Drug (new Unit start up)	After	5,000-3,000	700-500	85	3500	N.M	Clear

Note : N.M.- Not Measured
All the above figures are measured in PPM or Mg/Litre

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