# Powered by MICRO CARBON TECHNOLOGY®

## THE BASE OF ALL OUR PRODUCTS

Using MICRO CARBON TECHNOLOGY® as a base, we have developed many highly efficient products for maximum microbial stimulation in wastewater to reduce sludge; cut down on odor; lower biological oxygen demand (BOD), chemical oxygen demand (COD), and fat, oil, grease (FOG) levels; improve nitrogen removal; and lower electrical costs. Wastewater, in its untreated form, usually does not meet all of the conditions for optimal microbial activity that leads to the breakdown of waste solids. When microbial activity is not optimized, sludge accumulates, odor gets out of control, and COD/BOD/FOG levels fall out of compliance with government regulations.

### KEY BENEFITS OF MICRO CARBON TECHNOLOGY®

NON-SELECTIVE: works with both positive and negative elemental ions.

VERSATILE DELIVERY: hand application, spray, or via simple pumping system.

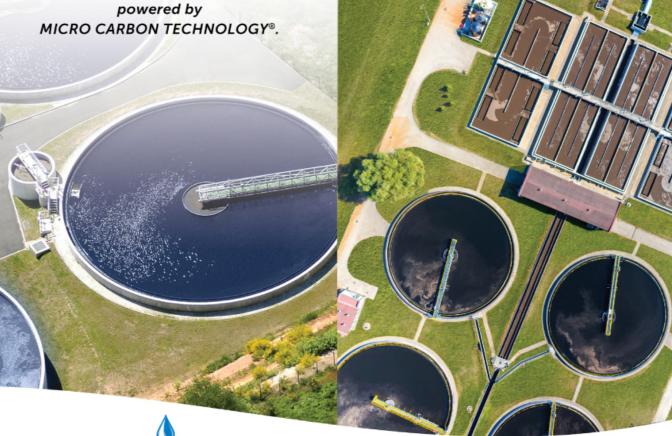
LOW ENERGY: requires less effort from the microorganisms to uptake nutrients, lowering biological oxygen demand (BOD).

## Become a Probiotic Solutions® Distributor

## Municipal Wastewater Solutions

Probiotic Solutions® invites you to experience the benefits of our broad-spectrum line of biostimulant & nutrient products, powered by

MICRO CARBON TECHNOLOGY®.



#### Our products are used in:

- Lagoons
- Activated Sludge Plants (Ox. Ditch, SBR, Membrane)
- Digesters (Aerobic & Anaerobic)
- Solids Holding Tanks



Bio Huma Netics, Inc. 1331 W. Houston Ave., Gilbert, AZ USA 85233 1.480.961.1220

#### www.Probiotic.com

©2016, Trademarks and registered trademarks are property of Bio Huma Netics, Inc.
All Rights Reserved.
PS-160218-01



#### **BIO ENERGIZER®**

The Solution for Wastewater Sludge, Grease, & Odor Reduction

#### WHAT IT DOES:

BIO ENERGIZER® is a formulation of complexing agents, organic acids, natural biological stimulants, buffers, nutrients, and energy systems that balance the natural microbial ecosystem to increase bio-oxidation capacity. It reduces sludge build-up and handling costs by lowering BOD/COD and reducing FOG, as well as solving odor concerns. BIO ENERGIZER® reduces odor and grease problems in sewer lines and lift stations.

#### **BENEFITS OF USE:**

- Reduces noxious odors
- Digests fats and greases
- Reduces sludge buildup in lagoons
- Increases dissolved oxygen levels
- Lowers sludge dewatering and hauling costs
- Improves flocculation and settleability
- Minimizes upsets
- An economical alternative to mechanical sludge removal, eliminating handling costs and out-of-service time

SYSTEM	SUGGESTED RATE
Wastewater Treatment Lagoon	3-7 ppm
Aeration Basins/Digesters	3-7 ppm
Odorous Compost/	1 qt per ton
Organic Matter/Garbage Trucks	

#### **BIO GENESIS®**

The Solution for Wastewater Settling, Filamentous Bacteria, Turbidity, and Power Consumption

#### WHAT IT DOES:

BIO GENESIS® is a formulation of nutrients, organic acids, natural biological stimulants, and energy systems that balance the natural microbial ecosystem to increase bio-oxidation capacity in activated sludge systems. BIO GENESIS® reduces operating costs by lowering BOD/COD and improving settleability while controlling filamentous bacteria and reducing FOG.

#### **BENEFITS OF USE:**

- Improves flocculation and settleability
- Improves SVI
- Reduces coagulant and flocculant chemical use and costs
- Minimizes upsets

Before

- Reduces chlorine disinfection demands
- Reduces filamentous bulking, foaming, and scum
- Reduces wasting, sludge volume, and out-of-service time
- Improves effluent water quality

#### **MICATROL®**

The Solution for Detoxifying Chemicals in Soil and Water

#### WHAT IT DOES:

MICATROL® is a formulation of complexing agents, organic acids, buffers, nutrients, and energy systems that enhance biological degradation. MICATROL® catalyzes the breakdown of chemical and petroleum compounds and promotes microbial digestion while buffering from harmful chemical compounds—resulting in biodegradation of toxicities into harmless byproducts of carbon dioxide, water, and humus. Micro Carbon Technology® is included to ensure better deliverability of nutrients to plants and microorganisms.

#### **BENEFITS OF USE:**

- Complexes heavy metals and salts to reduce toxicity
- Reduces chemical residues for detoxification
- Breaks down chemical or petroleum contamination

SYSTEM	SUGGESTED RATE
Activated Sludge Systems Aeration Basins Oxidation Ditches, etc	1.5-7 ppm

METHOD OF APPLICATION	SUGGESTED RATE
Upset	5-10 ppm
Maintenance	1-3 ppm

Before After

After Filamentous Bacteria