



**BIO-ORGANIC CATALYST**  
THE POWER IN NATURE®

bio-organic.com

## Advanced Odor Control Systems With Bio-Organic Catalyst

### **MAJOR TECHNOLOGY BREAKTHROUGH:**

The patented Bio-Organic Catalyst (BOC) technology for odor control and solid waste treatment facilities is a breakthrough technological advancement over odor masking (essential oils), or biological agents (bacterial/enzymes).

### **ESTABLISHED PERFORMANCE RESULTS:**

BOC odor control systems have been successfully deployed in most types of solid waste operations. Offering much superior odor reduction over any previous odor control chemistries, at a lower cost.

### **BROAD SPECTRUM ODOR MANAGEMENT:**

BOC is effective against all the odors associated with solid waste decomposition, and offer operators with the ultimate and safest technology in eliminating odors that impact solid waste operations. Odors associated with organic wastes are caused by gases produced by the decomposition of organic matter under anaerobic conditions (without oxygen), of which the most characteristic noxious odors include: hydrogen sulfide (H<sub>2</sub>S), Mercaptan's, Ammonia, Amines, Sulfides, and Skatole.

### **GREATER FLEXIBILITY FOR INSTALLATIONS:**

BOC odor control systems allow tremendous flexibility to solid waste operators in designing solutions that provide complete ability to manage their odor issues throughout the multiple areas of operations; including collection (garbage trucks), transfer stations, landfills, composting, and renewable energy production.

### **BOC GREEN CHEMISTRY:**

The BOC technology is a hybrid compound with both surface modifying and aggregating properties of surfactants, and the catalytic properties of enzymes. The BOC eliminates odors through changing the microbial ecology to a more aerobic state, rapidly oxidizing gases, and preventing their additional formation.

### **BOC TECHNOLOGY BACKGROUND:**

Through the oxidative properties of BOC, H<sub>2</sub>S gas, amines and mercaptan's are eliminated by oxidative reactions, and will take place in both air and water streams. One of the most important functions of BOC is the creation of microscopic sized bubbles that have extraordinary gas transfer capabilities. These provide phenomenally effect odor control at very high dilutions within water, allowing a precise adjustment to optimizing the requirements of odor elimination and promotion of higher aerobic biological conditions.

### **REFERENCED INSTALLATIONS:**

Canada: Municipal Transfer Stations, Garbage Trucks, Colombia: Municipal and Agricultural Solid Waste, US/ Florida: Municipal Solid Waste US/Orkin: Garbage dumpsters.

## Examples of BOC Odor Control Systems

**BOC odor control systems provide the world's highest performance standards in eliminating noxious odors and hazardous VOCs.**

- Extremely cost effective due to the ability to be delivered through water based spray systems at high dilution levels.
- BOC odor control systems offer the next generation of green chemistry. Exceptionally safe to use, and able to remediate the biological conditions which produce noxious odors.
- Used successfully in installations throughout the world to solve the toughest jobs.
- Simple, flexible, and immediately effective upon contact.
- Neutralizes ammonia, hydrogen sulfide and hydrocarbon type noxious VOC compounds in solid waste, organic composting, and sludge treatment.

ODOR CONTROL IN NEW YORK CITY- RESIDUAL WASTE FACILITY- (COMBINATION OF GRIT SCREENING AND FOG'S )



WASTE TRANSFER STATIONS-TORONTO, CANADA



BOC ODOR CONTROL USING MISTING SYSTEM



BOC AUTOMATIC ODOR CONTROL SYSTEM FOR GARBAGE TRUCKS IN-TORONTO, CANADA



Automatic Spray Misting System Inside The Back of Truck



BOC ODOR CONTROL FOR 7 MILE DRAINAGE CANAL- PORT AUTHORITY OF NEW YORK/NJ



Mississauga WWTP, Canada-Odor Control For the Grit Screening Screw Conveyor Operation



ODOR CONTROL FOR COLLECTION SYSTEMS

