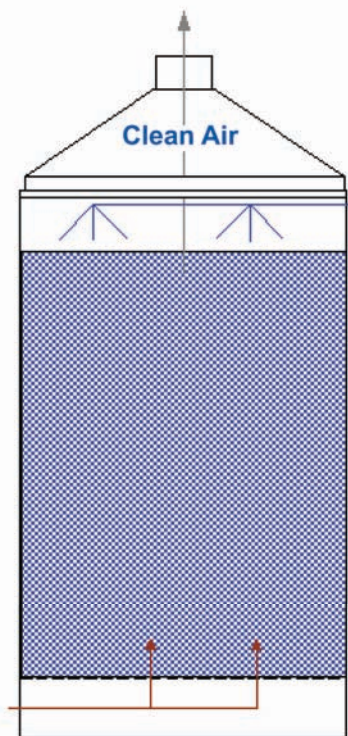




# Introducing the Latest Innovation in Bio Filtration



**1-STAGE BAT SYSTEM**  
(Optional Polishing System Not Shown)

## Chemisorptive Media

Beyond Ordinary Carbon Filtration  
Will Not Off-Gas  
Patented Formulation Contains More  
Permanganate for Increased Capacity

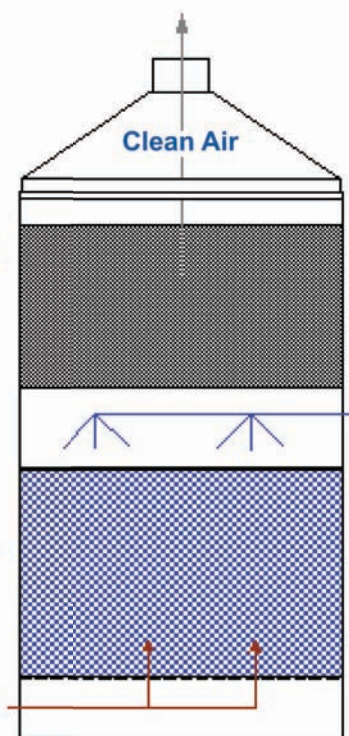


## Packed Bed Technology

Patented Layered Bed Technology PREVENTS:  
Bed Plugging & Channeling  
Patented Media Technology  
Enhanced Backwash



Reusable Feed Water  
For Irrigation



**2-STAGE BAT SYSTEM**

**PURAFIL®**





## ADVANCED BIOLOGICAL ODOR CONTROL SYSTEM

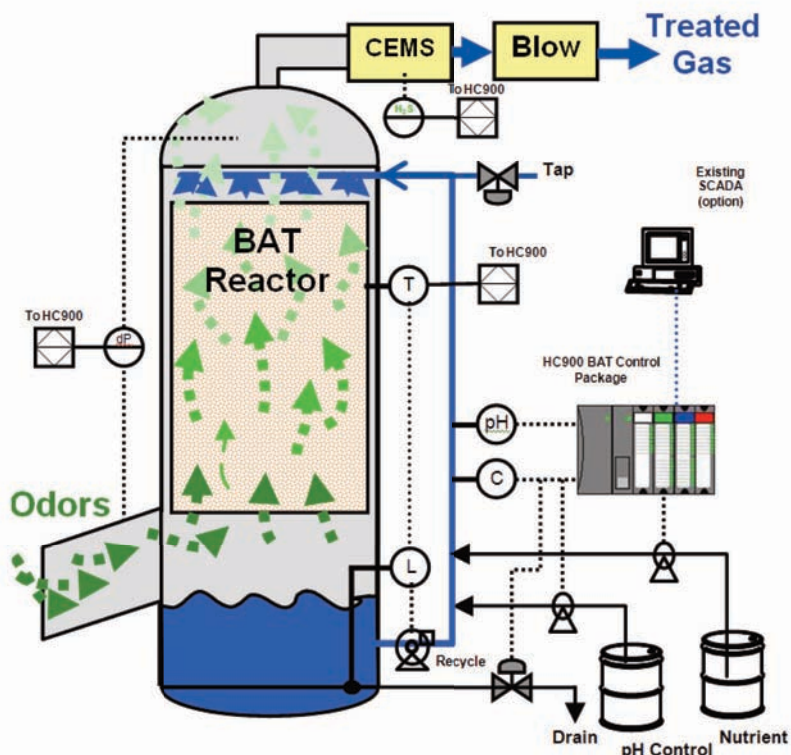
When two industry leaders join forces to combine bio and dry odor control technologies, you can expect the best odor abatement system on the market! Purafil's new BIOLOGICAL AIR TREATER (BAT) features the most advanced proprietary fixed-film trickling filter technology through an exclusive license with Honeywell Process Solutions.

Combined industry-leading patented innovations provide:

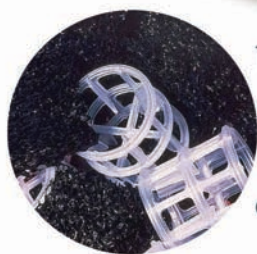
- Low Maintenance & Pressure Drop
- Natural Bio-Trickling Microbial Process
- Smaller Footprint versus Biofilters
- Engineered Chemisorptive Polishing Media
- Low Operating Costs with Long-lasting Media Life
- Low Capital Costs with High Contaminant and Odor Removal
- Ease of Operation with Stable Biofilms Resistant to Fluctuations
- Unique Design with Patented Mixed-Media Support Prevents Plugging and Channeling

### BAT TECHNOLOGY FEATURES

- Honeywell Control System
- High surface area mixed-media with great mass transfer and distribution
- Layering mixed-media options for:
  - Bulk Removal Stage
  - Intermediate Stage
  - Polishing Stage
- Uniform biofilms throughout bed
- Shock-resistant and stable biofilms
- Low cost construction materials
- High loading and removal capacities
- Adaptable for any microbial consortia
- Optional patented carbon-coating of foam media



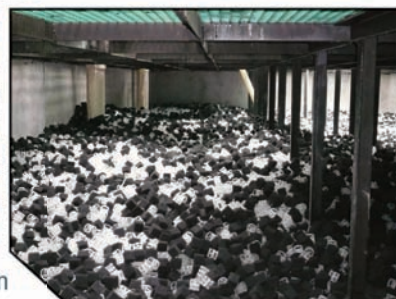




The patented technologies within Purafil's Biological Air Treater provides a more efficient and cost-effective odor abatement and VOC treatment than other biological removal systems. The innovative BAT media consists of proprietary blends of specially formulated polyurethane foam cubes and polypropylene spacers that are uniquely supported for the immobilized bio-catalysts, resulting in higher concentration and distribution of biofilm compared to conventional and alternative biotrickling filter systems.

### Honeywell's Proprietary Mixed-Media Packaging

The polyurethane foam cubes provide incredible surface area per unit volume to host microbial biofilms. Polypropylene spacers supply substantial void volume and structural integrity for tall beds, as well as enhanced mass transfer and excellent hydraulic dispersion and distribution. The unique mixed-media support allows for control of surface area and void space, with the result of reduced pressure drops across the design bed. Ratios of foam-to-plastic vary with engineering design and application, and are used to control biofilm depth and pressure drop. BAT mixed-media beds can be used in biofilters to produce highly-efficient bulk removal, intermediate removal, and polishing zones. Purafil's BAT biofilter & biotrickling filter technology is amenable for any biofiltration application.



The polishing filtration in this high-tech system is Purafil's proprietary Odormix™ SP dry media has been specially engineered to provide the highest amount of permanganate (the active ingredient) for increased capacity and **will not off-gas like carbon products**. Odormix™ SP Media demonstrates a higher working capacity for broad-spectrum oxidation of contaminants in actual field conditions, where multiple gas challenges are present.

#### EXCLUSIVE SCIENTIFIC ODOR CONTROL PARTNERSHIP REMOVES THE FOLLOWING TYPICAL POLLUTANTS:

- Inorganics such as Hydrogen Sulfide and Ammonia
- Organics such as Hydrocarbons
- Sulfurics such as Mercaptans
- Nitrogenous Compounds such as Trimethylamine and Amides and Nitriles
- Oxygenated Alcohols, Aldehydes, Esters, Ethers, Ketones and Acids
- Aromatics such as BTEX's (Volatile Organic Compounds; Benzene, Toluene, Ethylbenzene, and Xylenes) and Styrenes
- Aliphatics such as Butadiene and Hexane



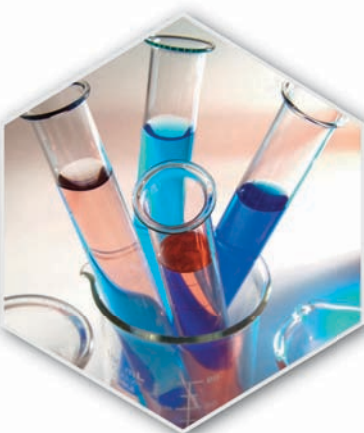
## **PURAFIL'S BIOLOGICAL AIR TREATER APPLICATIONS:**



**Municipal Composting and  
Wastewater Treatment Plants**



**Food and Agriculture  
Industries**



**Chemical and Pharmaceutical  
Industries**



**Petrochemical  
Industries**

# **PURAFIL®**

Purafil, Inc. • 2654 Weaver Way, Doraville, GA 30340, U.S.A. • (800) 222-6367 or (770) 662-8545 • [www.Purafil.com](http://www.Purafil.com)