



# The new nature of odor control for municipalities and industry

## A commitment to science, research and development

BioAir's full-scale pilot test system consists of five EcoFilter EF51 reactors, each with its own blower, water and electrical control system. This pilot test program led to the development of BioAir's breakthrough proprietary EcoBase media, and provides for continuing improvement to BioAir's odor control technology offerings.

**Our professional team ensures commitment to excellence through all phases of project execution: design, delivery and service.**

Fresh ideas

Innovative products

More efficient odor removal



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## OUR COMPANY

# Introducing BioAir Solutions™ . . .

A dynamic company bringing you a new generation of technology and an experienced, trustworthy management team to meet your critical air purification requirements. With extensive experience in the municipal odor control market, our professional team ensures commitment to excellence through all phases of project execution: design, delivery and service.

### A commitment to science, research and development

Through our unprecedented R&D program, BioAir is raising the bar on what's achievable in biological odor control. BioAir has made a long-term commitment to advance the science of biotrickling filter technology by developing new mechanisms for improving mass transfer and researching microbiological oxidation of odorous compounds.

A full-scale pilot test program (see back cover) at a major municipal wastewater treatment facility allowed us to put our research into practical use. This very successful pilot program led to the development of BioAir's breakthrough proprietary EcoBase media, the core of every BioAir system.

### Ecological . . . and economical!

BioAir units shrink your cost of ownership by eliminating odors using absolutely no expensive hazardous chemicals and no consumables, while keeping maintenance and energy costs to a minimum.

### Small footprint

All BioAir units are compact, with diameters as small as 5 feet and heights as low as 9 feet.

### Solutions for every need and application

BioAir can provide effective solutions to treat air streams from 350 cfm to over 100,000 cfm, and to meet the needs of facilities ranging from lift/pump stations to dewatering/sludge-drying operations, and everything in between. Skid mounted options are also available.

## OUR PRODUCTS

### EcoFilter™ biotrickling filter

**Exceptional, cost-effective, proven performance that expands with your needs!**

EcoFilter delivers unmatched odor control performance using a new generation of filtering and media technology for reliable and long-term removal of both inorganic and organic odors.

EcoFilter provides state-of-the-art performance with superior process control of the critical factors of moisture content, pH and nutrients. EcoFilter incorporates BioAir's breakthrough proprietary EcoBase structured synthetic media (patent pending) into its system.

The key advantages of this total system include:

- Optimized mass transfer of compounds
- Treatment of higher odor loadings
- Enhanced removal of targeted odor compounds
- Elimination of plugging
- Very low maintenance
- Incredibly low operating costs
- Compact design solving footprint challenges

### EcoFilter can be tailored to meet your exact needs

You never have to buy more system than you need, because EcoFilter is easy to expand and upgrade, scaling to meet your requirements now and in the future.

### No negative environmental impact

EcoFilter eliminates odors using absolutely no hazardous chemicals and no consumables. It's the ideal environmentally friendly solution to your odor control needs!

### Still using chemicals?

BioAir can save you the monthly cost of chemicals and the headache of maintenance by replacing your existing scrubber. Paybacks are in as little as 18 months, or choose a lease-to-own option. Like the belt and suspenders approach? Put the EcoFilter in front of your chemical scrubber and just turn the chemicals off!

### EcoBase™ synthetic media

**Proprietary uniform structured design for superior performance**

The proprietary uniform structured design of our EcoBase synthetic media provides multiple uniform characteristics, including uniformly available surface area, uniform flow distribution and uniform biomass contact time. **These uniform media characteristics are the key to uniform system performance.** Specific key advantages include:

- **Optimized mass transfer** of both inorganic and organic odorous compounds through controlled air turbulence.
- **Treatment of higher odor loadings** by increased bacterial population in the reactor.
- **Enhanced removal of targeted odor compounds** by controlling the micro-environment in the reactor to proliferate the growth of specific bacterial species.
- **Elimination of plugging** by engineering flow channels into the media.
- **Homogeneous air flow** – by maintaining uniform structure, density variations through the media bed are eliminated and uniform flow distribution is ensured.

Overall, these advantages result in longer media life and a controlled steady-state process for long-term consistent uniform performance.

### EcoPure™ dual-tech filter

**The two-stage solution for the lowest possible emissions**

With EcoPure from BioAir, odor complaints are a thing of the past – even for facilities in sensitive locations near housing developments or public facilities.

EcoPure delivers a double-barreled odor control solution: the unmatched performance of our proprietary biotrickling filtering system and EcoBase media technology, combined with a carbon polishing stage. The result: the lowest emissions possible!

### Exceptionally long carbon life

Get the benefits of carbon without the high expense! By combining activated carbon with the air purification power of our breakthrough EcoFilter biotrickling filter with EcoBase synthetic media, the carbon life is extended by up to 10 times over that of typical carbon filters.

### Available for all applications

With this exceptional new product, two-stage odor control is no longer suitable for pump stations only! EcoPure delivers the same reliability and performance for larger applications – a **single unit** can treat air streams from 100 cfm to 7,000 cfm.

### Using carbon?

BioAir can turn your existing carbon filter into an EcoPure, simply by adding our cost-effective EcoFilter unit in front. You'll get 10 times the carbon life, and extremely low emissions!

### EcoCarb™ carbon filter

**Economical odor control for low-level emissions**

EcoCarb is an economical odor control solution utilizing readily available activated carbon. It is designed to meet low-level odor treatment needs, is especially well suited to treat volatile organic compounds (VOCs) and is effective in removing trace amounts of inorganic and organic odors.

**For more information, please call 856.258.6969 or visit us online at [bioairsolutions.com](http://bioairsolutions.com)**

