

# Envirogen Modular Biofilters

High-performance, variable-flow modular systems with low lifecycle costs



For moderate air flow rates and sites requiring smaller system footprint treatment options, Envirogen Modular Biofilters deliver reliable, cost-effective performance. These automated, pre-fabricated fiberglass systems come in a range of standard configurations and can be adapted to flow, loading and site requirements – for both industrial and municipal applications. In some cases, they can be shipped with all media pre-installed and are easily installed at the site.

| Line                       | Models | Media (ft <sup>3</sup> ) | CFM      | EBRT/seconds (default) |
|----------------------------|--------|--------------------------|----------|------------------------|
| Biofilter (H-Series)       | 8      | 120-680                  | 120-2720 | 10-60 (30)             |
| Biofilter (I-Series)       | 13     | 450-3900                 | 224-8350 | 30-120 (75)            |
| Biofilter box (P&B Series) | 14     | 448-4176                 | 450-1670 | 15-60 (30)             |

Envirogen H-series modular biofilters are single media chamber systems that can be filled with inorganic media only or both inorganic and organic media, forming a dual zone treatment system. The H-series can be designed for H<sub>2</sub>S, reduced sulfur compounds (RSC) and volatile organic contaminant (VOC) removal. The H-series consists of round FRP vessels from 6' to 12' in diameter.

Envirogen P- and B-series are FRP boxes that start at 8'x8' and run up to 11'x52'. They can be configured as single or dual-zone ecosystems with media customized to target a single contaminant or multiple contaminants efficiently. The B-series is designed with easy access points and external piping for the irrigation system, improving the ease of maintenance and monitoring. I-series modular biofilters feature a small humidification chamber and/or treatment chamber for ammonia or other compounds, followed by a single or dual zone media chamber. These are similar to the B-series with improved access and irrigation systems. These systems were primarily designed for industrial applications for VOC and other industrial emission control challenges.

These industrial modular biofilters are designed for air flows as low as 120 cfm up to 8,350 cfm per model dependent on the contaminant type and mass loading.

Envirogen Modular Biofilters are robust, sustainable solutions, offering:

- Efficient contaminant destruction
- Reduced chemical usage/storage
- Reduced energy usage
- Lower carbon footprint
- Lower overall emissions
- Adaptability to changing emission sources and levels

## A long-term solution for you

Envirogen Modular Biofilters feature the latest concepts in odor and VOC control system design. They offer ease of installation, a high degree of automation, long media life and corrosion resistance – delivering excellent reliability, minimal operator attention and an overall low lifecycle cost.

Features include:

- FRP construction without metal support structure (no corrosion)
- Long media life (guaranteed)
- Ease of Installation (modular)
- “Drop and Start-up” (i.e., drop unit on pad, pre-loaded media)
- Single or dual-zone media tailored to air influent & treatment goals
- High degree of automation & process control

## About Envirogen Technologies

Envirogen Technologies is an environmental technology and process solutions provider that combines experience in water and vapor phase treatment with process development expertise, delivering long-term, guaranteed solutions in a broad range of treatment and process-related applications. Today, we provide system design, process engineering, equipment and operating solutions for the treatment of process water, groundwater, wastewater, VOCs & odor as well as materials recovery for a range of industrial and non-industrial customers throughout North America.

## The Envirogen Technology Portfolio

| Bioreactors                      | Biofilters                 | Ion Exchange                         | Physical-Chemical          | Adsorptive       |
|----------------------------------|----------------------------|--------------------------------------|----------------------------|------------------|
| Fluidized Bed Reactors (FBR)     | Built-in-Place (high flow) | SimPACK™ (400 gpm +)                 | FlexSorb™ (5-150 gpm)      | EnviroHPA™ Media |
| Membrane Bioreactors (MBR)       | I-Series (mid-flow)        | MinX™ (100-850 gpm)                  | HyperSorb™ (35-3000 + gpm) |                  |
| Suspended Carrier Reactors (SCR) | H-Series (low-flow)        | MinFlex™ (<300 gpm)                  | Reverse Osmosis            |                  |
|                                  | Biotrickling filters       | Service Exchange / Customer Supplied |                            |                  |



## Envirogen Biofilter Media

ScorFil™  
inorganic, scoria lava

VamFil™  
aged bark, engineered

FlexFil™  
synthetic structural or random packed media

Up to 10-year warranty

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Visit our website [www.envirogen.com](http://www.envirogen.com) for more information about the Envirogen Biotrickling Filters and our regional locations.

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