

EcoCarb® Adsorptive Filters

EcoCarb® adsorptive filters provide extremely low outlet odor concentrations of H_2S , VOCs, reduced organic sulfur compounds, ammonia, amines, and many other regulated compounds. BioAir utilizes its deep experience in odor and air emissions treatment to custom-design EcoCarb filters for each unique application, with the same care and quality found in BioAir's industry-leading biotrickling filters and related technologies.

Optia® Media

As adsorptive filters are best suited for sites with the strictest emissions requirements, media selection is very important; carbon alone is not always the solution. BioAir offers a wide range of its Optia adsorptive media products, each with unique qualities. These Optia media products are carefully selected, blended and layered by BioAir's process engineers to target and control specific odorous or toxic compounds found in each facility's unique airstream, to ensure the airstream meets regulatory and community requirements.

The Right Size

EcoCarb filters are available in a wide range of sizes, to minimize cost and footprint. BioAir also offers several styles of its EcoCarb filter, each with specific benefits (see the chart below). BioAir's process engineers carefully consider the compounds in each airstream, then select the most efficient and cost-effective combination of size, style, and Optia media for a given facility.

Convenience Features

Sample ports with ball valves are included on all EcoCarb filters, located at various depths throughout the media bed. This allows operators to easily test the remaining life of the media, and minimizes costs due to early media replacement. EcoCarb filters are also provided with rain stacks, to prevent precipitation from entering the carbon bed. In addition, dual-bed EcoCarb vessels are provided with balancing dampers, to allow operators full control over the airflow to each bed.



Pair with Biological Pre-treatment

EcoCarb filters can be combined with BioAir's industry-leading EcoFilter biotrickling filters, allowing for pre-treatment of high odor concentrations while extending the Optia media life by up to 10 times, significantly reducing operating costs.



EcoCarb Filter Styles:

Configuration	Benefit
Single Bed	Simple, cost-effective adsorptive treatment
Dual Bed	Doubles the Optia media, without increasing footprint or pressure drop.
Radial Flow	Smallest-footprint solution for higher airflows
Horizontal Flow	Increased capacity with long media life and small footprint