

MICROBES AT WORK US PATENT #5,780,293

Municipal Odor Control

The FILTERCROBE process:

- Uses proven catalytic carbon to absorb the Hazardous Air Pollutants (HAC) and Volatile Organic Compounds (VOC).
- Oxidizes hydrogen sulfide gases and converts byproduct to water soluble sulfur compounds.
- Special collection of aerobic microbes consume the VOC compounds
- These unique natural microbes create no biomass.



The FILTERCROBE Outcome:

- Eliminates hazardous byproducts.
- Cleans and rejuvenates granular activated carbon while in place.
- Provides a cost effective scrubber.
- Process efficiency provides a reduced footprint compared to traditional wet scrubbers or and thermal oxidation systems.
- Unique design reduces maintenance requirements.
- Extends the life of the carbon media often to 20 years without replacement.

The FILTERCROBE Features:

- Carbon bed depths up to three (3) feet for high gas concentrations.

The FILTERCROBE Summary:

Granular Activated Carbon is housed in a drum inside a 304 stainless steel tank. The drum is constructed of layers of perforated steel, and steel screens. The contaminated air passes through the center of this drum containing granulated carbon media to exit. The drum slowly rotates so that the bottom portion of the drum containing 30 percent of the carbon is submerged at all times in a water bath charged with the proprietary designed microbes - AgriMicrobe Sales Formula V®. The microbes remove and bio remediate the captured contaminants from the submerged carbon. Thus the carbon is not spent with a residual of VOC's or sulfur buildup.

Catalytic carbon has been used for over ten years in scrubber systems to remove hydrogen sulfide from wastewater applications. The technology is proven. The difference



**The Next Generation in
Air Purification Technology**

with Agrimicrobe's patented technology is the method of cleaning the carbon media while in place with no operational loss or down time. The bio-filtration system provides clean and safe disposal water periodically containing no acid. This waste may be disposed of as normal wastewater.

With stainless steel construction, stainless steel screening, PVC piping and regenerated carbon, the only maintenance cost should only involve motor maintenance. The AgriMicrobe Sales Formula V® microbes must be replaced every 4 weeks. Properly managed, the system will operate with the necessary electricity and "microbes" at a cost between \$225 to \$250 a month for a 20,000 CFM unit. This does not include the power cost for the air handler unit.

For more information about applications or system pricing, please call +1 (918) 708-1253 or visit our website at: www.american-environmental.us