

Airashell®

Biohybrid Filter

Quick Facts

Application:
High Capacity
Pump Station

Product:
Airashell® Biohybrid Filter

Installer:
Town of Mooresville

Location:
Mooresville, NC

Odor Treatment Solution for Golf Club and Community

Problem

Constant complaints about odor led the town of Mooresville, NC to seek a solution. A large pump station (3 MGD) located between an upscale housing community and the Mooresville Golf Club was causing issues for both golfers and residents.

Solution

Airashell uses recycled seashells in a hybrid biofiltration/biotrickling process to optimize the removal of odor compounds and to buffer pH. The town of Mooresville chose the modular Airashell for the following reasons:

- Ability to treat high strength odor with >99% H₂S removal
- Virtually hands-off operation with no chemical addition
- Minimal annual operation expenditure resulting in low life-cycle cost

Result

The installation has put an end to the constant complaints about odor from citizens. Mooresville Field Operator, Doye Baker, commented: "This system works well with very little maintenance. Our Field Operations team is very busy and this saves us a lot of time and energy."



Left: Casey Davis (Anua)

Right: Doye Baker (Town of Mooresville)

Airshell Biohybrid Filter



Cutaway of
Airshell

Quahog shells



Airshell Advantages

- Performs under variable loading
- Treats wide range of compounds
- Handles wide ranging flow rate
- No polishing stage necessary
- Virtually hands-off operation
- Built-in pH buffering
- Very low water use
- Neutral pH discharge water
- Rapid acclimation
- No nutrient feed
- No chemicals required

