

Puraflo[®]

Peat Fiber Biofilter

Quick Facts

Application:
Residential Use

Product:
Puraflo

Designer:
Crocker Consulting
Engineers, Inc.

Installer:
LaFollette Excavating, Inc.

Location:
Greene County, MO

Puraflo Saves Lakefront Home from Demolition

Situation

A small, lakefront property in the rural city of Rogersville, Missouri posed a problem for the homeowner and the design engineer.

Rogersville is a small city of approximately 3,000 people with nearby access to Springfield. Many homes in the area are served by onsite wastewater infrastructure due to the rural lakefront location.

The homeowner was faced with a decision. Tear down the home or find a way to install a new onsite treatment system. A narrow 10-foot by 40-foot area behind the home was the only space available for a drainfield. The proximity to the lake and the potential impact on water quality was also a concern that needed to be addressed in the design.



Solution

Due to the limited usable space for effluent dispersal, advanced treatment was required. Crocker Consulting Engineers proposed a Puraflo peat fiber biofilter with pad dispersal to the Greene County Environmental Health Department. This would be the first Puraflo system ever installed in Greene County.

The Puraflo is based on simple, passive biofiltration principles. The treatment of the effluent within the system is achieved by a combination of unique physical, chemical, and biological interactions between the effluent and the fibrous peat media. Coupled with timed dosing, the peat fiber properties attenuate the flow to the pad dispersal area and then into the native soil. This allows for a small footprint since the modules are directly over the drainfield. Furthermore, the properties of the peat fiber provide high level treatment with no by-pass, which protects the lake water quality.

The system consists of an existing septic tank with a newly installed 1/32" effluent filter followed by a new 500 gallon pump tank. Effluent is time dosed to the Puraflo modules. Treated effluent exits the modules via evenly spaced holes around the bottom perimeter. The effluent then flows into the in-ground gravel pad situated directly beneath the modules for dispersal into the native soil



Results

Puraflo provides a worry-free solution for the homeowners. Puraflo is odor-free and low-energy. The system is allowing the homeowners to continue to occupy their home while protecting the environment, and the lake's water quality

