

Alternative passive technology replaces a conventional drainfield



Problem

The owners of a two-bedroom farmhouse in Whitefield, N.H., had a noncompliant cesspool. They wanted a low-maintenance replacement that could withstand the rigors of tenants, yet would not require electrical and mechanical components or service contracts.

Solution

Larry Rexford of Wendell Rexford and Sons in Whitefield designed the 300 gpd system using **Advanced Enviro-Septic (AES) combined treatment and dispersal pipes from Presby Environmental**. He chose the technology for its reduction allowance from the water table and its ability to fit into tight spaces, install on slopes without extensive retaining walls, and flex around obstacles.

Treatment occurs in a perforated plastic pipe, a white Bio-Accelerator geotextile fabric along the bottom exterior surface, and a surrounding layer of plastic fiber mat and geotextile fabric. Ridges in the pipe allow effluent to flow

uninterrupted around the circumference and cool the liquid to ground temperature. Skimmer tabs at each perforation retain grease and suspended solids, protecting the outer layers from clogging.

The Bio-Accelerator filters additional solids, speeds treatment, facilitates quick startups, provides more surface area for bacterial growth, promotes even distribution, and protects outer layers and receiving surfaces from clogging. The surrounding mat of coarse fibers further filters the effluent as it passes into the outer geotextile layer and grows a protected bacterial surface.

The lightweight pipe is installed in ASTM C-33 sand, which wicks liquid from the geotextile fabric while transferring air to the microorganisms. The technology provides a large bacterial surface to break down solids, while an ample air supply and fluctuating liquid levels increase bacterial efficiency.

RESULT

The Bureau de Normalisation du Quebec and NSF Standard 40, Class I Certified, confirmed that the system treated effluent to less than 2 mg/l TSS and CBOD and 218 CFU/100 ml fecal coliform. **800/473-5298; www.presbyenvironmental.com.** ■