

TECHNOLOGY FACT SHEET

Polyethylene Tank Configuration PE-5 Biofilter®

The PE Biofilter® system is a modular onsite wastewater treatment system designed to treat septic tank effluent to tertiary quality before it even enters the ground. Removing wastewater contaminants outside of the native soil reduces the environmental impact on the land. This patented trickling system utilizes an absorbent foam filter medium that maximizes surface area, produces no aerobic sludge, increases retention time, and allows air flow between pieces; optimizing biological growth. Extensive third party testing confirms expected removal rates of 95% BOD, 95% TSS, 99% *E. coli*, and 60% TN.



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Systems Inc.**

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Advantages

Cost Effective

- few moving parts
- modular technology
- simple and infrequent maintenance requirements
- low power consumption
- can be housed in existing maintenance or storage building
- very easy to expand system size as required
- straightforward and simple installation

Superior Technology

- excellent, documented treatment levels
- over 14 years continuous experience
- most passive technology available
- no aerobic sludge to manage
- easily handles surge and no-flow periods
- effective for seasonal use applications
- quick start-up period
- small footprint
- non-biodegradable filter media lasts 20-30 years or more
- very robust and recoverable if overloaded or mistreated

Features

- Modular units make it easy to expand facilities as required; reduced up-front costs are ideal for phased-in developments
- Subsurface disposal bed is greatly reduced in both area and thickness over conventional drain fields; reduces land use and installation costs
- UV option for surface disposal allows wastewater to be reused onsite for uses such as irrigation and toilet flushing
- Options available for Phosphorous and additional Nitrogen removal
- Lightweight modules are easily shipped and moved to location
- Small treatment unit and disposal footprint allows for treatment in difficult locations - bedrock, high water table, small land area, clay soils, etc.



One PE-5 unit can treat
septic tank effluent from
three 3-bedroom homes
to tertiary quality