



Nassau County Soil & Water Conservation District
1864 Muttontown Road, Syosset, NY 11791 T: (516) 364-5860
Nassau County's S.E.P.T.I.C. Grant Program
Accepted Technology Information Sheet

This list is current as May 1, 2024 and listed in alphabetical order by Acceptance Category.

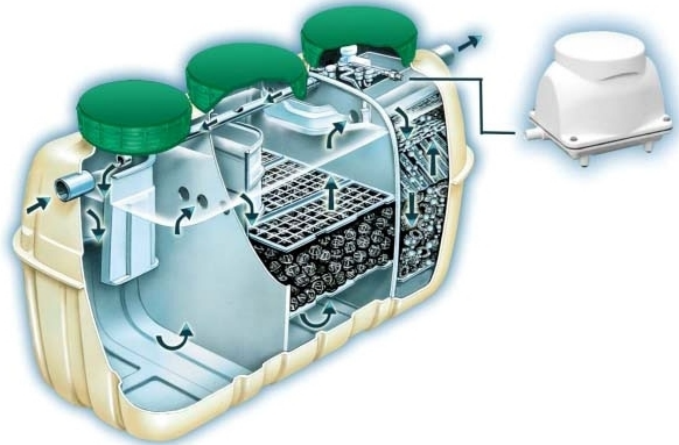
I. General Use Accepted Technologies

These technologies were accepted due to their General Use Approval status in Suffolk County, NY.

a. FujiClean CEN Series

The Fuji Clean system treats wastewater through a process of contact filtration, flow equalization and recirculation, all within one tank consisting of three sequential chambers, "Sedimentation," "Anaerobic" and "Aerobic."

Influent first enters the Sedimentation Chamber, where sludge settles to the bottom, scum and grease float to the top and the relatively clear liquid in the middle flows through a baffle into the bottom of the 2nd chamber, the Anaerobic Chamber. In the Anaerobic Chamber, plastic media sandwiched in the middle within a horizontal plastic grate provides for up flow physical filtration as well as surface area on which anaerobic microbe colonies live and decompose organic matter and denitrify nitrates. Filtered flow from the upper portion of the Anaerobic Chamber then flows into the 3rd chamber, the oxygen-rich Aerobic Chamber, where two different types of plastic media provide surface area for aerobic microbe digestion activity, additional solids filtration and nitrification of organic nitrogen to nitrate nitrogen. Oxygen is introduced into the sides of this chamber from one linear diaphragm blower. Air from this blower is also used to power a recirculation loop where an airlift pipe pulls mixed liquid from the sloped bottom center of the aeration chamber and recirculates it 24/7, in a controlled manner, back to the sedimentation chamber. Finally, air from this blower powers an effluent airlift line that meters cleaned effluent to a final settling zone before gravity discharge. Airlift pipes and flow-through ports are all positioned for natural flow equalization during processing, thus providing maximum residence time for optimal treatment.



<i>Manufacturer</i>	<i>Technology Resources</i>	<i>Long Island Distributor</i>
FujiClean USA	<ul style="list-style-type: none"> ● CEN Series Flyer ● Design Manual ● Installation Manual ● Owner's Manual ● Maintenance Manual ● Engineering Resources 	Bryan McGowin Advanced Wastewater Solutions, LLC PO Box 1622 Southampton, NY 11969 (631) 259-3353 https://www.awqli.com/ bmcgowin@gmail.com

b. Hydro-Action AN Series by AK Industries Inc.

The Hydro-Action® system utilizes a suspended growth aeration system. The treatment occurs as wastewater enters the pretreatment tank and flows by gravity into the aeration compartment. Wastewater flows by gravity from the aeration chamber through a hole in the base of the cone-shaped clarifier, where final settling takes place. The hydraulic roll created by the aeration system helps draw settled solids out of the base of the clarifier and back into the aeration chamber. The aerobically charged wastewater is then recirculated back to the pretreatment tank for denitrification. Treated wastewater exits by gravity through a tee structure located in the center of the clarifier, and treated effluent is then discharged to the leaching structure.

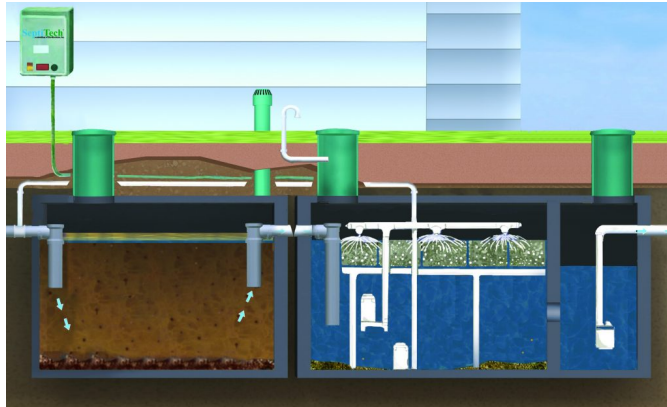


<i>Manufacturer</i>	<i>Technology Resources</i>	<i>Long Island Distributor</i>
AK Industries Inc.	<ul style="list-style-type: none"> ● Hydro-Action AN Series Flyer ● Installation Manual ● Installation PowerPoint ● O&M Manual ● Specifications 	Joe Densieski Wastewater Works Inc. 139 Reeves Avenue Riverhead, NY 11901 www.wastewaterworksinc.com wastewaterworks@gmail.com

c. SeptiTech STAAR by BioMicrobics Inc.

SeptiTech® STAAR™ (Smart Trickling Anaerobic/Aerobic Recirculation) System treats high organic loads by utilizing biological trickling filter technology. Influent first enters a two-compartment, settling tank to allow separation of solids from liquids. Effluent from the primary settling tank flows through an effluent filter into the treatment tank at the bottom of the trickling filter mixing with the treated wastewater. Wastewater is then pumped up into the trickling filter. The pump simultaneously draws a robust amount of air. The air combines with the uniform spray providing efficient treatment as the water and air combination trickles down through the filter media.

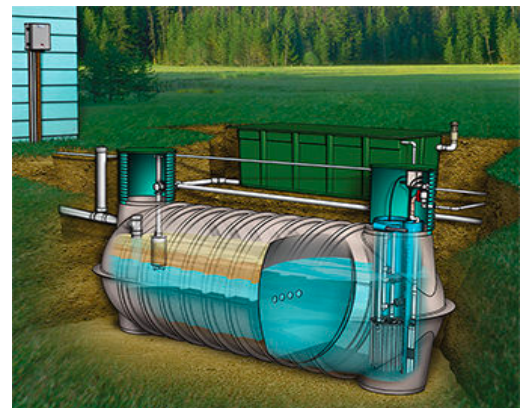
Systematically, wastewater is pumped back to the settling tank to remove sludge from the trickling filter. This localizes sludge management into the settling tank. After treatment, a pump will send small, frequent time doses to the leaching system to ensure optimal soil absorption. The SeptiTech® STAAR™ Filter Panel Senses “surge flow” and “low flow” activity; automatically adjusting the discharge rate as needed.



<i>Manufacturer</i>	<i>Technology Resources</i>	<i>Long Island Distributor</i>
BioMicrobics	<ul style="list-style-type: none"> • SeptiTech STAAR Website • System Sizing Information • Frequently Asked Service Questions • Owner’s Manual • SeptiTech Residential O&M Manual • Troubleshooting Guide -Residential 	<p>John Lindahl SeptiTech Long Island 27 Service Rd A Calverton, NY 11933 (631-)284-9893 jlindahl@clearriver.us https://septitechli.com/</p>

d. Advantex AX Series by Orenco Systems Inc.

Orenco's Advantex AX System is a prepackaged packed bed media filter consisting of a proprietary textile media, that reduces BOD and TSS. The AX unit is housed inside a fiberglass container and installed after a two-compartment tank prior to discharge to a leaching structure. When configured in recirculation mode (mode 3), this system reduces nitrogen by returning the treated nitrified wastewater to the septic tank, where denitrification occurs and nitrate is converted to nitrogen gas.



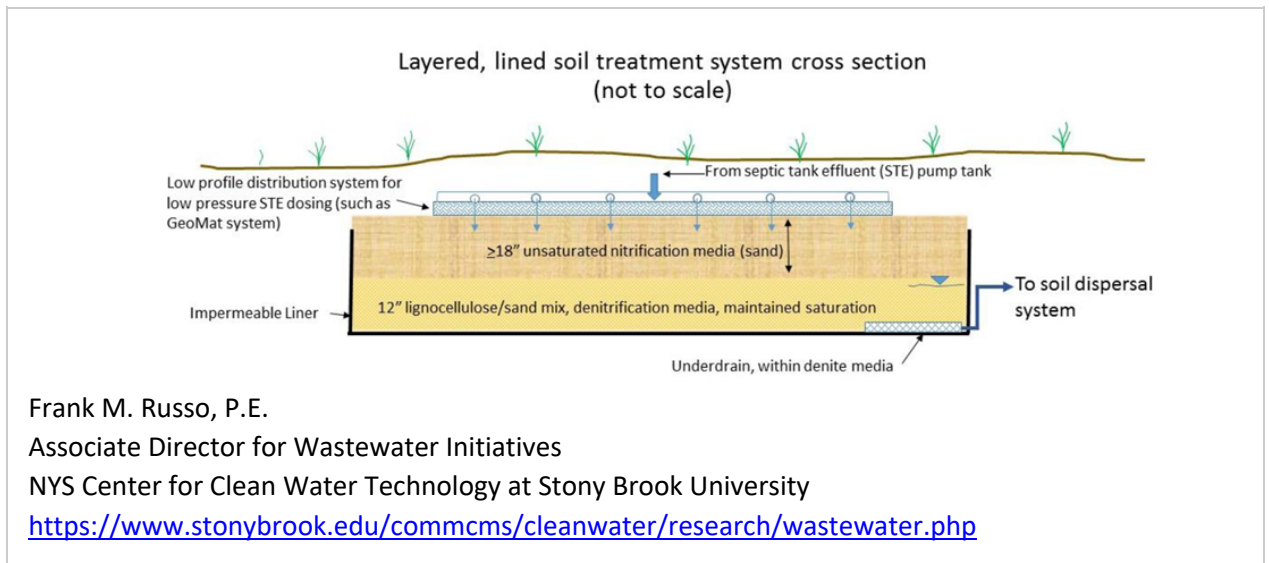
<i>Manufacturer Information</i>	<i>Technology Resources</i>	<i>Long Island Distributor</i>
<p>Orenco Systems Inc.</p> <p>https://www.orenco.com/ Jhealey@orenco.com</p>	<ul style="list-style-type: none"> • AX-20 Series Flyer • Residential Case Study • Video on how the AX works • Designer Resources • O&M Manual • Design Criteria 	<p>Lee Essay Nugent & Potter 1557 County Road 39 Southampton, NY 11968 Lee@nugentpotter.com http://nugentpotter.com (631) 283-1103</p>

II. Provisionally Accepted Technologies

These technologies were accepted due to their Provisional Use Approval status in Suffolk County, NY.

a. Lined Nitrogen Reducing Biofilter (NRB)

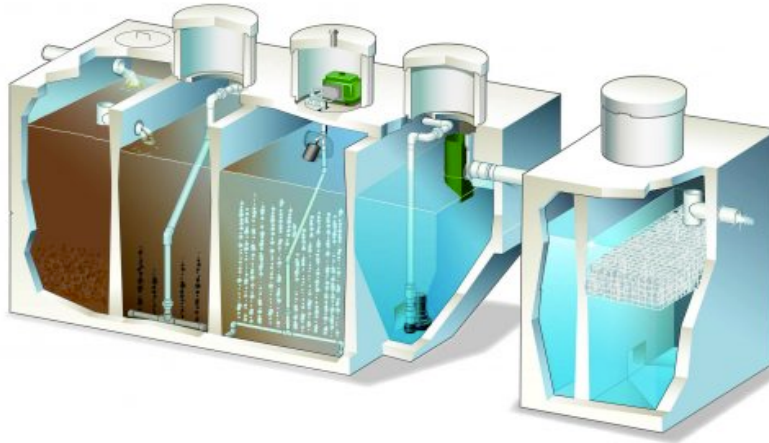
The Center for Clean Water Technology has prepared numerous technical and scientific papers on [Nitrogen-Removing Biofilters \(NRBs\) theory and process](#). NRBs generally consist of a nitrifying sand layer placed over a denitrifying mix of sand and lignocellulose. NRBs are relatively passive systems, utilizing a pump to dime-dose the field built filter, which is constructed with locally available material. NRBs are relatively passive systems with limited mechanical parts.



b. HydroKinetic by Norweco Inc.

The HydroKinetic system by Norweco uses extended aeration, attached growth, nitrification, and denitrification processes to treat wastewater. It consists of four treatment chambers (pretreatment, anoxic, aeration, and clarification) followed by a Hydro-Kinetic FEU filter containing filter media facilitating additional reduction of BOD and TSS by attached growth, prior to discharge to a leaching structure. The clarification chamber incorporates a flow equalization unit. Aeration is controlled by a factory-programmed timer, and wastewater is recirculated from the clarifier back to the anoxic chamber at factory-set intervals. The system is available with both concrete and HDPE tankage and with the pre-treatment tank either integral to the other three chambers in a four-chambered tank, or as a distinct tank.

<i>Manufacturer</i>	<i>Technology Resources</i>	<i>Long Island Distributor</i>
Norweco Inc.	<ul style="list-style-type: none"> ● HydroKinetic Brochure ● HydroKinetic Specifications ● HydroKinetic Owner's Manual 	Norweco of New York norwecony@gmail.com (516) 710-7967



III. Piloted Technologies:

Technologies with Piloting Acceptance may qualify for funding through the County's S.E.P.T.I.C. grant program, provided the following:

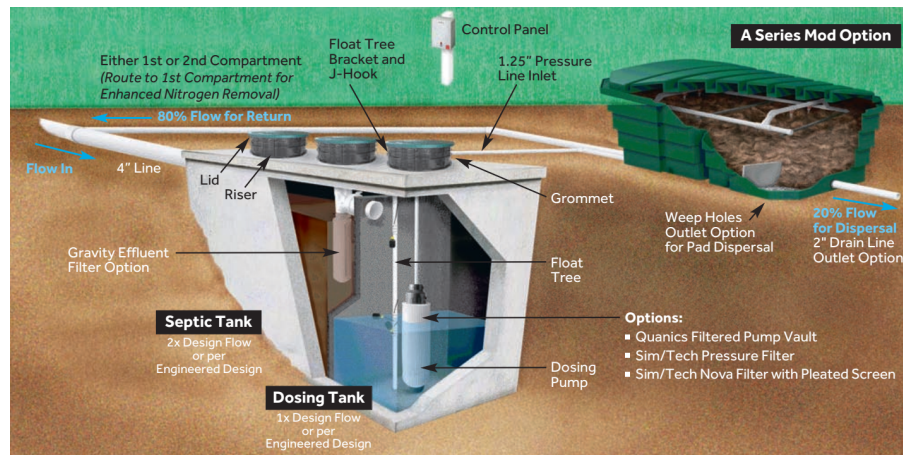
A. The Manufacturer (or the Design Professional in the case of non-propriety field-built systems) provides a disclosure statement signed by the Property Owner that states the Property Owner understands that the proposed technology has been granted "Piloting Acceptance" in Nassau County, NY and that they are aware that the technology:

- (1) has a limited number of installations on Long Island; and
- (2) has not demonstrated the capability to achieve average total nitrogen reductions to 19 mg/L or less on Long Island.
- (3) Financial Responsibility – The applicable Manufacturer or Design Professional of the proposed Piloting Acceptance technology shall submit a signed statement to the District agreeing to repair, replace, or modify the Piloting Acceptance technology, including to install an IA OWTS with Provisional or General Acceptance, if the District determines that the proposed technology fails to perform as designed. The signed statement must clearly state who is responsible for the cost of repairing, replacing, or modifying the OWTS, and the method for ensuring funds to complete this work - whether through a bond or other form of financial security posted by the Manufacturer or Design Professional that is acceptable to the District.

a. BioCoir Coconut Fiber Biofilter by Anua International

BioCoir is a recirculating biofilter providing stable treatment across a broad range of applications. BioCoir utilizes coir media housed in a preassembled module (mod). Coir are the strong and durable fibers that comprise the thick husk of the coconut fruit. Coconut fiber is a sustainable, upcycled resource. It has been successfully used to treat wastewater for over two decades. Pretreated effluent is sprayed over the media in short, timed intervals. Specially designed helical spray nozzles ensure

uniform distribution over the entire surface area of the mod. The effluent moves via gravity downward, where natural microbiological processes occur that provide high level treatment. After passing through the full depth of media, the effluent travels to the bottom of the mod where the flow is split with 80% returning to the primary tank and 20% going forward for final dispersal. The treated effluent meets the requirements of NSF/ANSI Standard 40, Class 1 with nitrogen reduction. The mods are factory assembled and can be configured as a combined treatment and effluent pad dispersal system.



<i>Manufacturer</i>	<i>Technology Resources</i>	<i>Contact Information</i>
Anua	<ul style="list-style-type: none"> • BioCoir Long Island Design Manual 	<p>Colin Bishop, CEO Anua (anua-us.com) T: 928.433.3220 colin.bishop@anua-us.com</p>