

Vendor Standards Certifications

Vendor	ANSI 40	ANSI 245	ANSI 350.1
	Residential >400gpd	Nitrogen	
		<19 mg/L	
Pugo Systems	X	X	unk
Biorealis	unk	unk	unk
Biomicrobics Microfast	X	X	unk
Biomicrobics Biobarrier	X	X	X
		BOD < 5mg/L;TSS< 2mg/L;Turb<.2NTU;fec<200CFU/100ml	
Biomicrobics SeptiTech	X	X	unk

Commercial manufacturers linked to Gates Foundation Toilet Initiative

For an overview from the Gates Foundation Sanitation Division, see [2019 Gates Foundation Wastewater Treatment](#)

- China
 - [Clear](#)
 - [CRRC](#)
 - [EcoSan](#)
- United States
 - [Sedron Technologies \(Janicki\) OmniProcessor](#)

- [Sedron Technologies \(Janicki\) Firelight Toilet](#)
- India
 - [Eram Scientific-CalTech](#)
 - [Ankur Scientific \(distributing OmniProcessor\)](#)
 - [Tide Technocrats](#)
- Thailand
 - [SCG Chemicals](#)
- Japan
 - [LIXIL](#)

Commercial Residential Wastewater Treatment systems available today

- Necessary Testing Standards for Residential Wastewater Treatment Systems
 - NSF/ANSI Standard 40 testing for residential wastewater treatment systems
 - NSF/ANSI Standard 245 testing for nitrogen reduction,
 - NSF/ANSI 350 and 350.1: Household treatment systems

In list below, we are currently assessing which standard is reached by each vendor

- US Vendors
 - [Sedron Technologies \(Janicki\) Firelight Toilet](#)
 - [Pugo Systems](#)
 - [Jet](#)
 - [Orenco](#)
 - [Biorock](#)
 - [AquaKlear](#)
 - [WaldenLabs](#)
 - [NSF-List of 40 Vendors](#)
 - [Ecological Tanks](#)
 - [MicroSepTec](#)
 - [newco]()
 - [newco]()
- UK Vendors
 - [WPL](#)
 - [newco]()
 - [newco]()
 - [newco]()

- France Vendors
 - [newco]()
 - [newco]()
- Germany Vendors
 - [Busse Innovation Systems](#)
- Japan Vendors
 - [Fuji]()
 - [newco]()
 - [newco]()
 - [newco]()

Patents for On-site Wastewater Treatment System

US Patents:

- [IRSF](#)
- [Charles Wofford-24 citations:2000](#)
- [William Stuth:1991](#)
- [Wayne Allen Wolf:2010](#)

Jupyter notebooks for hydrodynamic flow models of coupled reactors

[jupyternotebook](#)

Jupyter notebooks for dynamic microbial biome models:
growth and death of biofilms -> sloughing rate

- Model by species
- Model by density