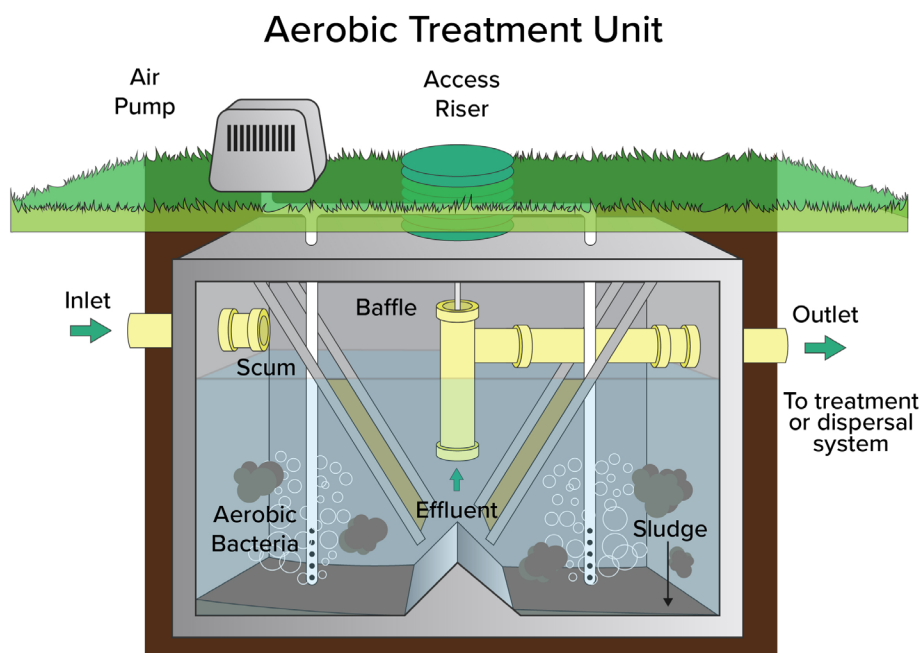


AEROBIC TREATMENT UNITS (ATU)

In Louisiana, many conventional septic systems are unsuitable due to environmental conditions such as high water table, soil saturation, contamination potential for surrounding waterways or topography. In these instances, aerobic treatment units are utilized to process wastewater effluent by creating oxygen to break down the organic matter in sewage and promote aerobic bacterial activity. These mechanical systems require regular maintenance to treat effluent efficiently. The major differences between conventional septic systems and aerobic treatment units are listed below :



Please note: The aerobic treatment unit can vary in components and design.

Schematic of Aerobic Treatment Unit

Conventional Septic System	Aerobic Treatment Unit
Anaerobic bacteria	Aerobic bacteria
Primary treatment	Primary and secondary treatment
No discharge allowed	Discharge is possible
Must meet LAC Title 51 XIII ¹	Must meet NSF/ANSI 40 ²
Manufacturer's approval by LDH ³	Manufacturer's approval by ANSI ⁴

¹This is the [Public Health – Sanitary Code LAC Title 51 Part XIII](#)

²NSF/ANSI – National Sewerage Foundation (NSF)/American National Standards Institute (ANSI)

³LDH – Louisiana Department of Health

⁴Louisiana Department of Health has a Memorandum of Understanding (MOU) with NSF and Gulf Coast Testing LLC (GCT) for manufacturer approved systems.

The NSF/ANSI 40 lists the following guidelines for systems with 400-1,500 gallons per day (GPD):

- Biological oxygen demand (BOD) must be adequate to treat waste in a five-day period. The required demand is 25 mg/L for the bacteria to process the waste effectively.
- Total suspended solids (TSS) will remain after treatment but should be less than 30 mg/L at discharge. Residual TSS can be further filtered using additional processes.
- The potential of hydrogen (pH) should be in the range of 6.0-9.0 which includes slightly acidic and alkaline conditions.
- All aerobic treatment units and corresponding parts, including blowers, must be approved by an ANSI accredited testing facility. Any alternate equipment (aerators) must be tested/approved by the testing facility.

The Louisiana Department of Health currently has 21 certified manufacturers located both in the state and across the country. Some companies have a single model/series of systems while others have multiple models/series of systems.

Approved Vendors by Louisiana Department of Health

The list of licensed manufacturers of mechanical treatment plants as of July 2024 can be found below and also at <https://ldh.la.gov/assets/oph/Center-EH/sanitarian/onsitewastewater/LicensedManufacturersofMechanicalTreatmentPlants.pdf>.

- Acquired Wastewater Technology, LLC, 9000 Cook Road, Denham Springs, LA 70726, 800-999-0615, www.modad.com
 - Models: Alliance, Econo HP Dual Air, CajunAire, Mo-Dad, TexAire
- Aerobic Systems Design Inc., 59 Joe Rosier Road, Deville, LA 71328, 318-466-9295
 - Models: Omni Green (G Series)
- AeroGreen Technologies, LLC, 3535 Calder Ave., Suite 310, Beaumont, TX 77706, 409-499-2040
 - Models: AeroGreen (AG series)
- American Wastewater Systems Inc., 1307 South Fieldspan, Duson, LA 70529, 800-960-3997 or 337-873-3128, www.best1systems.com
 - Models: B.E.S.T. 1 AWS
- AquaKlear, Inc., 876 North Bierdeman Road, Pearl, MS 39208, 877-936-7711 or 601-936-7711, www.aquaklear.net
 - Models: AquaKlear (AK, AKA series)
- Bio-Microbics Inc., 16002 W. 110th St., Lenexa, Kansas 66219, 800-753-3278, <https://biomicrobics.com/>
 - Models: Bio-Barrier (MBR), MicroFast
- Clearstream Wastewater Systems Inc., P.O. Box 7568, Beaumont, TX 77726-7568, 409-755-1500, www.clearstreamsystems.com
 - Models: Clearstream
- Ecological Tanks Inc., 2247 Highway 151 North, Downsville, LA 71234, 800-277-8179 or 318-644-0397, www.etiaquasafe.com
 - Models: Aqua Aire (AA series), Aqua Safe (AS and ASO series)
- Enviro-Flo Inc., 235 Flowood Drive, Flowood, MS 39232, 877-836-8476, www.enviro-flo.net
 - Models: Aqua-Flo (AF series), NuWater, BioRobix, Maxx Air, Enviro-Flo (E series)
- Fuji Clean USA LLC, 41-2 Greenwood Road, Brunswick, ME 04011, 207-406-2927, www.fujicleanusa.com
 - Models: Fuji Clean (CE and CEN series)

- Henry McGrew LLC, 3822 East Texas, Bossier City, LA 71111, 318-746-2380
 - Models: JetSpray
- Hoot Aerobic Systems Inc., 2885 Highway 14 East, Lake Charles, LA 70607, 888-878-4668 or 337-474-2804, www.hootsystems.com
 - Models: Hoot (H and LA series)
- Hydro-Action Inc., 2055 Pidco Drive, Plymouth, IN 46563, 800-370-3749 or 574-936-2542, www.hydro-action.com
 - Models: Hydro Action (AN, AP, and CLP series)
- Infiltrator Water Technologies LLC, 9125 Comar Drive, Walker, LA 70785, 225-665-6162, www.infiltratorwater.com/delta-treatment-systems
 - Models: Ecopod (E series), Enviro-Aire (EA series), Whitewater (DF and UC series)
- Jet Inc., 750 Alpha Drive, Cleveland, OH 44143, 440-461-2000, www.jetincorp.com
 - Models: Jet, Nano-Jet
- Montgomery Tanks of LA Inc., 2611 Highway 71, South Montgomery, LA 71454, 318-646-2212
 - Models: Montgomery Tanks (MT series)
- National Wastewater Systems Inc., 137 Reserve Drive, Lake Charles, LA 70611, 337-439-0680, www.solarair.biz
 - Models: Solar Air, Solar Aerobics (SA series)
- Norweco Inc., Firelands Industrial Park, 220 Republic St., Norwalk, OH 44857, 419-668-4471, www.norweco.com
 - Models: Singulair, Hydro-Kinetic
- Orenco Systems Inc., 814 Airway Ave., Sutherlin, OR 97479, 800-348-9843 or 541-459-4449, www.orenco.com
 - Models: AdvanTex (AX series)
- SludgeHammer, 4772 US-131 South Building D., Petoskey, MI 49770, 231-348-5866, <https://sludgehammer.net/>
 - Models: SludgeHammer
- Toshco Sewer Systems Inc., 2460 Comeaux Road, Jennings, LA 70546, 337-855-2282, www.microair-atu.com
 - Models: Micro Air

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- ◆ <https://ldh.la.gov/assets/oph/Center-EH/sanitarian/onsitewastewater/VISUALCHECLIST.pdf>
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