**Condensed Owner's Manual**- this condensed version of the homeowner's manual is just to give you a quick look at how it works, some good Do's and Don'ts for responsible use, and FAQs. For a full guide about your system, including some troubleshooting tips, please visit Leesburgseptic.net and click on our **ATU Resources** page.

**Service Provider For Your System:**

Telephone: (352) 787-5435
Email: Emily.leesburgseptic@gmail.com

**Model of Your System:**

□ CE5 □ CE7 □ CE10 □ CEN5 □ CEN7 □ CEN10

CE models are certified to NSF/ANSI 40 Standards
CEN models are certified to NSF/ANSI 40/245 Standards
Your System Serial # and Blower Serial # for your system are located both on the control/alarm panel and inside the treatment system (typically on the inside riser.) These can be used for warranty purposes and servicing purposes.

**Service and Support:**
Your system is required to be serviced biannually to insure maximum efficiency of the system. Your first 4 visits, the initial 2 years, are covered by your FujiClean installer. After the initial 2 years, you can decide to stay with Leesburg Septic Inc. as your service provider or obtain other options. However, we sincerely hope that you enjoy our service- keeping you up to date about your system and how to take care of it properly.

## What Your System Does

Your Fuji Clean treatment system is essentially your own personal wastewater treatment plant. Dirty "domestic" (i.e. household, from bathrooms, kitchen, sinks etc.) wastewater goes in and clean water comes out, which then flows into the environment, such as into a leachfield. Designed to produce a consistent, high-quality treated effluent, your Fuji Clean treatment system is a living biological ecosystem that relies on billions of living microbes to consume the pollutants in wastewater. Oxygen is introduced to keep the microbes alive and healthy (hence the air blower) and various forms of high surface area

plastic “media” are incorporated into the system to provide space for microbes to live and consume waste material.


This NSF label, located both on the control/alarm panel and inside the treatment system (typically on the inside riser) of all Fuji Clean USA systems , will indicated that this system meets the requirements set forth in NSF/ANSI Standard 40 & 245, which is a purification performance standard for the treatment of domestic strength wastewater. It also provides your Model and Serial Number of your system.

## How to Keep Your System Healthy

So, you’ve made an investment in your Fuji Clean treatment system. You have a service provider and service plan. Now, you just have to respect your system and treat it right.

Here’s the common-sense bottom line…. Remember that your treatment system is a living system. Billions of living microbes consume pollutants from your wastewater. Excessive fats, oils and greases can smother living microbes. Toxic substances can poison them. Therefore, please refrain from introducing items such as these into your system.

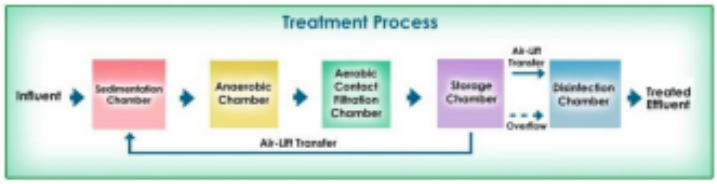
**KEEP THESE ITEMS OUT OF YOUR SYSTEM! THEY WILL HARM THE LIVING ORGANISMS WORKING TO CONSUME POLLUTANTS FROM YOUR WASTEWATER!**

**CHEMICALS:** Excessive Bleach, Paint & Paint Thinners, Herbicides & Insecticides, Motor Oil and Antifreeze, Antibiotic Pills, Chemical De-Clogging Agents, Fabric Softeners
**TRASH:** Sanitary Napkins, Cigarette Butts, Baby Wipes, Dental Floss, Condoms, Kitty Litter, Paper Towels
**FOOD:** Excessive Cooking Grease, Coffee Grounds, Fruit and Vegetable Peels

# Treatment Process Overview

Fuji Clean's "contact filtration" treatment is a simple, well engineered process that consists of a controlled, circuitous flow train through anaerobic and aerobic chambers and in direct contact with assorted proprietary fixed film medias on which biological digestion of organic matter occurs. Media is also designed and positioned to provide mechanical filtration of process wastewater.

The system includes two air lift pumps (see diagram below) The Recirculating Airlift Pump returns process water and sludge from the aerobic zone to the sedimentation chamber, recirculating 2-4 times inflow per day for CE models and 4-6 times inflow for CEN (enhanced denitrification) models. The Effluent Airlift Pump is designed to help equalize flow and discharge treated effluent.




**Two Air Lift Pumps.** One Recirculating Air Lift pump sending process water and solids back to Chamber 1, and one Effluent Air Lift Pump for measured discharge of treated effluent. (See airlift pump info below).

**Chamber 3B. Disinfection Chamber** (final zone before discharge – option for chlorination tablet disinfection)

**Chamber 3A. Storage Chamber** (settling zone)

**Sludge Transfer** (Recirculating air lift pumpback) See airlift pump info below.

Outlet

Inlet

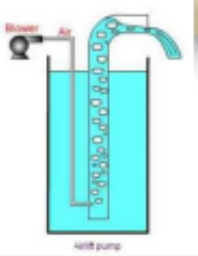
**Powered by the MACBlower "R" Series Blowers** State-of-the-art linear diaphragm air blowers manufactured by Fuji Clean Co sized to provide about 2.8 cubic feet per minute to most residential systems.

**Chamber 3. Aerobic Contract Filtration Chamber** (both board and cylindrical hollow mesh media) oxygen rich zone for aerobic microbe digestion activity, solids filtration and nitrification of ammoniac nitrogens to nitrates

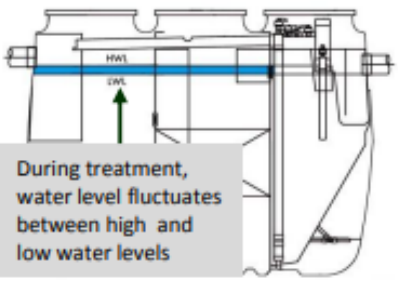
Overflow Effluent Weir

**Chamber 2. Anaerobic Contact Filtration Chamber** (spherical-skeleton filter media) organic matter decomposition by micro-organisms, suspended solids captured and nitrates are denitrified

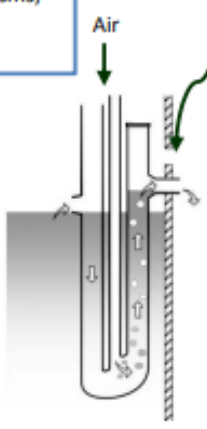
**Chamber 1. Sedimentation Chamber** (separates solids and greases)



**Airlift Pumps.** This generic illustration shows the mechanics of the "airlift pumps" used in this system, which are simple pipe conduits through which pressurized air (from blower) is introduced at the bottom and by fluid pressure, water is carried up the pipe by ascending bubbles.




During treatment, water level fluctuates between high and low water levels




**Flow Equalization** When water level exceeds LWL, treated water is discharged through Chamber 3B via the Effluent Air Lift pump. If water level exceeds HWL, then treated water is also discharged through an overflow effluent weir.

**System Components: MAC Blower**
A separate Owner's Manual is provided for your air blower. Please keep both manuals together and accessible to your system service provider.

**Frequently Asked Questions:**

**Our system is on our vacation home.** Should I turn it off when we are not home? Fuji Clean systems are designed to accommodate variable and intermittent flows, including only weekend use, but this assume that the air blower operates continuously regardless of inflow. However, for seasonal use properties, the air blower may be shut down if the system is not going to be used for an extended period of time. The blower should be re-started at least three days in advance of system use if possible.

**What if there is a power outage?** During a power outage, the blower will cease operation and after about 24-hours, treatment quality may begin to diminish. However, the Fuji Clean system will still allow wastewater to pass through the system and will not create a backup in the house unless a separate pump station has been installed.

**Does my system need servicing?** Your Fuji Clean system is designed to require minimal service, but inspection and service every 6-months is necessary during the first two years of service to assure proper operation. States vary in terms of mandatory service requirements after the initial 2-year warranty/service period expires, but Fuji Clean USA's extended service policy mandates that your system be maintained properly, which calls for semi-annual inspection/service visits from a trained and certified service provider. (This schedule may be altered for seasonal, and part-time sites). Your certified service provider will review details of initial (first two years) and extended (2 years +) service.

**Does my system need to be pumped out?** Like an ordinary septic tank, sludge must be removed from your system periodically (such as once every 2 years). Your service provider will measure sludge build-up during each inspection and will provide pump-out guidance for you. Pump out frequency depends on waste stream strength and use. Please consult with your service provider to help determine the pump-out frequency that is best for you.

**How much will it cost in electricity to run my system?** Since your Fuji Clean USA system has been designed to operate continuously, it is easy to calculate power cost. All residential units draw 1.3 kWh of power per day except for the CE10, CEN7 and CEN10, which draw 1.9 kWh of power per day. Simply multiply your local cost of power by the draw per day to calculate daily power cost.

**Can I use a garbage disposal with my system?** As noted in another section of this manual of how to maintain your system's health, garbage disposals are not recommended for this or any onsite septic system due to the heavy and inconsistent organic loads injected into the system, which can interfere with normal processing. Use of a garbage disposal may increase the frequency of sludge pumpouts.

Please visit the extended guide with warranty information and the Troubleshooting Guide on your service providers website- Leesburgseptic.net.