

SeptiTech Service

Suggested Answers to 24 Most Frequently Asked Customer Questions

1. **Why did the alarm sound when the power comes back on?...**
 - a. When system power is turned on it takes the PLC 15-seconds or so to “boot-up,” much like a computer. In this timeframe, the alarm will sound because the PLC, which controls the alarm function, is not yet operating.

2. **Should I hear a “gurgle” sound from the “air vent?”**
 - a. If an ear is placed next to the air intake pipe, you may be able to hear the sound of the water sloshing about in the processor.

 - b. However, if installation directions were not followed and there is no positive pitch in the processor sloping toward the processor, or if there is a dip in the air line, there is a chance that water can accumulate in the air intake pipe. This is not good and a loud “gurgle” may signify such a condition. Also, the strength of the air intake (during recirculation pump operation) may be weakened if there is water in this pipe, which you can test by placing a small piece of paper against the air intake pipe. Suction from the air intake should be able to hold a small piece of paper in place. Usually, the contractor must be notified to come and correct this problem.

3. **My system seems to be running all of the time...**
 - a. Most people know there system is running because they can hear the recirculation “gurgling” if they put their ear near the access covers or the air intake pipe. You should emphasize that SeptiTech is a demand-based system. Once there is sufficient inflow and the treatment program is turned on, then the system runs a treatment cycle that consists of on and off cycles for the better part of a day.

 - b. Sometimes, when customers understand that our treatment relies on a living microorganisms in a biological environment eating the waste, and the gurgling is simply feeding waste and oxygen to this environment (like a fish aquarium bubbler), it helps them understand the nature of our operation.

 - c. You should always point out that if flow stops coming into the processor, our system still runs a small amount just enough to keep the culture alive – and will stop altogether if there is no flow for a extended period of time.

4. **Can I turn my power off for the season?...**
 - a. No problem. The system will rebound quickly once you return. However, be certain that your customer is not planning to shut the power off on a regular basis. For instance, they should leave the power to the system running if they use their house only on weekends for instance. Again, explain that our system keeps reverts to “refresh” mode if there is no incoming flow which circulates the wastewater just enough to keep the culture alive

5. Why is there no snow around my SeptiTech system access lids?

- a. Explain that our biological treatment process means that it relies on billions of microbes to consume the waste. In other words, our treatment environment is a living, entity and produces heat as a byproduct. Further explain that we insulate the tank to preserve as much heat as possible to help provide the warm moist conditions most suitable for maximal microbial growth. Since the lids are not insulated, warmth from the system can seep into the snow above lids and melt snow. This heat escape does not materially affect system performance.

6. Is the pipe sticking up an air vent?

- a. No. Not exactly. This is an air intake pipe that allows air to be drawn into the treatment process. (Remember, it is a living colony of bacteria and microorganisms that we are keeping alive)
- b. Remind customers that this air intake pipe should be maintained in such a way to keep it clear of materials that could block airflow. (eg. deep snow, entangled brush).

7. Odor. --No odor should be associated with a SeptiTech system. If there is any odor, the cause of the odor should be eliminated.

- a. Is the system is vented properly through house stack. Is there an impediment blocking air flow like a pump station or a septic tank effluent filter that doesn't allow free airflow. If so, a separate vent needs to be cut into the line or septic tank.
- b. Is the customer's vent positioned properly and is it tall enough? We have had very good luck eliminating most odors with simple vent pipe extensions.
- c. Sometimes a carbon stack filter can be inserted onto the house vent stack to alleviate odor. These are typically available through a plumbing supply house.
- d. Are the system access ports tightened properly? These can be sealed more tightly with a closed cell foam/insulation product if necessary.
- e. Be wary of natural downdrafts conditions. Septic odor can often be traced to poor vent pipe positioning and downdraft air currents.
- f. Make sure the customer locates the precise position of odor if possible. We have had some cases where odor has arisen from sources not associated with the system such as old buried septic tanks.

8. How long do the pumps usually last?

- a. We use high quality Tsumri and Gould pumps for all of our systems. However, lifespan of pumps is very hard to estimate due to conditions beyond our control. For instance amount of system use as well as quality of power (i.e. our pumps generally do not like "dirty power") can affect pump lifespan. In general, our pumpback and discharge pumps do not operate to the extent that our recirculation

pump(s) operate during normal system operation and should last many years. Our recirculation pump under normal use should last 3-5 years or longer.

- b. Be careful responding to customers who suggest that their systems are only seasonal systems and therefore their pumps should not wear as much and last twice as long since long periods of inactivity can produce flat or dead spots and possibly accelerate pump wear time.
- c. Please note that most early pump failures are associated with poor cleaning of the septic tank during buildout. We find concrete chips or plastic tank shavings packed in pump impellers.

9. How long do the bulbs last (UV systems)?

- a. First, be careful to point out that not all SeptiTech systems have UV as many customers just assume that their systems includes UV when in fact it does not. Although the typical UV bulb on a residential system should last 12-months according to the manufacturer, we recommend that even for seasonal systems (where the bulb is on only part of the year) be replaced once a year to assure maximal kill rate, since kill rate diminishes with bulb age.

10. Does my processor need to be pumped?

- a. NO! Make certain that your customers understand the difference between their septic tanks and the processor! We get many call from confused pumpers. Of course the SeptiTech system is designed so that the pump-back line carries any accumulated solids from the processor back to the head of the septic tank thereby eliminating the need to pump sludge or solids from the SeptiTech unit.

11. Do I still need to pump my septic tank? How often?

- a. Though we have evidence that our oxygenated pumpback line activates aerobic treatment in the primary septic tanks (thus reducing sludge levels), we do still recommend to all of our customers to have their septic tanks pump as they would with a conventional system. As a guide, use the following table (which assumes no garbage disposal)

Tank Size	Household Size (number of people)					
<u>Septic Tank Pumpout Frequency Guide (number of years)</u>						
750	9.1	4.2	2.6	1.8	1.3	0.4
900	11	5.2	3.3	2.3	1.7	1.3
1000	12.4	5.9	3.7	2.6	2	1.5
1250	15.6	7.5	4.8	3.4	2.6	2
1500	18.9	9.1	5.9	4.2	3.3	2.6
1750	22.1	10.7	6.9	5	3.9	3.1
2000	25.4	12.4	8	5.9	4.5	3.7
2250	28.6	14	9.1	6.7	5.2	4.2
2500	31.9	15.6	10.2	7.5	5.9	4.8

12. Who should I call if I have a question or an alarm?

- a. Distributor should affix a label to the SeptiTech controller with a service telephone number that is associated with the distributor. Customers should call their local distributor with questions and for service.
- b. Commercial systems and residential systems with autodialers will be programmed with telephone numbers designated by the distributor.

13. I can't hear my alarm where it is located. Do I have any options?

- a. We have upgraded our alarm decibel level and alarms on newer systems should be loud enough to be heard if placed within reasonable distance of living/working space. However, if system configuration does not allow main controller to be placed within a reasonable distance, SeptiTech offers a remote alarm option, which allows alarm placement wherever the customer desires. (See photo below). Please contact SeptiTech for a current cost of this accessory, which must be installed by an electrician.



14. Can I move or hide the air intake pipe?

- a. No problem. BUT, make sure that your contractor knows that there must be positive pitch from the air intake pipe to the processor to allow water and moisture to flow freely back into the processor tank.
- b. Also, we recommend that the intake pipe be hidden away from the house next to a tree or shrub.
- c. Due to the soft sound of a air intake during system recirculation, we do not recommend that the air intake be placed immediately adjacent to main living quarters (such as next to a bedroom window or under a porch).

15. Can I bury the access lids?

- a. NO! However, we have had plenty of creative solutions to camouflaging these lids. Whatever the contractor wants to do, the bottom line is that service personnel need free access to systems via all access ports throughout the year.

16. What are some options to hide the access lids?

- a. We consider it SeptiTech's job to help educate system designers and contractors regarding the necessity to keep the access lids exposed and therefore initial placement of the SeptiTech unit. Better that it be placed off to the side of a lawn for instance, where wild grass grows, rather than smack in the middle of a yard.
- b. Small shrubs or bushes are great.

17. Can I drive over my system?

- a. No! Not unless you specifically specify and install an H-20 rated system. This is a special order from SeptiTech and requires different access covers.

18. Can I paint my air intake pipe?

- a. No problem. Paint away. Or cover it with a decorative fixture that allows air to flow freely such as a unit manufactured by Pagodovent. (www.pagodovent.com).

19. Do I need to take effluent samples?

- a. Not unless regulations require effluent sampling, in which case a protocol will be set up with customer and distributor or outside testing organization. In either case, the customer should never have to take effluent samples.

20. Do I need to perform regular maintenance on my system?

- a. Not really. However, as a customer you should be aware of proper use of the SeptiTech system, which really mirrors proper use of any septic system. Proper use includes the following (listed in the Owner's Manual).

Owner Care & Maintenance

Every septic system will benefit if treated with care. Thank you for respecting your new SeptiTech system and for following the recommended care steps outlined below. These steps are normal recommended care for any septic tank – leachfield system.

1. Pumping Septic Tank:

SeptiTech® recommends that you pump your septic *tank* once every 3-5 years. Note: the septic tank is not the same unit as the SeptiTech® processor. SeptiTech® processors should never require pumping.

2. Use of Bleach:

Your septic tank and SeptiTech® treatment system relies on bacterial action to work. Therefore, please avoid the heavy use of bleach as much as possible. If bleach must be used, use it sparingly and spread out its use over time so the bacteria in the system are not all depleted. Likewise, do not flush antibiotic pills into the system as they can also kill the bacterial action in the septic and processor tanks.

3. Disinfecting a Well:

Occasionally a contaminated well needs to be disinfected (usually with Clorox bleach). If you need to do this, do not run the chlorinated water through your septic system. Open the outside water faucets and let the water run for several hours or as long as necessary to flush the chlorine out of the well. Pump the well for several hours after you no longer smell chlorine, in the mean time don't use any water in the house.

4. Trash & Garbage Disposals:

Always keep sanitary napkins, cigarette butts, coffee grounds, paper towels, excessive cooking grease, paints and non-biodegradable materials out of the system. Use of sink grinders (garbage disposals) can result in heavy and inconsistent load of organic materials into the system and are therefore not recommended.

5. Discharges from Potable Water Treatment Systems:

Discharges from water treatment systems, such as water softeners or water filtration systems that require back flushing, are not considered wastewater and should never be pumped into a septic system. This flow can and should to be diverted into a separate, properly constructed dry well (refer to state and local codes).

6. Plumbing Fixture Maintenance:

Plumbing fixtures such as toilet bowl fill valves and faucets should be maintained to insure that leaks do not cause excess water to enter the septic system.

7. Additives:

Never use toilet tablets or products such as *Drain-O* as these products will deplete necessary bacteria from the septic system. Never use septic tank additives of any kind. Most are harmful to the system and none have any positive effect.

8. Alarm:

The computer in your SeptiTech® control panel monitors all the important functions of the SeptiTech processor. It will set off an

alarm if any of several events occur such as a failure to discharge water from the tank. Should your alarm sound; first read and record the fault message on the key pad display located on the front cover of the controller and next, press the re-set button to silence the alarm and call SeptiTech® for service. A service telephone number for your area will be affixed to the cover of the panel.

9. Important Notice for Home Generator Users

SeptiTech® does not recommend use of this unit with a generator. However, in cases where a generator must be used, please follow these procedures:

- a. Turn off both SeptiTech circuit breakers at house service panel before generator power is applied.
- b. Once generator is on, turn on SeptiTech® breakers one-at-a-time at house service panel.
- c. When electrical power is restored, turn off SeptiTech breakers at house service panel before disconnecting generator and returning to house power. Then turn on SeptiTech® breakers one-at-a-time at house service panel.

SeptiTech®'s warranty requires that these procedures be followed to prevent power surges damaging PLC controller and/or service pumps.

In the event of a system alarm during power changeover, push re-set button once to silence alarm and re-set system. If this action does not clear alarm, call SeptiTech® service immediately.

21. Can I use a garbage disposal with this system?

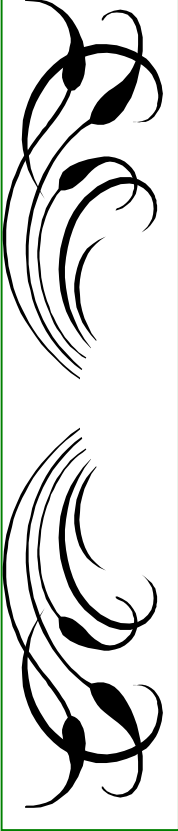
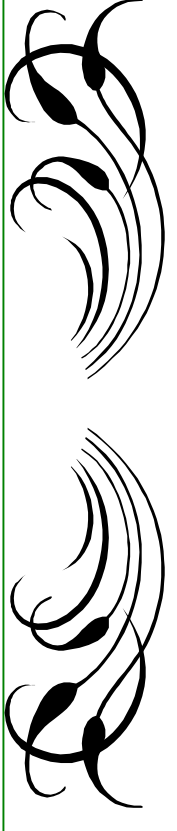
- a. No septic system likes garbage disposals, period. It greatly increases the “pollution” content of effluent (BOD₅ and TSS numbers can easily double or triple).
- b. If your customer insists that they must have a garbage grinder, we offer 3 recommendations:
 - i. Increase the size of the septic tank by at least 50%.
 - ii. Install an effluent filter on the septic tank (like a Zabel filter) which is required on SeptiTech installations anyway.
 - iii. Educate your customer that excessive use of the garbage grinder is detrimental to optimal treatment and in particular, make sure that they try to limit the quantity of fats, oils and greases down the drain.

22. Should I be concerned about detergents or cleaners with my system?

- a. As part of the Owner's Manual, we include a recommendation sheet that addresses this question as follows:

Care of Your SeptiTech® System

This residence benefits from a SeptiTech® wastewater treatment system - an aerobic biological trickling filter processor that cleans wastewater before discharging to the environment. To assure the system functions as it was designed we ask you to adhere to the following:

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1. The system relies on bacterial action to work properly. Laundry detergents that are low in phosphates, nitrates and chlorine such as *Arm and Hammer* laundry detergent are recommended. Such detergents are gentle to your clothing, as well as the septic treatment system.
 2. Please avoid using bleach. If bleach must be used, use it sparingly and spread its use over time so the bacteria in the treatment system are not depleted. Likewise, do not flush antibiotic tablets or solutions into the system.
 3. Please keep sanitary napkins, cigarette butts, paper towels, coffee grounds, cooking greases and oils as well as paints, petroleum products and other non-biodegradable materials out of the system.
 4. Please do not use toilet tablets of any kind (the tablets that turn the water blue or green) or other products such as *Drain-O*. These products deplete or degrade bacterial action.
 5. Never use septic tank additives of any kind.
 6. Please be sure that leaky faucets or running toilets are repaired. Excess water flow will hamper treatment.
 7. Garbage disposals are not recommended.
 8. Remember, all septic systems, SeptiTech® included, require the septic *tank* be pumped on a regular basis. A typical pumping schedule for a residential house may be once every two or three years. (Annual pumping is recommended if a garbage disposal is being used).

23. Should I put septic tank additives into this system?

Our position on septic tank additives mirrors that of the Maine State Department of Environmental Health where it is stated on their website:

“Chemical additives and treatments said to prolong the life of your system are not reliable and cannot substitute for regular pumping. These products may hurt your system by keeping solids in suspension, which then travel to and clog the disposal field”

24. Can I get information about my system operation?

- a. We can provide our system data reports pulled at annual inspections or other intervals as arranged to fulfill local permitting requirements.