What to do when your Onsite Wastewater Treatment System Experiences a Power Outage

Types of onsite wastewater treatment systems (OWTS)

Electrical power outages may affect the operation of your onsite wastewater treatment system (OWTS). An OWTS operates either by gravity, or will involve the use of pumps that require electricity. You will need to determine which type of system serves your home.

A gravity collection system feeding into a septic tank and gravity distribution into the soil treatment area will continue to operate properly and you will be able to continue using your system. If you also have a private well for your water supply, you may need to use buckets of water (from a pond, stream or other similar source) to manually flush the toilet.

If your system contains components that require electricity to operate, the wastewater will collect in the septic tank, treatment unit or dosing tank during the electrical outage and will have to be treated and dispersed when electrical service resumes. Components of this type of system may include:

1. Pump chambers to soil treatment areas
2. Sand filters
3. Aerobic treatment units or packed media filters
4. Low pressure distribution systems
5. Subsurface drip distribution systems

What can I do if my OWTS has a pump and we lose power?

Limit water usage to essential needs such as toilet flushing and hand washing. Laundry, bathing, showers, and dishwashing should be minimized or eliminated during the power outage. Don't let the water run while brushing teeth, shaving or rinsing dishes. Don't flush the toilet each time it's used for liquid waste.

The air void in your septic tank and pump chamber will typically hold about 1 - 3 day's volume of waste, depending on their size. Once these tanks are filled, any additional waste will back up into your home.

Stop all water use if electrical outage is extended or the plumbing begins to drain slowly. Slow-draining plumbing may indicate that the reserve capacity in the tanks has been exceeded and the system is full.

What should I do once power is restored?

If you are unsure or uncomfortable working with electrical components or do not completely understand how your system functions, contact your service provider or a licensed electrician. Always be careful when working with electrical components.

If you have an operation manual for your system, refer to the manual for directions on restarting your system.
If your system is “demand dosed” (waste is pumped out to a soil treatment area via engaging a float as the tank becomes full), the pumping system can be manually operated by switches located in your control panel to disperse the stored wastewater to the soil treatment area. Manually operating the dosing system may be necessary to avoid overloading your soil treatment area following restoration of power. Your system can be dosed manually by:

- When the power is restored, turn the pump ‘on’ for 2 - 3 minutes, and ‘off’ for 4 - 6 hours. You are now “dosing” the right amount of effluent into the soil treatment area over a given period of time. If there was little water use during the power outage, the pump may automatically turn off during the first manual dosing.
- Conserve water and continue the 2 - 3 minute pumping every 4 - 6 hours until the pump turns itself off.
- Note that some systems may not have an over-ride to automatically turn the pump off. Never pump the water level in the tank down below the top of the pump.

If your system is “time dosed”, allow the system to continue to operate normally until the water level is reduced in the system. A pump system with a timer controls the number of times the pump starts and stops. It manages how much effluent (liquid sewage from the septic tank) goes into the soil treatment area in a 24-hour time period. Timers make sure that the soil treatment area only gets as much effluent as it was designed to handle. The timer system will eventually take care of itself and bring the effluent in the tank to a normal level once the power is restored. If the power has been off for several days, the timer will be behind. In order to let your timer catch up, continue to conserve water for an additional day or more.

System components that require electricity are usually equipped with a high water alarm. If the water level in your tank is high, this alarm should sound when the power is restored. You can silence the alarm if it has a silence switch option; typically located on the control panel. If the alarm remains activated more than 24 hours, contact your service provider.

**CAUTION:** Do not enter the pump chamber. Gases inside pump chambers are poisonous and the lack of oxygen can be fatal. Always turn off the power supply at the circuit breaker, and unplug all power cords before handling the pump or floats to prevent electric shock. The service or repair of pumps and other electrical equipment must be conducted by an experienced person.

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*Source: Excerpts obtained from the Ohio Department of Health, Bureau of Environmental Health and Radiological Protection publication, “When your Sewage Treatment System experiences a Power Outage”; August, 2017*

[www.colorado.gov/cdphe/clean-water-site-wastewater-treatment-systems](http://www.colorado.gov/cdphe/clean-water-site-wastewater-treatment-systems)