

# GUIDANCE FOR SEPTIC SYSTEMS BEFORE, DURING, AND AFTER A POWER OUTAGE





# Guidance for Septic Systems Before, During, and After a Power Outage

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## Background

*This resource provides guidance for septic system users before, during, and after a power outage. Understanding your septic system type, location, and components before a power outage occurs will make this guide more useful. Please visit [neha.org](http://neha.org) to access educational resources for septic system users.*

## Safety Reminders

- Get help from a septic system service professional for steps with this symbol:  You can find septic system service professionals through local health departments, departments of environmental quality, departments of natural resources, or university extension services.
  - Make sure you turn off power to the septic system and all cords are unplugged before inspecting the area. There is danger of electrical shock and damage to your septic system.
  - Wear rubber gloves and eye protection when inspecting septic system components. Wash your hands thoroughly, throw away gloves, and wash any contaminated clothes when finished.
  - Steps with a  only apply to pressure distribution systems.
  - Get help from a septic system service professional if any of the steps feel unsafe in your situation or if your system loses power.
  - If sewage has backed up, stay out of the affected area until it has been disinfected or the contaminated materials have been removed.
  - Never enter the pump chamber or septic tank. Gases inside the pump chamber and septic tank are poisonous and the lack of oxygen can be fatal.
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## Before the Power Outage

Always keep your septic system well maintained; a well-maintained septic system is better able to withstand the stresses of a power outage. If you live in an area where power outages are common, take these steps to protect your septic system.

- **Know and document all components** of your septic system. Take photos of the connections and system components. These photos will be helpful if components are destroyed and you need to replace them or file insurance claims. Make sure your photos and/or documents include:

- Septic tank location
- Septic system records or drawings
- Electrical components

- Gravity systems do not require, but may include, components that require electricity, including:

- Blowers
- Chemical feeders
- Lights
- Aerobic treatment units
- Sand filters
- Recirculating media filters
- Elevated sand mounds
- Generator (if applicable)

⚙️ Pressure distribution systems may include the above components, in addition to:

- Pumps
  - Flow equalization tanks
  - Low pressure distribution
  - Subsurface drip distribution
  - Spray distribution
  - Peat systems, if having to pump effluent to drain field
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## During the Power Outage

- **Gravity based systems should operate normally** during a power outage. If there are signs of damage such as erosion or the plumbing is draining slowly call a septic system service professional.

⚙️ **If you have a pressure distribution or other system/components that require electricity to operate, reduce water use** and see the guidance below on temporary toilets. Wastewater will collect in the system during the power outage and must be treated and dispersed when power returns.

- **Reduce water use** during the power outage.

- **Take short showers**
- **Limit laundry and dishwashing**
- **Turn off the water** while brushing teeth, shaving, or rinsing dishes
- **Do not flush the toilet** each time it's used for liquid waste

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## After the Power Outage

A power outage may damage your septic system and make it unsafe. **Always consult with a septic system service professional and follow the steps below.**

- **Turn off power to the system** at the circuit breaker and unplug all power cords.

🔧 **Inspect your system and contact a septic system service professional** if any of the issues below are found.

- Damaged piping, risers or manway covers
- Exposed electrical wiring to control boxes
- Unlevel ground
- Damage to the disposal field
- Odor or visible evidence of sewage
- Exposed septic system components
- Settling or breakage away from pipe
- ⚙️ Exposed electrical wiring to pumps

🔧 ⚙️ **If your system has a pump, it may have a high-water alarm that may sound when the power is restored** based on your water usage during the power outage. You can silence the alarm if it has a silence switch option. If the alarm remains activated for more than 24 hours, contact a septic system service professional.

- **Continue to reduce water use** for several days.

## On-Demand Systems

On-demand pumps begin the pump cycle whenever the wastewater volume reaches a pre-marked level in the septic tank, and the effluent is pumped into the drain field. During the power outage, effluent is not pumped to the drain field and may continue to collect. When power is restored, too much effluent can be pumped, which may cause the drain field to flood or plumbing to backup.

**- If the pump is controlled by float controls and is off for more than six hours, follow these steps** to pump the accumulated effluent to the drain field at a reasonable rate.

- **Turn off power to the pump at the circuit breaker while the power is out.**
- **When the power is back on, turn the pump on for 5 minutes and off for 6 hours.** This supplies a limited amount of effluent into the drain field. If there was little water use during the power outage, the pump may automatically turn off during the first manual dosing.
- **Reduce water use and continue the 5-minute pumping every 6 hours until the pump turns off automatically** during a dosing interval.

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## Timer Systems

Timer controlled pump systems control the number of times the pump starts and stops, managing how much effluent goes into the drain field in a 24-hour period. The timer system will eventually correct itself once power is restored but **be sure to reduce water use** for several days. If the system does not correct itself, contact a septic system service professional.

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### OTHER SYSTEMS

If you have an advanced treatment unit or any other type of onsite wastewater treatment system not addressed above, contact a septic system service professional or your local health department.

## Temporary Toilets

If your septic system appears to be damaged and cannot be used, one option is a temporary toilet. **Only use a temporary toilet if there are no functioning toilets available and the power outage is expected to last several days.**

- Temporary toilets options include:
  - **Check to see if you can stay somewhere else** that has working water and sewer.
  - **Contract a PortaPotty** for temporary use.
  - **Modify your own toilet:**
    - **Shut off the water valve** to the toilet. If you can't close it, try another option.
    - **Flush out any water still in the bowl** (the toilet shouldn't refill when the valve is closed).
    - **Line your toilet bowl** (under the seat) with a plastic kitchen garbage bag inside of another kitchen bag.
    - **Into the inner bag, put some kitty litter, dry peat moss, lime, or something similar** that will absorb liquid and may reduce odors.
    - **Avoid mixing urine and fecal material if possible.** This will limit odors and urine is generally much safer for disposal if not mixed with fecal material.
    - **Wash or sanitize your hands** after toilet use and waste handling. Keep a bucket of clean water, a dipper, and soap for handwashing nearby. Camp handwash stations may be a viable solution.
    - **Store full bags in a secure area** (consider a watertight bucket or trashcan) away from pets, wildlife, and curious kids.
    - **Dispose of the bags properly** when possible. In most jurisdictions throwing them in the garbage is allowed but it is best to check with local authorities.
- **Use a five-gallon bucket as a toilet.** You can add a toilet seat and set it up like a modified toilet (above).
- **If you must dig a hole for your waste, make sure it's at least 200 feet** (70 adult steps) from water bodies and water wells to minimize pollution. It must be at least six inches deep, so critters or kids won't dig it up. Fill it in after a single use, tamp the dirt down. This is a short-term option only and regulations may vary by jurisdiction.

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### SOURCES

<https://texashelp.tamu.edu/browse/disaster-recovery-information/restoring-your-home-belongings/onsite-wastewater-treatment-systems/>  
<http://www.kingcounty.gov/depts/health/environmental-health/piping/onsite-sewage-systems/maintenance/power-outage.aspx>  
<http://www.myaerobicseptic.com/poweroutage.html>  
<https://www.doh.wa.gov/portals/1/Documents/Pubs/337-147.pdf>  
<https://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/SepticSystem/TypesofSystems>

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