



Septic System Management Plan for Holding Tank Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your holding tank system is designed to store your used water before it is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure compliance with applicable rules and regulations. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer. However, it is YOUR responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner:

Property Address:

Property ID:

System Designer:

License #:

System Installer:

License #:

Service Provider/Maintainer:

Phone:

Permitting Authority:

Phone:

Permit #:

Date Inspected:

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

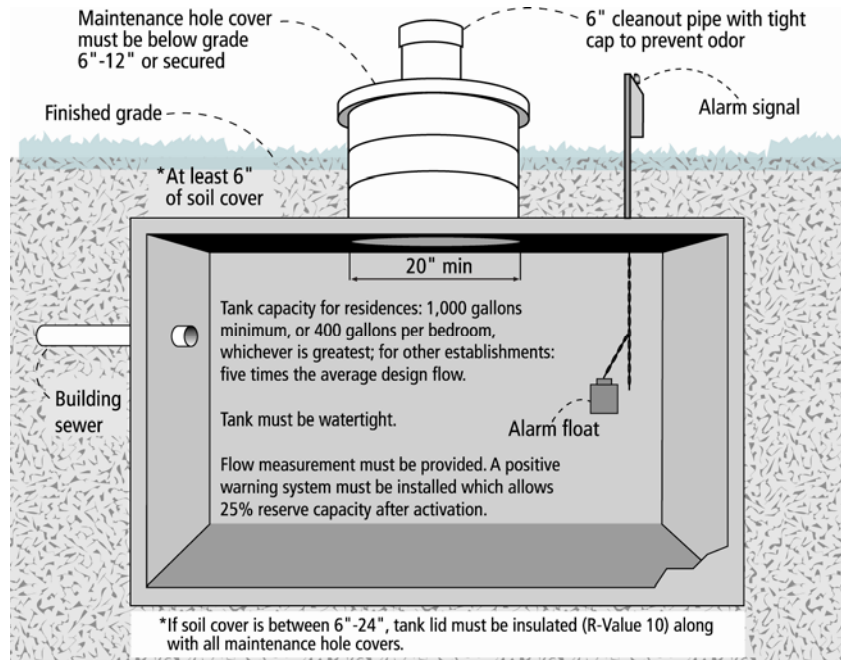
- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, call 1-800-876-8636 or go to <http://shop.extension.umn.edu/>

<http://septic.umn.edu>



Your Holding Tank



Dwelling Type	Well Construction
Number of bedrooms: _____ System capacity/ design flow (gpd): _____ Anticipated average daily flow (gpd): _____ Comments _____ In-home business? ___ What type? _____ Number of occupants _____	Well depth (ft): _____ <input type="checkbox"/> Cased well Casing depth: _____ <input type="checkbox"/> Other (specify): _____ Distance from septic (ft): _____ Is the well on the design drawing? Y N

Holding Tank	
<input type="checkbox"/> One tank: Tank volume: _____ gallons <input type="checkbox"/> Two tanks: Tank volume: _____ gallons <input type="checkbox"/> Tank is constructed of _____	<input type="checkbox"/> Flow measurement device: _____ <input type="checkbox"/> Location: _____ <input type="checkbox"/> Alarm ____ visual ____ audible <input type="checkbox"/> Reserve %: _____
<input type="checkbox"/> Service contract held by: _____ <input type="checkbox"/> Service contract is attached to this management plan	



Homeowner Management Tasks

These *operation and maintenance* activities are your responsibility. Use the chart on page 6 to track your activities.

Identify the service intervals recommended by your system designer and your local government. The tank assessment for your system will be the **shortest interval of these three intervals**. Your pumper/maintainer will determine if your tank needs to be pumped.

Tank capacity ÷ (# of occupants X 50 Gallons/day) = # of days between cleaning

OR

Within 24 hours of alarm signal

System Designer: check every _____ days

Local Government: check every _____ days

My tank needs to be emptied
every _____ days

Seasonally

- Monitor alarm daily* – make sure the alarm has not signaled. Alarms signal when your holding tank is nearly full; contact your maintainer.
- Measure* and note your average daily water usage on page 5. Conserving water saves you money!
- Leaks*. Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.

Annually

- Establish a contract for tank cleaning services with a state licensed maintenance business.
- Caps*. Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- Water conditioning devices*. See Page 5 for a list of devices. When possible, discharge clear water sources to another location. Program the recharge frequency based on *water demand (gallons)* rather than *time (days)*. Recharging too frequently will result in increased pumping costs.
- Review your water usage rate*. Review the Water Use Appliance chart on Page 5. Discuss any major changes with your pumper/maintainer.

During each visit by a pumper/maintainer

- Ask if your pumper/maintainer is licensed in Minnesota.
- Make sure that your pumper/maintainer has clear access to the holding tank and completely empties the tank
- Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.



Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. Professionals should refer to the O/M Manual for detailed checklists for tanks, pumps, alarms and other components. Call 800-322-8642 for more details.

- Written record provided to homeowner after each visit.

Plumbing/Source of Wastewater

- Review the Water Use Appliance Chart on Page 5 with homeowner. Discuss any changes in water use and the impact those changes may have on the frequency of maintenance.
- Review and document water usage rates with homeowner.

Holding Tanks

- Maintenance hole lid.* A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- Liquid level.* Check to make sure the tank is not leaking.
- Inspection pipes.* Replace damaged caps.
- Alarm.* Verify that the alarm works and that there is at least 25% reserve capacity.
- End of year seasonal property pumping.* Remind homeowner of most frequent causes of tank and building sewer freeze-ups. Ensure that there are no “micro-sources” of water such as a high efficiency furnace or other dripping devices. Determine a logical winter water use plan that will not result in need for emergency visit(s).

All other components – inspect as listed here:



Water-Use Appliances and Equipment in the Home

Appliance	Impacts on Holding Tank	Management Tips
Garbage disposal	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Use of a garbage disposal is not recommended. • Minimize garbage disposal use. Compost instead.
Washing machine	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Choose a front-loader or water-saving top-loader, these units use less water than older models. • Wash only full loads. • Do laundry off site.
Dishwasher	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Wash only full loads.
Large bathtub (whirlpool)	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Take short showers to conserve water.
Clear Water Uses	Impacts on Holding Tank	Management Tips
High-efficiency furnace	<ul style="list-style-type: none"> • Drip may result in frozen pipes during cold weather. 	<ul style="list-style-type: none"> • Re-route water into a sump pump or directly out of the house. Do not route furnace recharge to your holding tank.
Water softener Iron filter Reverse osmosis	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • These sources produce water that is not sewage and should not go into your holding tank. • Reroute water from these sources to another outlet, such as a dry well, drain tile or old drainfield.
Surface drainage Footing drains	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • When replacing, consider using a demand-based recharge vs. a time-based recharge. • Check valves to ensure proper operation; have unit serviced per manufacturer directions

Maintenance Log

Track maintenance activities here for easy reference. See list of management tasks on pages 3 and 4.

Activity	Date accomplished/measured water usage									
Check daily for a period of time and weekly once average use is determined:										
Water usage rate (gallons per day)										
Leaks: check for plumbing leaks										
Annually:										
Establish and maintain contract for holding tank pumping services										
Water use appliances – review use										

