



# Subsurface Sewage Treatment System Administration

Presented by Rum River Consultants

Baldwin City Council Meeting

April 15, 2026



## Purpose & Intent

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To ensure the proper location, design, installation, use, and maintenance of subsurface sewage treatment systems (SSTS).

Which protects the public health, safety, and general welfare by adequately discharging treated sewage to groundwater

# What is a Tank Assessment?

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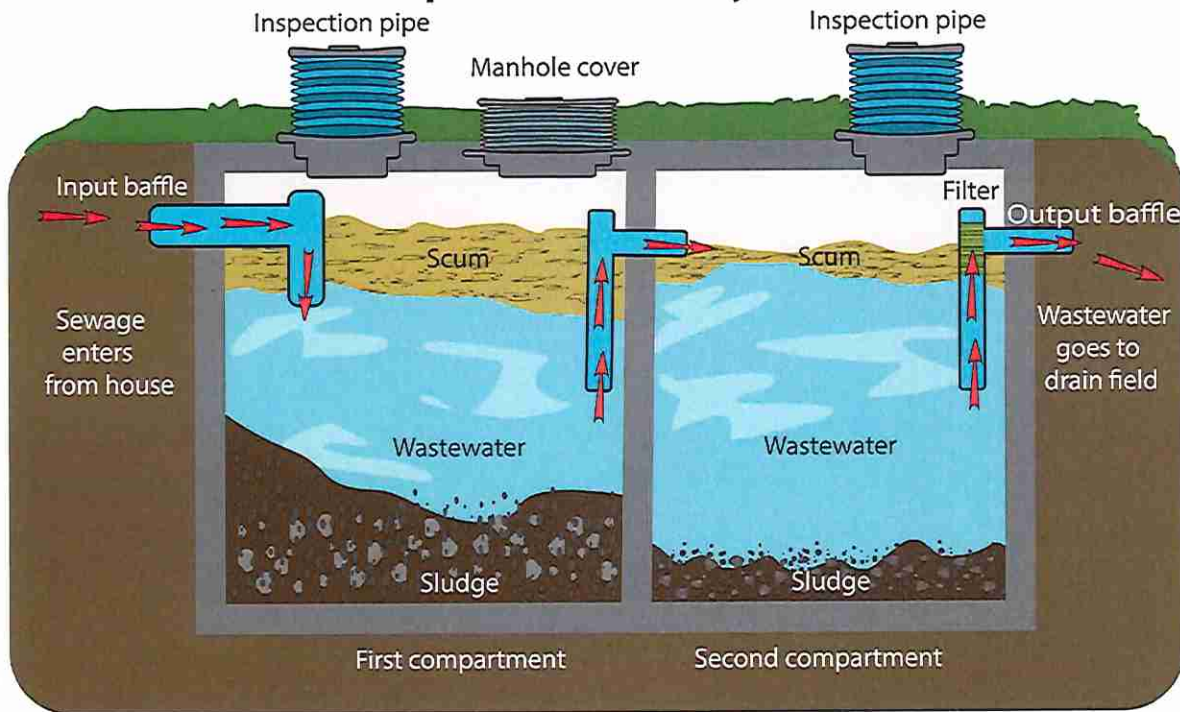
A tank assessment is an evaluation of your septic tank to answer two basic questions:

1. Is the septic tank watertight?
  - a. Water must not be leaking out of the tank into the surrounding ground.
  - b. Excess water should not be leaking into the tank as this can overload the system.
  
2. Are the levels or amounts of solids inside the tank within operating parameters?

These solid layers are:

  - a. Scum – material floating at the top of the tank; and
  - b. Sludge – material sitting at the bottom of the tank

## Septic Tank System



## What is a Tank Assessment?

Solids are held inside the tank by baffles (see diagram). The *Maintainer* should verify the presence and condition of the baffles while completing on site work.

# Tips for Tank Assessments

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If the tank's contents are removed (pumped out) as a matter of practice or abundance of caution, measurement (assessment) of the tank's solids is not required.

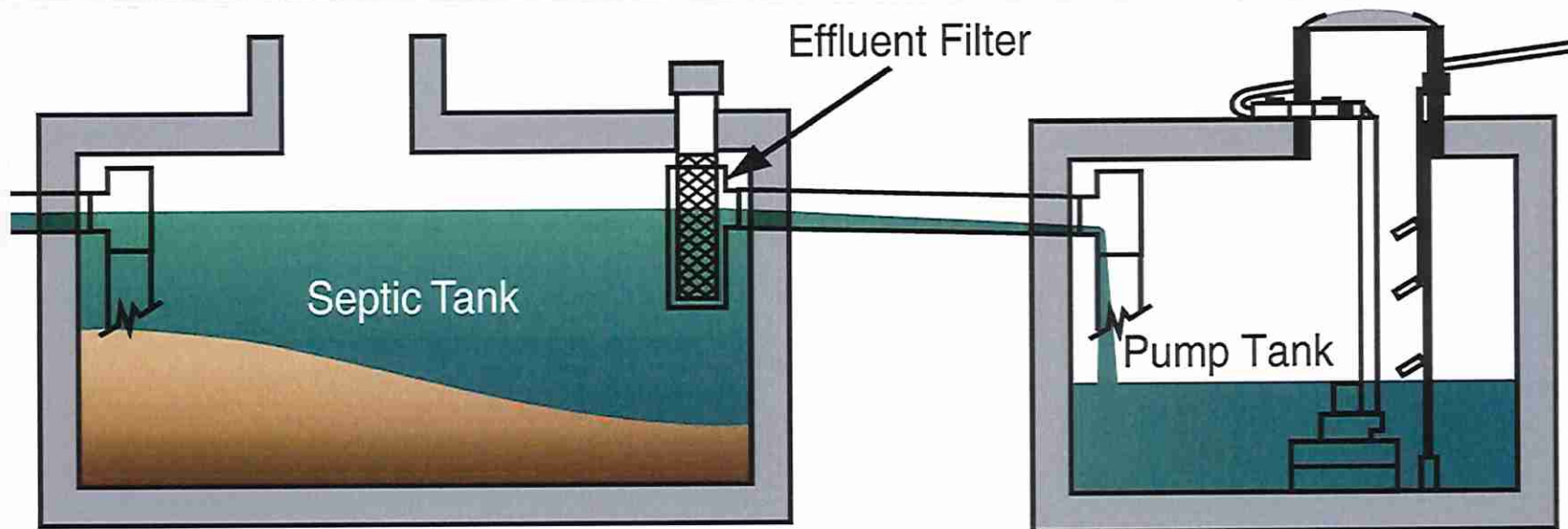
If the occupants have been consistently taking care of their septic system by monitoring what is disposed of and controlling water usage, they may choose to communicate with the *Maintainer* upon scheduling their triennial appointment that an assessment is requested rather than a full service of removal of the tank's contents.

This may be less expensive and can be performed timelier as it requires different/less costly equipment.

# Pump Tanks

If your system has a pump tank (where the effluent is pumped to the drainfield), it must also be assessed or pumped/cleaned every three years.

- The same criteria for water tightness also applies to pump tanks.
- Solid material **should not** be in the pump tank
  - If significant amounts of scum or sludge are present, the source/cause should be determined while the *Maintainer* is on site.
  - Solid material in this tank can cause significant damage to the pump and is a serious risk of plugging in the drain field.



# Assessment vs. Pumping

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If the *Maintainer* measures the tank's contents in an assessment and find the measurements indicate the tank is **beyond allowable levels**, pumping/removing the tank contents will then be **required**.

Pumping cannot be performed through the inspection ports. Fully compliant pumping activities can only be performed through the maintenance/access holes.

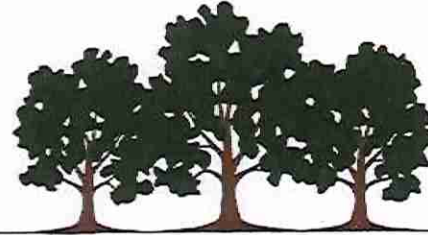
Pumping will entail either backflushing or agitation by mechanical means to ensure solids become suspended in the liquid for thorough removal/cleaning.

# State vs. Local

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MINNESOTA POLLUTION  
CONTROL AGENCY



CITY OF BALDWIN

# State Responsibilities

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MINNESOTA POLLUTION  
CONTROL AGENCY

- State Laws
- Certifications
- Registrations

Minnesota Rules  
Chapters 7080 through 7083

Subsurface Sewage Treatment  
Systems Program



Extracted from Minnesota Rules 2011  
including revisions adopted through December 2020

Text prepared by the University of Minnesota  
and is not the official version compiled by the  
Office of the Revisor of Statutes

The official rule language for  
Minn. Rules chs. 7080, 7081, 7082 and 7083  
can be found at the Revisor's website at  
[revisor.mn.gov](http://revisor.mn.gov)

## State Requirements

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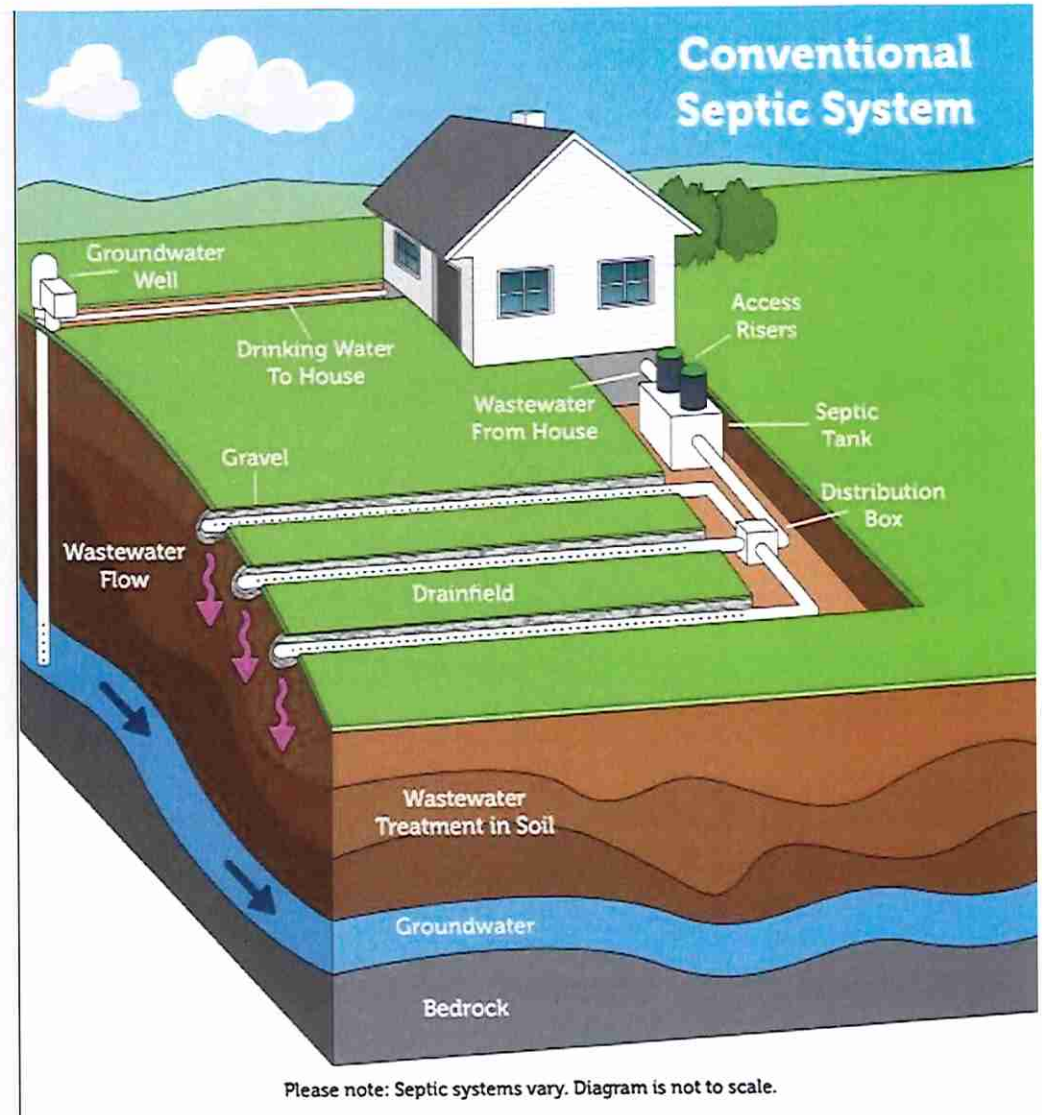
- SSTS are governed by Minnesota Rules 7080 through 7083.
- Minnesota Rule 7082: Local ISTS Programs has 9 Chapters
  - 7082.0010: *Purpose & Intent*
  - 7082.0020: *Definitions*
  - 7082.0040: *Regulatory Administration Responsibility*
  - 7082.0050: *General Requirements for Local Ordinances*
  - 7082.0100: *Requirements for Local Ordinances*
  - 7082.0300: *Local Program Administration*
  - 7082.0500: *Permit Program for SSTS*
  - 7082.0600: *System Management*
  - 7082.0700: *Inspection Program for SSTS*

# State Requirements

Tanks must be assessed or emptied/cleaned at least every 3 years by a licensed septic *Maintainer*.

Septic tanks are examined to ensure they are watertight and operating as designed to protect the drainfield from clogging and becoming overloaded.

Adequate maintenance helps avoid costly repairs and potentially hazardous situations of surfacing raw sewage and/or pollution to the environment.



- Ordinance
- Permits
- Maintenance
- Compliance
- Reporting

## Local Responsibility

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# Ordinance

Chapter 4  
SUBSURFACE SEWAGE TREATMENT SYSTEMS

SECTION:  
XX-4-1: Purpose  
XX-4-2: Authority  
XX-4-3: Definitions  
XX-4-4: General Provisions  
XX-4-5: General Requirements  
XX-4-6: SSTS Standards  
XX-4-7: SSTS Permitting  
XX-4-8: Management Plans  
XX-4-9: Compliance Management  
XX-4-10: Enforcement

*Baldwin City Code*  
*Chapter 4*  
*Subsurface Sewage*  
*Treatment Systems*

- Must be at least as restrictive as state rules – can be more restrictive.
- Must require that all SSTS design, installation, and repair be performed by an appropriately licensed business with at least one certified employee.
- Must require the remediation of noncompliant systems.
- Must enforce all local ordinances.
- Must prohibit surface discharge of sewage.
- Must describe when a holding tank is allowed.
- Must require management plans and operating permits, as needed.
- All changes to local ordinances must be reviewed by the MPCA.

# Permit Program



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- Required for all new and replacement SSTS constructions.
  - All permits and construction documents must be reviewed and approved by an appropriately certified individual.
  - Must maintain permit applications and issued permits.
  - Verify that designs have an accurate measurement of the depth to limiting conditions.
  - Inspections performed by a certified SSTS inspector and performed during critical stages of installation to ensure the system is installed in accordance with all applicable regulations. Up to 7 inspections per system.
  - Management plan is reviewed.
  - SSTS permit applications must:
    - Be submitted by a certified individual
    - Contain a site evaluation, design report, and management plan.
    - Have soil observations that are verified by a certified inspector

# Compliance Program

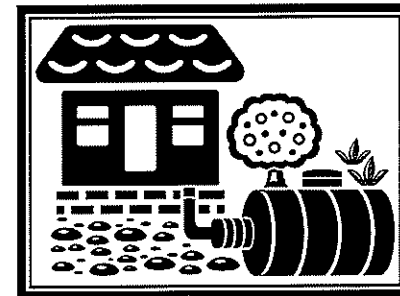
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## □ Compliance Inspections

- Performed by private inspection companies that have certified SSTS Inspectors.
- Performed at property point of sale.
- Required when adding a bedroom.
- Verify the system's tanks are watertight.
- Verify the system has sufficient vertical separation above the seasonal high-water table.

## □ Local government must maintain records of:

- Certificates of Compliance
- Notices of Noncompliance



# Annual Reporting

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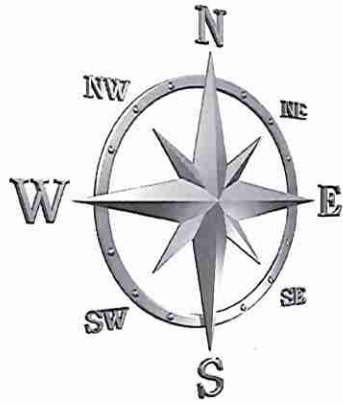
State law requires that every Local Unit of Government that has an SSTS program, submit an annual report every January. The annual report must include:

- The number of compliant and noncompliant systems in the City of Baldwin.
- The number of systems installed of each type.
- What tanks are being installed (including the number and manufacturer).
- The number of systems serving non-residential buildings and seasonal dwellings.

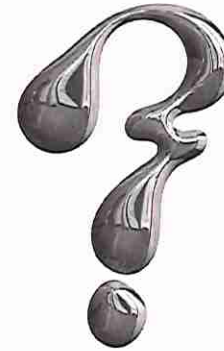
# Maintenance Program



- Maintenance, monitoring, and operational requirements are included in the management plan.
- Operating permits for advanced systems or special situations.
- Residential system management
- Maintenance Permits for Tank Assessment
  - State code requires SSTs are maintained (pumped) every 2 – 3 years.
  - Helps to ensure pumping is happening at the required frequency.
  - Reminders are sent to homeowners when their system is coming due.
  - Maintenance is tracked, including the frequency and any results or findings from the pumping.
  - Program funded by a small permit fee paid by SSTs Maintainers



**Direction**



**Questions**



**Thank You!**