## **Midwest Sewer Services**

P.O. Box 10853 White Bear Lake, MN 55110 651-492-7550/Brian@Midwestsoiltesting.com

Brian Humpal MPCA Licensed Advanced Inspector

#### SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

**Date:** 5/3/2023 & 5/4/2023 **Time:** 1:00 PM **Owner:** Estate of Mary Andersen

**Inspection Address:** 12855 30<sup>th</sup> St S, Afton, MN 55001

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1989) consists of a pre-cast septic tank and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years. Ron's Sewer Service pumped the septic tank on May 4, 2023.

Although not a compliance criteria, it should be noted that the septic tank manhole cover is buried. I recommend extending this cover to the ground surface to facilitate easier access and proper maintenance. In addition, the septic tank is shallower than two feet and should either be insulated or have additional cover added to the top of septic tank.

Predicated on my inspection of the system and my review of the original design/permit records, it is my opinion that this system <u>presently meets</u> MPCA minimum compliance inspection requirements.

Midwest Sewer Services have been hired to perform a compliance inspection of this SSTS for compliance with local ordinances pursuant to Minn. Stat. § 115.55 (2013). This compliance inspection covers only the criteria required by Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011). A compliance inspection is an indication of the current compliance status of the system and does not guarantee the performance or longevity of this system beyond the date of inspection, as it is impossible to determine the future performance of any system. Midwest Sewer Services disclaim any use of this compliance inspection beyond determining SSTS compliance pursuant to Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011).

Please contact me should you have any questions.

Christopher Uebe

Brian Humpal

Brian Humpal



520 Lafayette Road North St. Paul, MN 55155-4194

# Compliance inspection report form

#### **Existing Subsurface Sewage Treatment System (SSTS)**

Doc Type: Compliance and Enforcement

Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance. Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at <a href="https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf">https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf</a>.

Property information	Local tracking	number:				
Parcel ID# or Sec/Twp/Range:	Reason for Inspection	Property Transfer				
Local regulatory authority info: Washington County	<u> </u>					
Property address: 12855 30 <sup>th</sup> St S, Afton, MN 55001						
Owner/representative: Estate of Mary Andersen/Jennifer Ande	rsen (Buyer)	Owner's phone: 715-230-0737				
Brief system description: A pre-cast septic tank and a rock trend						
System status						
System status on date (mm/dd/yyyy): _5/4/2023						
☐ Compliant – Certificate of compliance*	☐ Noncompliant – Notice	ce of noncompliance				
(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and abatement under section 145A.04, subdivision 8 is discovered or	Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.					
a shorter time frame exists in Local Ordinance.)	•	An imminent threat to public health and safety (ITPHS) must be				
*Note: Compliance indicates conformance with Minn.		e discontinued within ten months of receipt ter period if required by local ordinance or				
R. 7080.1500 as of system status date above and does not guarantee future performance.	under section 145A.04 subdivision 8.					
Reason(s) for noncompliance (check all applicab	ıle)					
☐ Impact on public health (Compliance component #1) – Immii	•	nd safety				
☐ Tank integrity (Compliance component #2) – Failing to prote	· · · · · · · · · · · · · · · · · · ·	na saisty				
☐ Other Compliance Conditions (Compliance component #3) –	=	ealth and safety				
☐ Other Compliance Conditions (Compliance component #3) –	·	-				
☐ System not abandoned according to Minn. R. 7080.2500 (Co						
☐ Soil separation (Compliance component #5) – Failing to prot		. a.m.g to prototi grounditer				
☐ Operating permit/monitoring plan requirements (Compliance	=	liant - local ordinance applies				
Comments or recommendations	, , , , , , , , , , , , , , , , , , ,	name rocar or annumou approc				
Although not a compliance criteria, it should be noted that the se	entic tank manhole cover is l	huried I recommend extending this				
cover to the ground surface to facilitate easier access and prope two feet and should either be insulated or have additional cover	er maintenance. In addition,	the septic tank is shallower than				
Certification						
I hereby certify that all the necessary information has been gathered future system performance has been nor can be made due to unknow inadequate maintenance, or future water usage.						
By typing my name below, I certify the above statements to be true used for the purpose of processing this form.	and correct, to the best of my	knowledge, and that this information can be				
Business name: Midwest Sewer Services		Certification number: 5342/9852				
Inspector signature: Brian Humpal Home		License number: L2896				
(This document has been electronically sign	ned)	Phone: 651-492-7550				
Necessary or locally required supporting do	cumentation (must b	<del></del>				
, , , , , , , ,	•					
Soil observation logs	quired forms 🛮 Tank Integr	ity Assessment				

☑ Other information (list): Report Summary, Property Information, Disclaimer

compliance criteria:		Attached supporting	documentation:
System discharges sewage to the	☐ Yes* ☒ No	Other:	
ground surface		☐ Not applicable	
System discharges sewage to drain ille or surface waters.	☐ Yes* ☐ No		
System causes sewage backup into dwelling or establishment.	☐ Yes* ☒ No		
Any "yes" answer above indicates imminent threat to public health an	-		
Describe verification methods and	results:		
None of the above found.			

### **2. Tank integrity** – Compliance component #2 of 5

Compliance criteria:		Attached supporting documentation:				
System consists of a seepage pit,	☐ Yes* ☒ No	☐ Empty tank(s) viewed by inspector				
cesspool, drywell, leaching pit, or other pit?		Name of maintenance b	ousiness:	Ron's Sewer Service		
Sewage tank(s) leak below their	☐ Yes* ⊠ No	License number of maintenance business: L4007				
designed operating depth?		Date of maintenance:		5/4/2024		
	Existing tank integrity assessment (Attach			1)		
If yes, which sewage tank(s) leaks:		Date of maintenance (mm/dd/yyyy):	(must be within	three years)		
Any "yes" answer above indicates the system is failing to protect groundwater.		(See form instructions to ensure assessment complies with Minn. R. 7082.0700 subp. 4 B (1))				
		☐ Tank is Noncompliant (pumping not necessary – explain below)				
		Other:				

#### Describe verification methods and results:

Although not a compliance criteria, it should be noted that the septic tank manhole cover is buried. I recommend extending this cover to the ground surface to facilitate easier access and proper maintenance. In addition, the septic tank is shallower than two feet and should either be insulated or have additional cover added to the top of septic tank.

Property Address: 12855 30 <sup>th</sup> St S, Afton, MN 55001	
Business Name: Midwest Sewer Services	Date: <u>5/4/2023</u>
3. Other compliance conditions – Compliand	te component #3 of 5
3a. Maintenance hole covers appear to be structurally unso	ound (damaged, cracked, etc.), or unsecured?
☐ Yes* ☐ No ☐ Unknown	
3b. Other issues (electrical hazards, etc.) to immediately and	adversely impact public health or safety? ☐ Yes* ☒ No ☐ Unknown
*Yes to 3a or 3b - System is an imminent threat to p	ublic health and safety.
3c. System is non-protective of ground water for other con-	ditions as determined by inspector? ☐ Yes* ☒ No
3d. System not abandoned in accordance with Minn. R. 70	
*Yes to 3c or 3d - System is failing to protect groun	dwater.
Describe verification methods and results:	
Attached supporting documentation: ⊠ Not applica	ble 🗌
<ol> <li>Operating permit and nitrogen BMP* – Control</li> </ol>	ompliance component #4 of 5 🛛 Not applicable
Is the system operated under an Operating Permit?	☐ Yes ☐ No If "yes", A below is required
Is the system required to employ a Nitrogen BMP specified i	n the system design? ☐ Yes ☐ No If "yes", B below is required
BMP = Best Management Practice(s) specified in the s	system design
If the answer to both questions is "no", this section	n does not need to be completed.
Compliance criteria:	
a. Have the operating permit requirements been met?	☐ Yes ☐ No
b. Is the required nitrogen BMP in place and properly fur	ctioning?
Any "no" answer indicates noncompliand	ce.
Describe verification methods and results:	
Attached supporting documentation:   Operation	ng permit (Attach)

siness Name: Midwest Sewer Services			Date: <u>5</u> /-	4/2023	
Soil separation – Compliance com	npone	nt #5 of	f 5		
Date of installation 1989 (mm/dd/yyyy)	Unkr	nown			
Shoreland/Wellhead protection/Food beverage lodging?		⊠ No	Attached supporting documentation:  ☐ Soil observation logs completed for the report		
Compliance criteria (select one):			☐ Two previous verifications of required vertical separation		
	⊠ Yes □ N	☐ No*	☐ Not applicable (No soil treatment area	a)	
not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:			Reviewed design and permit records.		
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.					
5b.Non-performance systems built		☐ No*	Indicate depths or elevations		
April 1, 1996, or later or for non- performance systems located in Shoreland or Wellhead Protection Areas or serving a			A. Bottom of distribution media	See Attached Boring Log(s)	
food, beverage, or lodging establishment:			B. Periodically saturated soil/bedrock		
Drainfield has a three-foot vertical separation distance from periodically			C. System separation		
saturated soil or bedrock.*			D. Required compliance separation*		
			*May be reduced up to 15 percent if allo Ordinance.	owed by Local	
5c. "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080. 2350 or 7080.2400 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day)	☐ Yes	□ No*			
Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.					

**Upgrade requirements:** (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.

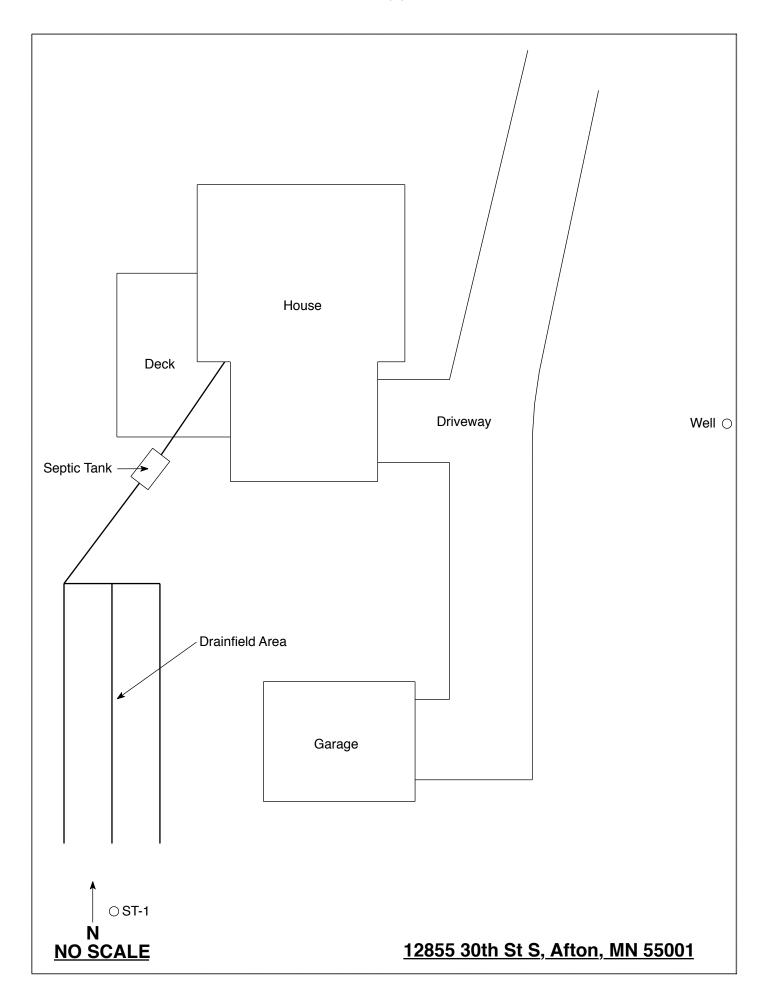
Describe verification methods and results:

# <u>Midwest Sewer Testing</u> <u>Subsurface Sewage Treatment System Owner/Property Information</u>

This information will be used for the purpose of conducting an MPCA Compliance Inspection.					
Date of Inspection: 5/3/2023 & 5/4/2023	Time: 1:00 PM				
Property Address: 12855 30 <sup>th</sup> St S, Afton, MN	Zip: 55001				
Property Owner: Estate of Mary Andersen	Phone:				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Soil Treatment System         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Alternative system Experimental system Cesspool system Other system				
Are the tank maintenance covers accessible?   Yes   No performed through the maintenance holes. Maintenance hole the ground surface to facilitate access and prepar maintenance.	covers should be made accessible to				
the ground surface to facilitate access and proper maintenance	e of the system.				
Year house built: 1902 Year septic installed: 1989	Tank size (gals.): 1500				
	of residents in home?				
Number of bedrooms? 4 Are all floors drained l	, <u>, , , , , , , , , , , , , , , , , , </u>				
Garbage disposal? Whirlpool b	ath?				
More than one system (laundry, etc.)?					
Does this property have any footing drain tiles connected to the	ne septic system?				
	Are any buildings on this property such as garages or out-buildings connected to this system?				
Are there any additional systems on this property serving other	er buildings?				
Location of septic system on lot? Southwest Side					
	s the well a deep well? Y				
Have you ever experienced any problems with the system such as: tree roots, sewage back-ups, surfacing of sewage onto the ground, septic tank overflowing, etc.; or have any repairs been made to the system?  If yes, explain:					
When was the system last pumped? 5/4/2023 Name of pumper: Ron's Sewer Service					
How often pumped in previous years?					
Have you received notices from any government agency concerning this system?					
Is your property located in a shoreland management area? N					
Do you have any additional information that should be given to	to the new owner?				
I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection completion. I also agree that unless otherwise noted in this report, that I/we are ultimately responsible for payment of all fees for all work performed relative to this inspection by Inspect Minnesota and Midwest Soil Testing					

Date:

Owner/Occupant:



## **Soil Observations Log**

	Locati	on of Drojecti	120EE 20th Ct C A	fton M	N EEOO	1	
Location of Project: 12855 30th St S, A Observations Made By: Midwest Sewer Ser			UUCC N	Date:	5/3/2023		
	Classification System: USDA		VICES		Date:	5/3/2023	
		•			Cail O	haam (ation	
		Observation:	ST-1			bservation:	
Elevat	Surface Elevation of Observation  Same ground surface as last drainfield trench			face tion of vation			
Depth In Inches	Rock %	Soils E	ncountered	Depth In Inches	Rock %	<u>Soils</u>	Encountered
0-8 8-33 33-38 38-54 54-62 62-75		96 Soils Encountered  10YR 2/2 Silt Loam 10YR 3/4 Silt Loam 10YR 3/4 Sandy Loam 10YR 3/4 Medium Sand 10YR 4/4 Medium Sand With Fine Sand Layers 10YR 5/4 Fine Sand With Few Lamellae Banding					
75"	Depth To End Of Soil Observation Or Redox			Depth T	o End Of Soil	Observation Or Redox	
	Elevation Of Observation Relative To System					tion Relative To System	
	-45" Depth To Bottom Of Distribution Media						Distribution Media
≥30"	Of Sepa	iration			Of Sepa	iration	
Fnd	Of Soil (	Observation At:	75"	Fnd Of	Soil Oh	servation At:	
			None			onditions At:	
	Limiting Soil Conditions At: None Standing Water Present At: None					r Present At:	
Startaing Water Present Act							

Bottom Of Distribution Medium At: 45 Inches			
Signature:	Chan Ula		

### **DISCLAIMER**

# Brian L. Humpal, Inc. dba. Midwest Sewer Services, Inspect Minnesota, Midwest Soil Testing Relative to Subsurface Sewage Treatment System (SSTS) Compliance Inspections

- 1. This inspection/report is being performed for only the seller/owner of the property on which the SSTS is located. In such case that another party is paying for the inspection, the contract is between only said party and Brian L. Humpal, Inc.; there is no contract between Brian L. Humpal, Inc. and any other party unless otherwise noted.
- 3. Brian L. Humpal, Inc. has not been retained to warranty, guarantee, or certify the proper functioning of the SSTS for any period of time beyond the date of inspection or into the future. Because of the numerous factors (usage, maintenance, soil characteristics, previous failures, etc.) which may affect the proper operation of an SSTS, as well as the inability of Brian L. Humpal, Inc. to supervise or monitor the use or maintenance of the SSTS, the report shall not be construed as a warranty by Brian L. Humpal, Inc. that the SSTS will function properly for any particular party for any period of time.
- 4. Brian L. Humpal, Inc. is unable to verify the frequency and/or, quality of prior or future maintenance of the SSTS. Maintenance of the tank(s) must be performed through the tanks maintenance hole. The removal of solids from any location other than the maintenance hole is not a compliant method of maintenance. It is strongly recommended that maintenance covers be made accessible to the ground surface to facilitate proper maintenance.
- 5. Minimum Compliance Inspection requirements relative to this inspection and this report include <u>only</u> verification that the SSTS has tank(s) (septic tanks, lift tanks, dosing tanks, stilling tanks, etc.) which are watertight below the designed operating depth, the required separation between the bottom of the subsurface soil distribution medium and seasonally saturated soils, no back-ups of sewage into the dwelling, no discharge of sewage/effluent to the ground surface or surface waters, and no imminent safety hazards. Brian L. Humpal, Inc. does not inspect plumbing or pumps prior to the first SSTS component as these are plumbing components. The performance of exterior pumps and associated components are not inspected as they are considered to be maintenance items. Additionally, no indications relative to compliance with electrical code requirements have been made. It is recommended that any other applicable plumbing, electrical, housing, etc. inspections be performed by a qualified inspection business. Sewage back-up verification is limited to observing the floor drain area and/or the information supplied by the last occupants of the building prior to inspection. Brian L. Humpal, Inc. cannot guarantee that the information given to them by the last occupants of the building prior to inspection relative to back-ups is accurate.
- 4. Certification of this SSTS does not warranty future use beyond the date of the inspection. Any SSTS, old or new, can become hydraulically overloaded or discharge sewage/effluent to the ground surface as a result of more people moving into the house than were previously occupying the house, improper maintenance, heavy usage, leaking plumbing fixtures, groundwater infiltration, tree roots, freezing conditions, surface drainage problems, poor initial design, poor construction practices, or unsuitable materials used in constructing the system; the system can also simply stop working because of its age. An SSTS that has been properly designed and installed, properly maintained, and used in the manner for which the system was designed can be expected to provide service for twenty to twenty-five years on average. Some parts of the SSTS such as alarms, switches, pumps, filters, etc. will most likely have to be repaired or replaced over the lifetime of the system.
- 5. A Compliance Inspection is not meant to be a test or inspection for longevity of the system; a Compliance Inspection is strictly for the purpose of determining if the SSTS is protective of public health and safety, as well as the groundwater at the date and time the inspection was performed. This inspection is not intended to determine if the SSTS was originally designed or installed to past or present MPCA or other Local Government Unit code requirements. This inspection is not intended to determine if the SSTS was designed and/or installed to support the anticipated flow from the building as the use of the building may have changed since the design and construction of the SSTS due to the addition of bedrooms, occupants, etc. In addition, this inspection is not intended to determine the quality of the original SSTS design, the quality of the construction practices used while installing the SSTS, or the quality of the materials used in constructing the SSTS.
- 6. Brian L. Humpal, Inc. cannot guarantee the performance of SSTS products/components such as: gravelless pipe, chamber trenches, effluent filters, tanks, sewage pre-treatment components, piping, etc. Products such as gravelless pipe are no longer approved for installation in the State of Minnesota and may have a significantly reduced performance and/or life expectancy.
- 7. WINTER WORK: By accepting this report, it is understood that inspections conducted during winter months (approximately November 1<sup>st</sup> through April 1<sup>st</sup>) are more difficult to perform because of possible snow cover and/or ground frost. SSTS components such as tanks, maintenance covers, tank inspection pipes, subsurface distribution medium inspection pipes, and soil treatment areas are more difficult or impossible to locate due to snow cover and/or ground frost. In addition, soil borings are more difficult to perform due to snow cover and/or ground frost. Brian L. Humpal, Inc. will attempt to use the same level of standards when performing work during winter periods as when performing work during non-winter periods. However, the recipient of this report understands that because of the aforementioned considerations, the same level of standards may not be possible.
- 8. By accepting this report, the client understands that Brian L. Humpal, Inc. will not be responsible for any monetary damages exceeding the fee for the services provided.