# **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

Inspection Address: 9130 Knollwood Dr N, Grant, MN 55082

#### **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 1988) consists of two pre-cast septic tanks and a gravelless trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years. This system was not pumped at the time of inspection.

Although not a compliance criteria, it should be noted that gravelless pipe is no longer approved for installation in the State of Minnesota and we have had experience with this product having significantly reduced performance and/or life expectancy.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils and surfacing effluent. This system is an imminent threat to public health and safety per MPCA rule 7080 Subp. 19a. because of the discharge of sewage to the ground surface.

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact the Washington County Department of Public Health & Environment (651-430-6655) to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

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			
Property address: 9130 Knollwood Dr N, Grant, MN 55082			
Owner/representative: Jim & Marilyn Opp		Owner's phone: 651-430-9936	
Brief system description: Two septic tanks and a gravelless tren	nch drainfield.		
System status			
System status on date (mm/dd/yyyy): 4/4/2022			
☐ Compliant – Certificate of compliance*		ce of noncompliance	
(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and		ound water must be upgraded, replaced, or ime required by local ordinance.	
abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in Local Ordinance.)	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 or under section 145A.04 subdivision 8.		
*Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.			
Reason(s) for noncompliance (check all applicat	ole)		
	inent threat to public health a	nd safety	
☐ Tank integrity (Compliance component #2) – Failing to prote	ect groundwater		
☐ Other Compliance Conditions (Compliance component #3) -	– Imminent threat to public h	ealth and safety	
$\hfill \Box$ Other Compliance Conditions (Compliance component #3) -	<ul> <li>Failing to protect groundwa</li> </ul>	iter	
☐ System not abandoned according to Minn. R. 7080.2500 (C	ompliance component #3) -	Failing to protect groundwater	
⊠ Soil separation (Compliance component #5) – Failing to pro	tect groundwater		
☐ Operating permit/monitoring plan requirements (Compliance	e component #4) – Noncomp	liant - local ordinance applies	
Comments or recommendations			
Certification			
Certification			
I hereby certify that all the necessary information has been gathered future system performance has been nor can be made due to unknown 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.	e 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	<u></u>	License number: L2896	
(This document has been electronically sig	ned)	Phone: 651-492-7550	
<b>Necessary or locally required supporting do</b>	cumentation (must b	pe attached)	
Soil observation logs System/As-Built □ Locally red		<u> </u>	
✓ Soli observation logs ✓ System/As-Built ✓ Locally rec	·	ny Assessment	
Es Other information (list). Report Summary, Property informa	mon, Discialitiel		

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Compliance criteria:		Attached supporting documentation:
System discharges sewage to the ground surface	⊠ Yes* □ No	☐ Other: ☐ Not applicable
System discharges sewage to drain tile or surface waters.	☐ Yes* ☒ No	
System causes sewage backup into dwelling or establishment.	☐ Yes* ☒ No	
Any "yes" answer above indicate imminent threat to public health a		
Describe verification methods an	d results:	
First trench on the south side of the	drainfield is discharging	g effluent to the ground surface.
Although not a compliance criteria, Minnesota and we have had experi		
Minnesota and we have had experience with the second secon	ence with this product h	aving significantly reduced performance and/or life expecta
Minnesota and we have had experience when the solution of the	e component #2	of 5  Attached supporting documentation:
nk integrity — Compliance  Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit,	ence with this product h	of 5  Attached supporting documentation:  □ Empty tank(s) viewed by inspector
nk integrity — Compliance  Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?	e component #2	of 5  Attached supporting documentation:
nk integrity — Compliance  Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit,	e component #2	of 5  Attached supporting documentation:  □ Empty tank(s) viewed by inspector  Name of maintenance business:
nk integrity — Compliance Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their	e component #2	of 5  Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:
nk integrity — Compliance Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their	erce with this product h	of 5  Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  Date of maintenance:  Existing tank integrity assessment (Attach)  Date of maintenance
nk integrity — Compliance  Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  Sewage tank(s) leak below their designed operating depth?	e component #2	of 5  Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  Date of maintenance:  Existing tank integrity assessment (Attach)  Date of maintenance

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800-657-3864

Use your preferred relay service •

Business Name: Midwest Sewer Services	Date: 4/4/2022
	_
3. Other compliance conditions – Compliance component #3 of 5	
3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or u  ☐ Yes* ☒ No ☐ Unknown	nsecured?
3b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or sa	afetv?□Ves* ⊠No □ Unknow
*Yes to 3a or 3b - System is an imminent threat to public health and safety.	incty:   103     No   Onknown
3c. System is non-protective of ground water for other conditions as determined by inspector?	☐ Yes*
3d. System not abandoned in accordance with Minn. R. 7080.2500?	☐ Yes* ☒ No
*Yes to 3c or 3d - System is failing to protect groundwater.	
Describe verification methods and results:	
Attacked compating decompating Materials	
Attached supporting documentation:   Not applicable	
<ol> <li>Operating permit and nitrogen BMP* – Compliance component #4</li> </ol>	lof 5 ⊠ Not applicable
Is the system operated under an Operating Permit? ☐ Yes ☐ No	o If "yes", A below is require
Is the system required to employ a Nitrogen BMP specified in the system design? ☐ Yes ☐ No	
BMP = Best Management Practice(s) specified in the system design	
If the answer to both questions is "no", this section does not need to be comple	ted.
Compliance criteria:	
a. Have the operating permit requirements been met?	
b. Is the required nitrogen BMP in place and properly functioning?   Yes  No	
Any "no" answer indicates noncompliance.	
Describe verification methods and results:	
Describe verification methods and results:	

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siness Name: Midwest Sewer Services			Date: <u>4/</u>	4/2022	
Soil separation — Compliance com         Date of installation       1993 (mm/dd/yyyy)	npone		T 5		
Shoreland/Wellhead protection/Food beverage lodging?	⊠ Yes	□No	Attached supporting documentation:  ☑ Soil observation logs completed for the supporting the supporting documentation.	ne report	
Compliance criteria (select one):			☐ Two previous verifications of required vertical separation		
		☐ No*	☐ Not applicable (No soil treatment area)		
not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:					
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.					
5b. Non-performance systems built	☐ Yes	⊠ 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	1		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			C. System separation		
separation distance from periodically saturated soil or bedrock.*			D. Required compliance separation*		
			*May be reduced up to 15 percent if all 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.

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# **Soil Observations Log**

Location of Project: 9130 Knollwood Dr N, Grant, MN 55082						
		Midwest Sewer Ser			4/4/2022	
	ification System:	USDA	·			
	Soil Observation:	ST-1	Soil Obser		bservation:	
Surface Elevation of Observatio	// dua:	nd surface as last field trench	Surface Elevation of Observation			
Depth In Inches Rock	% Soils E	ncountered	Depth In Rock %		Soils Encountered	
0-8 8-33 33-42	10YR 4/4 Sand 7.5YR 4/4	3 Sandy Loam dy Loam (Saturated) Sandy Loam With R 5/8 Redox				
33" Dept	th To End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
	ation Of Observatio	on Of Observation Relative To System				tion Relative To System
-18" Dept		To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media		Distribution Media
=15" Of S	eparation			Of Sepa	iration	
End Of So	oil Observation At:	42"	End Of	Soil Ob	servation At:	
	Soil Conditions At:	33"			onditions At:	
	Water Present At:	None			r Present At:	
Trong Trans. Trans.						

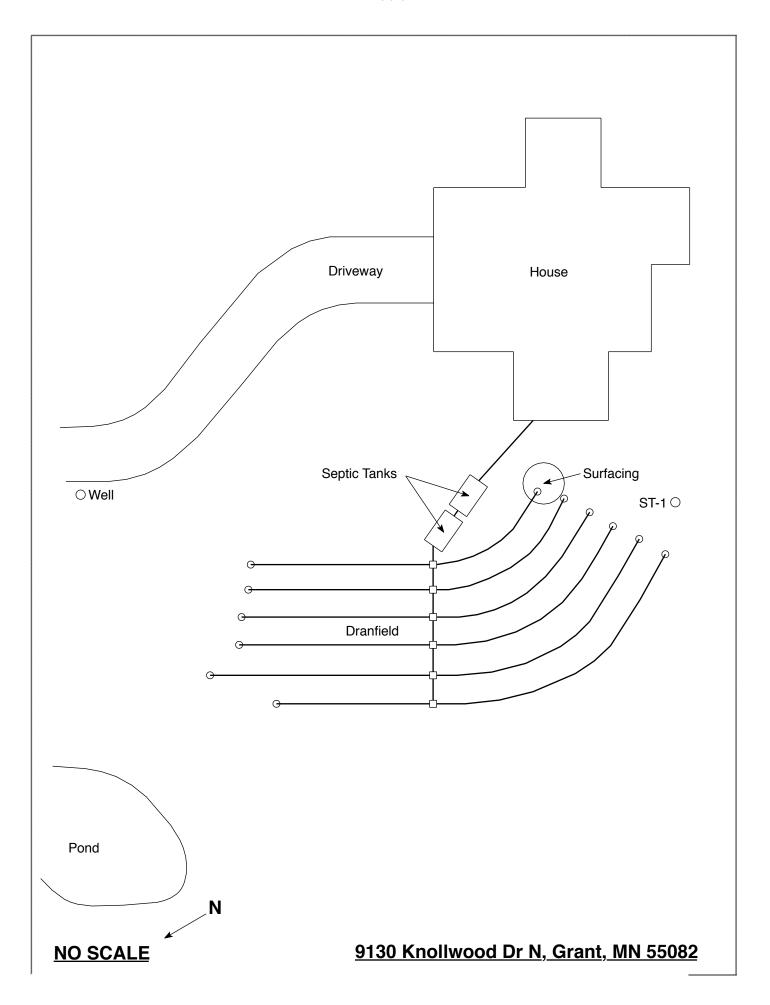
Bottom Of Distribution Medium At: 18 Inches			
Signature:	Color Ole		

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

This information will be used for the purpose of conducting an MPCA	A Compliance Inspection.				
Date of Inspection: April 4, 2022	Time: 11:00 AM				
Property Address: 9130 Knollwood Dr N, Grant, MN	Zip: 55082				
Property Owner: Jim & Mary Opp	Phone: 651-430-9936				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 2       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Other  Alternative system Experimental system Cesspool system Other system				
Are the tank maintenance covers accessible?   Yes   No *If no, proper maintenance must be performed through the maintenance holes. Maintenance hole covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system.					
	Tank size (gals.): 1-1250, 1-1000				
	esidents in home?				
Number of bedrooms? 6 Are all floors drained by §	, ,				
Garbage disposal? Whirlpool bath	?				
More than one system (laundry, etc.)?					
Does this property have any footing drain tiles connected to the 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 buildings?					
Location of septic system on lot? North Side					
	e well a deep well? Y				
Have you ever experienced any problems with the system such as	s: 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:					
	nper: Pinky's Sewer Service				
How often pumped in previous years? Is system	n on a monitoring plan?				
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 the	ne 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:



# **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.