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: May 11, 2020 **Time:** 10:45 AM **Owner:** Fred Brandt

Inspection Address: 9833 Norell Ave N, Stillwater Twp, MN 55082

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Fred Brandt, and have reviewed the original design/permit records on file at Washington County. This older system (installed in 1991) consists of two precast septic tanks and a rock trench drainfield.

At the time of our initial inspection; ponding was found in the inspection pipe at the end of the first drainfield trench and it appears that this drainfield trench may not have been installed level. A leveler device was installed on the outlet of the first trench to divert water to the subsequent trenches. It should be noted that this is an older system and no guarantee can be given relative the future performance or life expectancy of the system.

Predicated on my inspection of the system, my review of the history of the system with the owner, and my review of the original design/permit records, it is my opinion that this system presently meets 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



Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

Instructions: Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply.	For local tracking purposes:		
Submit completed form to Local Unit of Government (LUG) and system owner within 15 days			
System Status			
System status on date (mm/dd/yyyy):5/11/2020			
·	pliant – Notice of Noncompliance ade Requirements on page 3)		
Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminent threat to Other Compliance Conditions (Compliance Component #3) – Imminent thre Tank Integrity (Compliance Component #2) – Failing to protect groundwate Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwate Soil Separation (Compliance Component #4) – Failing to protect groundwate Operating permit/monitoring plan requirements (Compliance Component #4)	eat to public health and safety er tect groundwater oter		
Property Information Parcel ID# or Sec/Twp/Rang	٥٠		
. ,	r inspection: Property Transfer		
· · ·	hone: 651-491-8486		
or			
Owner's representative: Represent	Representative phone:		
Local regulatory authority: Washington County Regulatory	Regulatory authority phone: 651-430-6655		
Brief system description: Two pre-cast septic tanks and a rock trench drainfield.	ainfield.		
Comments or recommendations: At the time of our initial inspection; ponding was found in the inspection pipe at the end that this drainfield trench may not have been installed level. A leveler device was instal water to the subsequent trenches. It should be noted that this is an older system and r performance or life expectancy of the system.	led on the outlet of the first trench to divert		
Certification			
I hereby certify that all the necessary information has been gathered to determine the condetermination of future system performance has been nor can be made due to unknown possible abuse of the system, inadequate maintenance, or future water usage.			
Inspector name: Brian Humpal/Christopher Uebe Certification	on number: C5342/C9852		
Business name: Midwest Sewer Services Licens			
Business name: Midwest Sewer Services Licens	se number: L2896		
Brian Humpal 14-11	ne number: 651-492-7550		
Inspector signature: Brian Thumpal fiftee Man Phor			
Inspector signature: Phore Phore	ne number: 651-492-7550		
Inspector signature: Brian Thumpal fiftee Man Phor	ne number: 651-492-7550		

Property address: 9833 Norell Ave N, Stillwater Twp, MN 55082

Inspector initials/Date: __5/11/2020**28#**(\(\text{//}

1.	Impact on Public Health — Compliance component #1 of 5							
	C	ompliance criteria:			Verification method(s):			
		stem discharge sewage to the ound surface.	☐ Yes	⊠ No	Searched for surface outletSearched for seeping in yard/backup in home			
	Sy	stem discharge sewage to drain tile surface waters.	☐ Yes	⊠ No	 ☑ Excessive ponding in soil system/D-boxes ☑ Homeowner testimony (See Comments/Explanation) 			
		vstem cause sewage backup into velling or establishment.	☐ Yes	⊠ No	 "Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test 			
		ny "yes" answer above indicates n Imminent Threat to Public Heal			☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
	Co	omments/Explanation:			,			
2.	ap tre giv	pears that this drainfield trench may n	ot have be trenches. life expect	een installed level. It should be noted	ction pipe at the end of the first drainfield trench and it el. A leveler device was installed on the outlet of the first ted that this is an older system and no guarantee can be em			
			тропент т	72 01 0	Verification method(s):			
		ompliance criteria: vstem consists of a seepage pit,	☐ Yes		✓ Probed tank(s) bottom			
		esspool, drywell, or leaching pit.			Examined construction records			
		epage pits meeting 7080.2550 may be mpliant if allowed in local ordinance.			Examined Tank Integrity Form (Attach)Observed liquid level below operating depth			
		ewage tank(s) leak below their esigned operating depth.	☐ Yes	⊠ No	☐ Examined empty (pumped) tanks(s)			
	If yes, which sewage tank(s) leaks: Any "yes" answer above indicates the system is Failing to Protect Groundwater.			☐ Probed outside tank(s) for "black soil"				
					 ☐ Unable to verify (See Comments/Explanation) ☑ Other methods not listed (See Comments/Explanation) 			
		omments/Explanation: owered underwater camera into tanks -	baffles ar	nd tank walls OK.				
3.	0	ther Compliance Conditions	- Comp	liance compone	ent #3 of 5			
	a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. $\ \square \ Yes^* \ \boxtimes \ No \ \square \ Unknown$							
	b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. ☐ Yes* ☒ No ☐ *System is an imminent threat to public health and safety							
		Explain:						
	C.	System is non-protective of ground wa *System is failing to protect ground		er conditions as det	determined by inspector ☐ Yes* ☒ No			
		Explain:						

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 2 of 3

Inspector initials/Date: 5/11/2020 **24**(1) Property address: 9833 Norell Ave N, Stillwater Twp, MN 55082 **Soil Separation** – Compliance component #4 of 5 Date of installation: 1991 Unknown Verification method(s): Shoreland/Wellhead protection/Food Beverage Soil observation does not expire. Previous soil Lodging? observations by two independent parties are sufficient, unless site conditions have been altered or local Compliance criteria: requirements differ. For systems built prior to April 1, 1996, and ☐ Yes ☐ No not located in Shoreland or Wellhead ☐ Conducted soil observation(s) (Attach boring logs) Protection Area or not serving a food. ☐ Two previous verifications (Attach boring logs) beverage or lodging establishment: ☐ Not applicable (Holding tank(s), no drainfield) Drainfield has at least a two-foot vertical ☐ Unable to verify (See Comments/Explanation) separation distance from periodically ○ Other (See Comments/Explanation) saturated soil or bedrock. ⊠ Yes □ No Non-performance systems built April 1, Comments/Explanation: 1996, or later or for non-performance Reviewed design and permit records. systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.* "Experimental", "Other", or "Performance" ☐ Yes ☐ No Indicate depths of elevations systems built under pre-2008 Rules; Type IV See Attached or V systems built under 2008 Rules (7080. Boring Log(s) A. Bottom of distribution media 2350 or 7080.2400 (Advanced Inspector License required) B. Periodically saturated soil/bedrock Drainfield meets the designed vertical separation distance from periodically C. System separation saturated soil or bedrock. D. Required compliance separation* Any "no" answer above indicates the system is *May be reduced up to 15 percent if allowed by Local Failing to Protect Groundwater. Ordinance. 5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 Not applicable ☐ Yes ☐ No If "yes", A below is required Is the system operated under an Operating Permit? Is the system required to employ a Nitrogen BMP? ☐ Yes ☐ No If "yes", B below is required 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 completed. Compliance criteria a. Operating Permit number:

Any "no" answer indicates Noncompliance.

Have the Operating Permit requirements been met?

b. Is the required nitrogen BMP in place and properly functioning?

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.

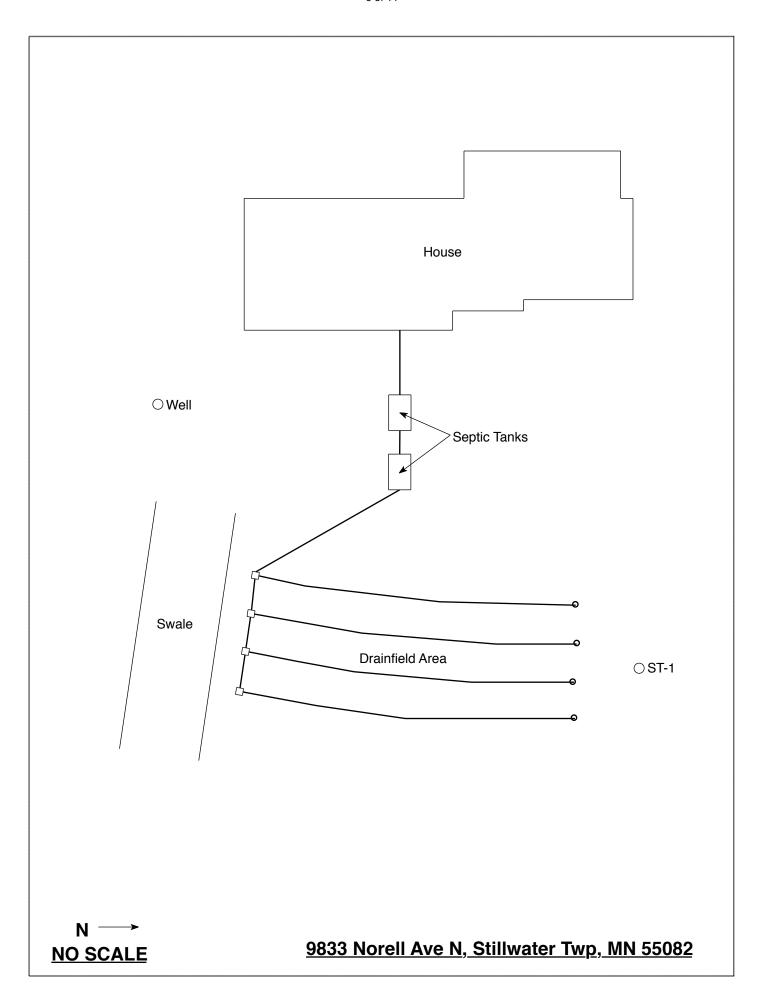
☐ Yes ☐ No

☐ Yes ☐ No

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 3 of 3

Midwest Sewer Testing Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting an MPCA Compliance Inspection.

This information will be used for the purpose of conducting an MPCA	Compliance Inspection.				
Date of Inspection: May 11, 2020	Time: 10:30 AM				
Property Address: 9833 Norell Ave N, Stillwater Twp, MN	Zip: 55082				
Property Owner: Fred Brandt	Phone: 651-491-8486				
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					
performed through the maintenance holes. Maintenance hole cover					
the ground surface to facilitate access and proper maintenance of t	the system.				
Year house built: 1991 Year septic installed: 1991	Tank size (gals.): 1-1250, 1-1000				
How long has seller owned the property? 1991 Number of re	sidents in home? 2				
Number of bedrooms? 3 Are all floors drained by g	ravity? Y				
Garbage disposal? Y Whirlpool bath?	N				
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the se	eptic system? N				
Are any buildings on this property such as garages or out-building	•				
Are there any additional systems on this property serving other buildings? N					
Location of septic system on lot? East Side					
	e 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? N If yes, explain:					
When was the system last pumped? 2016 Name of pum	per: Pink's Sewer Service				
How often pumped in previous years? Every 3					
Have you received notices from any government agency concerning this system? N					
Is your property located in a shoreland management area? Y					
Do you have any additional information that should be given to the new owner? N					
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					
Owner/Occupant:	Date:				



Soil Observations Log

Location of Project: 9833 Norell Ave N, Stillwater Twp, MN 55082							
Observations Made By: Midwest Sewer Ser		vices		Date:	5/11/2020		
Classification System: USDA							
Soil Observation: ST-1		Soil Observation:					
Surface Elevation of Observation		Same ground surface as last drainfield trench		Surface Elevation of Observation			
Depth In Inches	Rock %	Soils E	ncountered	Depth In Inches	Rock %	<u>Soils</u>	Encountered
0-22 22-38 38-50 50-61	≈15-20	7.5YR 4/ 7.5YR 3/4 Sand 7.5YR 4/4 Me	7/3 Loamy Sand 3 Sandy Loam dy Loam With Gravel dium To Fine Sand ace Of Gravel				
61"	Depth 1	o End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
Same Elevation Of Observation Relative To System		Elevation Of Observation Relative To System					
-25" Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media					
≤36" Of Separation			Of Sepa	ration			
End Of Soil Observation At: 61"		Fnd Of	Soil Oh	servation At:			
Liid		dox Present At:	None	Liid Oi		x Present At:	
Standing Water Present At: None			Standi		r Present At:		
Ctanumy rates recent rate							

Bottom Of Distribution Medium At: 25 Inches				
Signature:	Offer 1/2			

BORING LOG

BORING 1		BORING 2		
0-4"	DARK BROWN FINE SANDY LOAM	0-5"	DARK BROWN FINE SANDY LOAM	
4"-21"	LIGHT BROWN FINE SANDY LOAM (SLIGHT FILM)	5"-68"	LIGHT RED BROWN FINE LOAMY SAND AND ROCKS	
21"- 6'0	LIGHT BROWN FINE LOAMY SAND (SLIGHT FILM)	68"- 6'10"	LIGHT BROWN FINE TO MEDIUM LOAMY SAND (FILM)	
6'0- 7'3"	LIGHT BROWN TAN FINE TO MEDIUM SAND	6'10"- 8'0	LIGHT TAN FINE TO MEDIUM CLEAN SAND	
7'3"- 8'0	LIGHT TAN FINE CLEAN SAND	8'0	END BORING	
8'0	END BORING			

BORINGLOG

DUNINGLUG				
BOR	ING 3	BOR	ING 4	
0-5"	DARK BROWN FINE SANDY LOAM	0-5"	DARK BROWN FINE SANDY LOAM	
5"-65"	LIGHT RED BROWN FINE LOAMY SAND (FILM)	5"-47"	LIGHT RED BROWN FINE LOAMY SAND AND ROCKS (FILM)	
65"- 7'0	LIGHT BROWN FINE TO MEDIUM LOAMY SAND AND ROCKS (FILM)	47"- 6'0	LIGHT RED BROWN FINE SANDY LOAM (FILM)	
7'0~ 8'0	LIGHT TAN FINE TO MEDIUM CLEAN SAND	6'0- 8'0	LIGHT RED BROWN FINE LOAMY SAND AND ROCKS (FILM)	
8'0	END BORING	8'0	END BORING	
4				

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 1st through April 1st) 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.

Subsurface Sewage Treatment Systems

Non-transferable

Business License

Midwest Sewer Services

License # L2896

License Expires: 12/22/2020

Issued: 11/26/2019

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert # Na

Name

Certification Expires:

C5342

Brian L Humpal

10/15/2023

Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector

C9852 4

Christopher R Uebe

3/4/2021

Designer, Inspector



520 Lafayette Road North St. Paul, Minnesota 55155-4194 Mich Haig

Nick Haig, Supervisor Certification and Training Unit