### **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:** 13115 50<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 older system (installed in 1996) consists of two pre-cast septic tanks and a gravelless trench drainfield.

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. We cannot guarantee the performance of this system beyond the compliance date (3/26/2020). In addition, the septic tank manhole covers are under a concrete driveway. I recommend extending these covers to the ground surface to facilitate easier access and proper maintenance. Vehicle traffic should be reroute off the septic tanks to prevent any damage.

It should also be noted that the existing system is sized for a 7 bedroom home. This house currently has 9 to 10 bedrooms.

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



## **Compliance Inspection Form**

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

Doc Type: Compliance and Enforcement

<b>Instructions:</b> 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): <u>3/26/2020</u>	
	npliant – Notice of Noncompliance trade 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 threat the Tank Integrity (Compliance Component #2) – Failing to protect groundward Other Compliance Conditions (Compliance Component #3) – Failing to protect groundward Soil Separation (Compliance Component #4) – Failing to protect groundward Operating permit/monitoring plan requirements (Compliance Component #4)	reat to public health and safety ter otect groundwater rater
Property Information Parcel ID# or Sec/Twp/Rang	ge:
Al-	or inspection: Property Transfer
Property owner: Steve Triemert Owner's	phone: 913-908-0383
or	
· · · · · · · · · · · · · · · · · · ·	ntative phone:
· · · · · · · · · · · · · · · · · · ·	ry authority phone: <u>651-430-6655</u>
Brief system description: Two pre-cast septic tanks and a gravelless trench drainfie	ld.
Comments or recommendations:  Although not a compliance criteria, it should be noted that gravelless pipe is no longer approved for instate experience with this product having significantly reduced performance and/or life expectancy. We cannot the compliance date (3/26/2020). In addition, the septic tank manhole covers are under a concrete drive ground surface to facilitate easier access and proper maintenance. Vehicle traffic should be reroute off be noted that the existing system is sized for a 7 bedroom home. This house currently has 9 to 10 bedroom.	of guarantee the performance of this system beyond eway. I recommend extending these covers to the the septic tanks to prevent any damage. It should also
Certification	
I hereby certify that all the necessary information has been gathered to determine the of determination 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 Certificat	ion number: C5342/C9852
Business name: Midwest Sewer Services Licer	nse number: L2896
Inspector signature: Photometer	one number: _651-492-7550
Necessary or Locally Required Attachments	
	local ordinance
☐ Other information (list): Report Summary, Property Information, Disclaimer, Lic	

Property address: 13115 50th St S, Afton, MN 55001

Inspector initials/Date: 3/26/2020 **B#** 

1.	lm	Impact on Public Health - Compliance component #1 of 5			
2.	Sygror Sygor Sydw An An Co	estem discharge sewage to the bund surface.  Is stem discharge sewage to drain tile surface waters.  Is stem cause sewage backup into relling or establishment.  In y "yes" answer above indicates a Imminent Threat to Public Heal of the above found.  In the stem cause sewage backup into relling or establishment.  In y "yes" answer above indicates a Imminent Threat to Public Heal of the above found.	th and Safety.	Verification method(s):  Searched for surface outlet  Searched for seeping in yard/backup in home  Excessive ponding in soil system/D-boxes  Homeowner testimony (See Comments/Explanation)  "Black soil" above soil dispersal system  System requires "emergency" pumping  Performed dye test  Unable to verify (See Comments/Explanation)  Other methods not listed (See Comments/Explanation)	
3.	Se con Se de lf y	pompliance criteria:  Instem consists of a seepage pit, sspool, drywell, or leaching pit.  Instem consists of a seepage pit, sspool, drywell, or leaching pit.  Instempliant if allowed in local ordinance.  Instempliant if allowed in local ordinanc	Yes No  Yes No  Yes No  ates the coundwater.  baffles and tank walls OK.	Verification method(s):  ☐ Probed tank(s) bottom ☐ Examined construction records ☐ Examined Tank Integrity Form (Attach) ☐ Observed liquid level below operating depth ☐ Examined empty (pumped) tanks(s) ☐ Probed outside tank(s) for "black soil" ☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)	
<u> </u>	a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound.  ☐ Yes* ☐ No ☐ Unknown  b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. ☐ Yes* ☐ No ☐ Unknown  *System is an imminent threat to public health and safety  Explain:  c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☐ No  *System is failing to protect groundwater  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

Pro	perty address:13115 50th St S, Afton, MN 550	001		Inspector initials/Date:	3/26/2020 <b>BH</b> (M		
4.	Soil Separation – Compliance compor	nent #4 of 5					
	Date of installation: 1996	Unknown	V	erification method(s):			
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes ⊠ No		oil observation does not expire			
	Compliance criteria:			observations by two independent parties are sufficient unless site conditions have been altered or local			
	For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:	ed in Shoreland or Wellhead  in Area or not serving a food,  or ladging establishment:  Two previous	Conducted soil observation(	cted soil observation(s) (Attach boring logs) evious verifications (Attach boring logs)			
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.			Unable to verify (See Comme	ents/Explanation)		
	Non-performance systems built April 1,	⊠ Yes □ No	С	omments/Explanation:			
	1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:		Reviewed design and permit records.		cords.		
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*						
	"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV	☐ Yes ☐ No	Ir	Indicate depths of elevations  See Attached			
	or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)		_A.	Bottom of distribution media	Boring Log(s)		
	Drainfield meets the designed vertical		_B.	Periodically saturated soil/bedro	ck		
	separation distance from periodically saturated soil or bedrock.		C.	System separation			
			D.	Required compliance separation	1*		
	Any "no" answer above indicates the system is Failing to Protect Groundwater.			May be reduced up to 15 perce Ordinance.	ent if allowed by Local		
5.	Operating Permit and Nitrogen B	<b>MP*</b> – Complia	nce com	ponent #5 of 5 🛮 🖂 <b>Not</b> a	applicable		
	Is the system operated under an Operating Per	mit?	s 🗌 No	If "yes", A below is requir	ed		
	Is the system required to employ a Nitrogen BMP?			If "yes", B below is requir	ed		
BMP=Best Management Practice(s) specified in the system design							
	If the answer to both questions is "no",	this section do	es not r	need to be completed.			
	Compliance criteria						
	a. Operating Permit number:						
	Have the Operating Permit requirements been met?			☐ Yes ☐ No			

Any "no" answer indicates Noncompliance.

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.

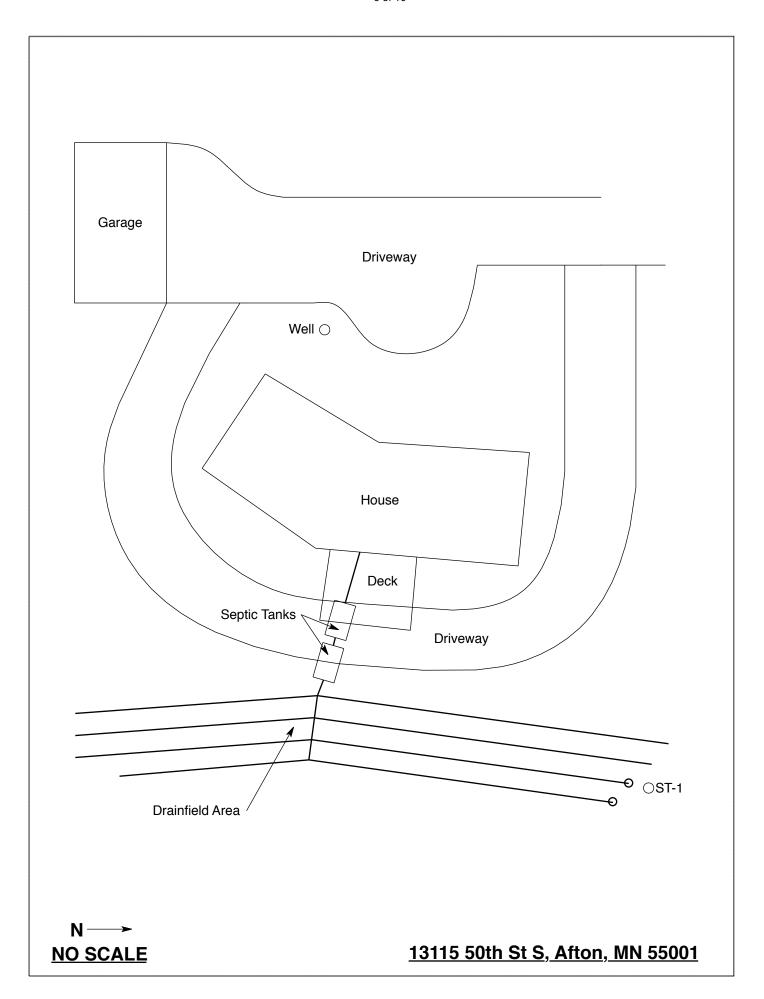
☐ Yes ☐ No

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

This information will be used for the purpose of conducting an MPCA Compliance Inspection.					
Date of Inspection: March 26, 2020	Time: 2:00 PM				
Property Address: 13115 50 <sup>th</sup> St S, Afton, MN	Zip: 55001				
Property Owner: Steve Triemert	Phone: 913-908-0383				
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  Are the tank maintenance covers accessible? Yes No *If	Other  Alternative system Experimental system Cesspool system Other system The proper maintenance must be				
performed through the maintenance holes. Maintenance hole cov					
the ground surface to facilitate access and proper maintenance of					
	Tank size (gals.): 2-1500				
<u> </u>	esidents in home?				
Number of bedrooms? 9/10? Are all floors drained by g					
Garbage disposal? Whirlpool bath'	?				
More than one system (laundry, etc.)?					
Does this property have any footing drain tiles connected to the so Are any buildings on this property such as garages or out-building					
Are there any additional systems on this property serving other bu	ııldıngs?				
Location of septic system on lot? East Side					
Location of water well on lot? West Side  Is 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:					
	nper: Pinky'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 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					

Owner/Occupant:	Date:



### **Soil Observations Log**

Location of Project: 13115 50th St S, Afton, MN 55001							
Observations Made By: Midwest Sewer Serv					Date:	3/26/2020	
		ation System:	USDA				
	Soil Observation: ST-1		Soil Observation:				
Elevat	face tion of vation	_	nd surface as last field trench	Surface Elevation of Observation			
Depth In Inches	Rock %	-	ncountered	Depth In Inches Soils Encountered		Encountered	
0-35 35-50 50-66	≈20	10YR 3	2/2 Silt Loam 8/4 Silt Loam ny Sand With Gravel				
66"	Depth T	o End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
						tion Relative To System	
-33" Depth To Bottom Of Distribution Media					Distribution Media		
≥33" Of Separation			Of Sepa				
End Of Soil Observation At: 66"		End Of	Soil Oh	servation At:			
LIIU		dox Present At:	None	Liiu Oi		x Present At:	
Stan	Standing Water Present At: None			Standi		r Present At:	
Standing Water Fresche Act							

Bottom Of Distribution Medium At: 33 Inches				
Signature:	Offer 1/2			

Location	or Project	Date 8-15-95			
Borings	made by Frank Femling				
Classifi	cation System: AASHO; USDA	-SCS; Unified; Other			
Auger us	sed (check two): Hand, or Pow	er; Flight, or Bucket: other Book			
Depth,	Boring number 3	Depth, Boring number 4			
in feet	Surface elevation	feet Surface elevation			
0	11 1	Park Brown sitt lorm			
1	Dank Brown silt lown				
_	De Brown silt locum	Brown sitt loam			
2 — -					
3 <b>—</b>	Dank Tan sandw/gravel	Dunk tan sand w/gravel			
4 — -	_				
5 —	Reddish tan sand w/clay	5 Brown clay			
6 — -	Brown clay	6 —			
7 —		7 —			
8 —		8 —			
End of	boring at feet.	End of boring at feet.			
Standin	g water table:	Standing water table:			
Present	at feet of depth,	Present at feet of depth,			
	hours after boring.	hours after boring.			
Not pre	sent in boring hole	Not present in boring hole			
Mottled		Mottled soil:			
	d at feer of depth.	Observed at feet of depth.			
Not pre	sent in boring hole	Not present in boring hole			
Obsutva	tions and comments:	Observations and comments:			

#### **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 only 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 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.

## 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