#### **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: 10840 Kingsborough Trl, Cottage Grove, MN 55016

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2017, which were on file at Washington County. This older system (installed in 1993) consists of two pre-cast septic tanks and a rock trench drainfield.

Although not a compliance criteria, it should be noted that the septic tanks manhole covers are buried. I recommend extending these covers to the ground surface to facilitate easier access and proper maintenance. In addition, a soil boring over the drainfield indicated some minor ponding. This is an indication that the drainfield may be showing its age.

Predicated on my inspection of the system and my review of the 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

		<b>7</b> p p			
requirements and attac	on results based on Minnesota Pollution Control A ched forms – additional local requirements may als orm to Local Unit of Government (LUG) and sy	so apply.			
within 15 days					
System Status					
System status	on date (mm/dd/yyyy):10/27/2020	<u> </u>			
(Valid for 3 y	t - Certificate of Compliance years from report date, unless shorter time ed in Local Ordinance.)	☐ Noncompliant – Notice of Noncompliance (See Upgrade Requirements on page 3)	)		
Reason(s) for	noncompliance (check all applicable)				
☐ Impact on	Public Health (Compliance Component #1) - Im	nminent threat to public health and safety			
☐ Other Con	mpliance Conditions (Compliance Component #3,	B) – Imminent threat to public health and safety			
☐ Tank Integ	grity (Compliance Component #2) – Failing to pro	rotect groundwater			
	mpliance Conditions (Compliance Component #3)	,			
	ration (Compliance Component #4) – Failing to p	•			
☐ Operating	permit/monitoring plan requirements (Compliance	ce Component #5) – Noncompliant			
Property Inform	nation Parcel ID# o 0840 Kingsborough Trl, Cottage Grove, MN 5501	or Sec/Twp/Range:			
· · ·	allace Boeve	Owner's phone: 651-308-1398	· · · · · · · · · · · · · · · · · · ·		
or					
Owner's representative	e:	Representative phone:			
Local regulatory autho	rity: Washington County	Regulatory authority phone: 651-430-6655			
Brief system description	on: Two pre-cast septic tanks and a rock trenc	ch drainfield.			
Comments or recomm	endations:				
these covers to the gro		inks manhole covers are buried. I recommend extending er maintenance. In addition, a soil boring over the drainfield may be showing its age.			
Certification					
determination of future		o determine the compliance status of this system. No e due to unknown conditions during system construction, r usage.			
Inspector name: Bri	an Humpal/Christopher Uebe	Certification number: C5342/C9852			
Business name: Mic	dwest Sewer Services	License number: L2896			
Inspector signature:	Brian Humpal for the	Phone number: 651-492-7550			
_			-		
•	cally Required Attachments	_			
Soil boring logs	⊠ System/As-built drawing	-			
	1 (list): Report Summary, Property Information	Report Summary, Property Information, Disclaimer, License			

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Property address: 10840 Kingsborough Trl, Cottage Grove, MN 55016

Inspector initials/Date: 10/27/2020 10/27/2020

1.	Impact on Public Health – Cor	mpliance component #1 of	5
	Compliance criteria:  System discharge sewage to the ground surface.  System discharge sewage to drain tile or surface waters.  System cause sewage backup into dwelling or establishment.  Any "yes" answer above indicates an Imminent Threat to Public Heal Comments/Explanation:  None of the above found.		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)
2.	Tank Integrity – Compliance com	nponent #2 of 5	
	System consists of a seepage pit, cesspool, drywell, or leaching pit.  Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.  Sewage tank(s) leak below their designed operating depth.  If yes, which sewage tank(s) leaks:  Any "yes" answer above indicasystem is Failing to Protect Ground Comments/Explanation:  Lowered underwater camera into tanks -	oundwater.	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)
3.	Other Compliance Conditions	- Compliance componer	nt #3 of 5
	<ul> <li>a. Maintenance hole covers are damaged</li> <li>b. Other issues (electrical hazards, etc.) to in *System is an imminent threat to put Explain:</li> <li>c. System is non-protective of ground wan *System is failing to protect ground</li> </ul>	mmediately and adversely imposed impos	pact public health or safety. ☐ Yes* ☒ No ☐ Unknown
	Explain:		

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Property address: 10840 Kingsborough Trl, Cottage Grove, MN 55016

Inspector initials/Date: 10/27/2020 **BA** 

4.	Soil Separation — Compliance compor	nent #4 o	f 5				
	Date of installation: 1993	Unkn	own	V	erification method(s):		
	Shoreland/Wellhead protection/Food Beverage Lodging?				Soil observation does not expire. Previous soil observations by two independent parties are sufficient,		
	Compliance criteria:			uı	inless 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:	⊠ Yes □ No		requirements differ.  Conducted soil observation(s) (Attach boring logs) Two previous verifications (Attach boring logs) Not applicable (Holding tank(s), no drainfield) Unable to verify (See Comments/Explanation) Other (See Comments/Explanation)			
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.						
	Non-performance systems built April 1, 1996, or later or for non-performance	☐ Yes	□No	С	omments/Explanation:		
	systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:			eviewed previous compliance inspection from 2017. eviewed design and permit records.			
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*						
	"Experimental", "Other", or "Performance"	☐ Yes	□No	In	ndicate depths of elevations	1	
	systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)			<u>A.</u>	Bottom of distribution media	See Attached Boring Log(s)	
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.			-	Periodically saturated soil/bedrock  System separation		
				D.	Required compliance separation*		
	Any "no" answer above indicates the system is Failing to Protect Groundwater.				*May be reduced up to 15 percent if allowed by Local Ordinance.		
	<u>,                                    </u>			-			
5.	Operating Permit and Nitrogen B	<b>MP*</b> – C	omplianc	e com	ponent #5 of 5 🛮 🖂 <b>Not app</b>	licable	
	Is the system operated under an Operating Per	mit?	☐ Yes	☐ No	If "yes", A below is required		
	Is the system required to employ a Nitrogen BM	IP?	☐ Yes	☐ No	If "yes", B below is required		
	BMP=Best Management Practice(s) specifi	ied in the	system de	sign			
	If the answer to both questions is "no",	this sec	tion does	s not r	need to be completed.		
	Compliance criteria						
	a. Operating Permit number:				☐ Yes ☐ No		
	Have the Operating Permit requirements been met?						
	b. Is the required nitrogen BMP in place and properly functioning?			☐ Yes ☐ No			
	Any "no" answer indicates Noncom	pliance.					

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.

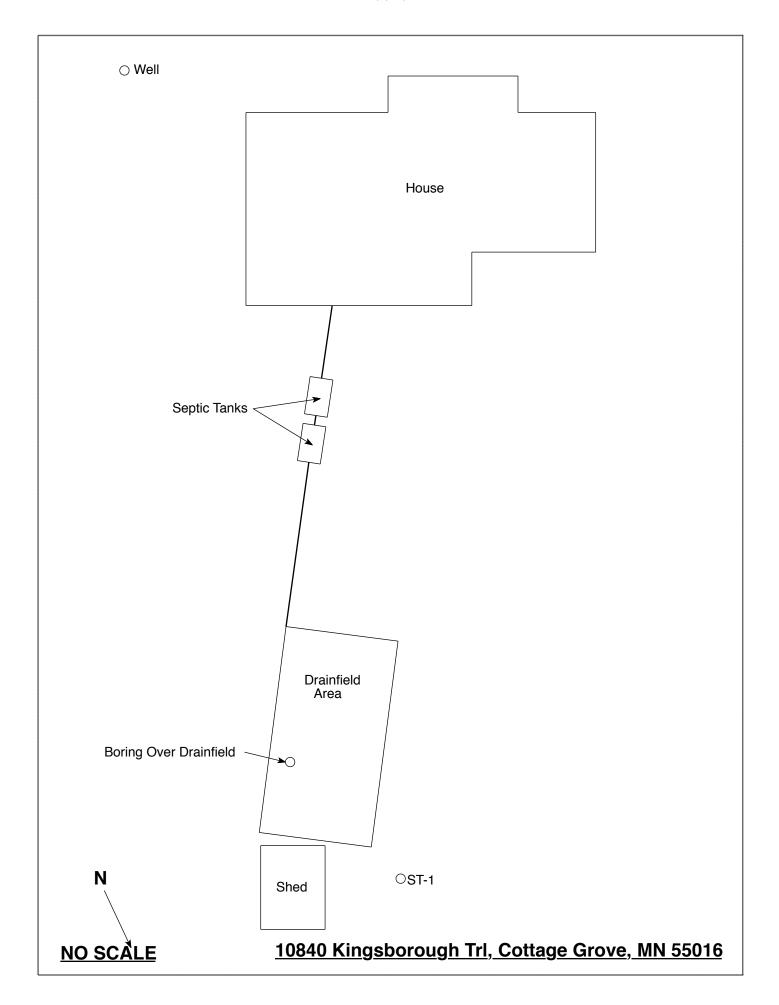
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# <u>Midwest & ewer Testing</u> <u>Subsurface Sewage Treatment System Owner/Property Information</u>

This information will be used for the purpose of conducting an MPCA C	ompliance Inspection.			
Date of Inspection: October 27, 2020	Time: 12:45 PM			
Property Address: 10840 Kingsborough Trl, Cottage Grove, MN	Zip: 55016			
Property Owner: Wallace Boeve	Phone: 651-308-1398			
Tank(s)       Tank(s)Material       Soil Treatment System	Other Alternative system Experimental system Cesspool system Other system			
Are the tank maintenance covers accessible? ☐ Yes ☒ No *If no				
performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the	e system.			
	ank size (gals.):			
How long has seller owned the property?  Number of resi				
Number of bedrooms? 4 Are all floors drained by gra	vity? Lower Pumped			
Garbage disposal? Whirlpool bath?  More than one system (laundry, etc.)?				
Does this property have any footing drain tiles connected to the sep	tic system?			
Does this property have any rooting train thes connected to the sep	tie 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? Northeast Side				
	well a deep well? Y			
Have you ever experienced any problems with the system such as: t surfacing of sewage onto the ground, septic tank overflowing, etc.; to the system?  If yes, explain:	or have any repairs been made			
When was the system last pumped? 10/27/2020 Name of pumper: Meyer Sewer Service				
How often pumped in previous years? Every 3  Is system 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	new owner?			
I hereby certify that the above information is correct to the best of my knowledge. considered "non-compliant/failing" per MPCA rules, that the inspector must by la local government unit within 15 days of the date of inspection completion. I also this report, that I/we are ultimately responsible for payment of all fees for all work by Inspect Minnesota and Midwest Soil Testing	w submit a copy of this report to the agree that unless otherwise noted in			

Date:

Owner/Occupant:



### **Soil Observations Log**

Location of Project: 10840 Kingsborough Trl, Cottage Grove, MN 55016						
Observations Made By: Midwest Sewer Ser					, Date:	10/27/2020
Class	ification System:	USDA				
9	Soil Observation:	ST-1		Soil O	bservation:	
Surface Elevation of Observatio	// dua:	nd surface as last field trench		face tion of vation		
Depth In Inches Rock	% Soils E	ncountered	Depth In Inches	Rock %	Soils Encountered	
0-28 28-47 47-70	10YR 3/4	2 Loamy Sand 4 Medium Sand 4 Medium Sand				
70" Dept	th To End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
-33" Depth To Bottom Of Distribution Media					Distribution Media	
≥37" Of Separation				Of Sepa	ration	
End Of Soil Observation At: 70"			Fnd Of	Soil Ob	servation At:	
Redox Present At: None			Liid Oi		x Present At:	
Standing Water Present At: None			Standi		r Present At:	
Training traces is recent from						

Bottom Of Distribution Medium At: 33 Inches		
Signature:	Chan la	

### **Log Of Soil Borings**

Loc	Location of Project: 10840 Kingsborough Trl S, Cottage Grove, MN 55016				
Borings Made By: Inspect Minnesota				3/15/17	
Auger Used: Hand/Bucket		Classification System: USDA		USDA	
	Boring Number:	1		Boring Number:	
Surface Elevation Boring	of Same grou	and surface as last of the state of the stat	Surface Elevation of Boring	of	
Depth In Inches		ncountered	Depth In Inches	Soils En	<u>icountered</u>
0-15 15-31 31-47 47-80	10YR 3/3 10YR 4/4	Medium Sand Medium Sand Medium Sand Medium Sand			
80"	Depth To End Of Boring Or Redox		Depth To End Of Boring Or Redox		
Same Elevation Of Boring Relative To System		Elevation Of Boring Relative To System			
-30" Depth To Bottom Of Distribution Media			Depth To Bottom Of Distribution Media		
≥50" Of Separation				Of Separation	
End Of Boring At: 80"				End Of Boring At:	
Redox Present At: None				Redox Present At:	
Standing Water Present At: None				Water Present At:	

Bottom Of Distribution Medium At: 30 Inches

#### **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