Inspect Minnesota & Midwest Soil Testing

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: 10300 Perkins Ave N, Stillwater, MN 55082

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 2013, which were on file at Washington County. This very old system (installed in 1978) consists of a pre-cast septic tank and a rock trench drainfield. An additional pre-cast septic tank and a chamber trench drainfield were installed in 2002.

Although not a compliance criteria, it should be noted that a soil boring over the drainfield indicated some ponding. This ponding is an indication that the drainfield <u>may</u> be at the end of its useful life. In addition, there is a small amount of soil disruption in the chambers caused by rodents.

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

Inspect Minnesota and Midwest Soil Testing 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. Inspect Minnesota and Midwest Soil Testing 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

requirements and attached forms – additional local requirements may also apply. Submit completed form to Local Unit of Government (LUG) and system owner	
	racking purposes:
within 15 days	
System Status	
System status on date (mm/dd/yyyy): 3/28/2019	
	Notice of Noncompliance ements on page 3)
Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminent threat to public heal Other Compliance Conditions (Compliance Component #3) – Imminent threat to public Tank Integrity (Compliance Component #2) – Failing to protect groundwater Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwater Soil Separation (Compliance Component #4) – Failing to protect groundwater Operating permit/monitoring plan requirements (Compliance Component #5) – Noncompliance Component #5)	health and safety
Property Information Parcel ID# or Sec/Twp/Range:	
· • • <u> </u>	: Property Transfer
or Owner's representative: Representative phone	a.
	ohone: 651-430-6655
Comments or recommendations: This very old system (installed in 1978) consists of a pre-cast septic tank and a rock trench drainfie tank and a chamber trench drainfield were installed in 2002.	ld. An additional pre-cast septic
Certification	
I hereby certify that all the necessary information has been gathered to determine the compliance s determination of future system performance has been nor can be made due to unknown conditions	
I hereby certify that all the necessary information has been gathered to determine the compliance s determination of future system performance has been nor can be made due to unknown conditions	during system construction,
I hereby certify that all the necessary information has been gathered to determine the compliance is determination of future system performance has been nor can be made due to unknown conditions possible abuse of the system, inadequate maintenance, or future water usage. Inspector name: Brian Humpal/Christopher Uebe Certification number: Inspect Minnesota, Midwest Soil Testing License number:	during system construction, C5342/C9852
possible abuse of the system, inadequate maintenance, or future water usage. Inspector name: Brian Humpal/Christopher Uebe Certification number: Business name: Inspect Minnesota, Midwest Soil Testing License number: Brian Humpal (4)	during system construction, C5342/C9852
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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 1 of 3

Property address: 10300 Perkins Ave N, Stillwater, MN 55082

Inspector initials/Date: 3/28/2019 8/4

1.	Impact on Public Health — Compliance component #1 of 5					
	Searched for surface			Verification method(s): ✓ Searched for surface outlet		
		stem discharge sewage to the ound surface.	☐ Yes ⊠ No	 Searched for surface outlet Searched for seeping in yard/backup in home 		
		stem discharge sewage to drain tile surface waters.	☐ Yes ⊠ No	 ☑ Excessive ponding in soil system/D-boxes ☐ Homeowner testimony (See Comments/Explanation) 		
		stem cause sewage backup into elling or establishment.	☐ Yes ⊠ No	☐ "Black soil" above soil dispersal system☐ System requires "emergency" pumping☐ Performed dye test		
		ny "yes" answer above indicates Imminent Threat to Public Heal		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)		
	It s			ome ponding. This ponding is an indication that the drainfield nount of soil disruption in the chambers caused by rodents.		
2.	Ta	nk Integrity – Compliance com	nponent #2 of 5			
	Co	ompliance criteria:		Verification method(s):		
		stem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes ⊠ No	☑ Probed tank(s) bottom☑ Examined construction records		
		epage pits meeting 7080.2550 may be npliant if allowed in local ordinance.		 Examined Tank Integrity Form (Attach) Observed liquid level below operating depth 		
=		wage tank(s) leak below their signed operating depth.	☐ Yes ⊠ No	☐ Examined empty (pumped) tanks(s)		
	lf y	ves, which sewage tank(s) leaks:		Probed outside tank(s) for "black soil"		
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			 ☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation) 		
3.	Lo	mments/Explanation: wered underwater camera into tanks - cher Compliance Conditions				
	a.	Maintenance hole covers are damaged	d, 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* ☒ № *System is an imminent threat to public health and safety			r impact public health or safety. ☐ Yes* ☒ No ☐ Unknown			
Explain:		Explain:				
	C.	System is non-protective of ground wa *System is failing to protect ground Explain:		determined by inspector ☐ Yes* ☒ No		

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Inspector initials/Date: 3/28/2019 **24**

4.	Soil Separation – Compliance compor	nent #4 of 5		
	Date of installation: 2002	Unknown	Verification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes	Soil observation does not expire. Proobservations by two independent pa	
	Compliance criteria:		unless site conditions have been alt	
	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: Drainfield has at least a two-foot vertical separation distance from periodically	☐ Yes ☐ No	requirements differ. Conducted soil observation(s) (A trace of the conducted soil observation) (A trace of the conducted soil observation) (Attace of the conducted soil observation) (A trace of the	ch boring logs) o drainfield) Explanation)
	Non-performance systems built April 1, 1996, or later or for non-performance 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.*	⊠ Yes □ No	Comments/Explanation: Reviewed previous compliance insp Reviewed design and permit records	ection from 2013.
	"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically	☐ Yes ☐ No	A. Bottom of distribution media B. Periodically saturated soil/bedrock	See Attached Boring Log(s)
	saturated soil or bedrock.		C. System separation D. Required compliance separation*	
5.	Any "no" answer above indicates to Failing to Protect Groundwater. Operating Permit and Nitrogen B		*May be reduced up to 15 percent if Ordinance.	·
<u>J.</u>	Is the system operated under an Operating Per		No If "yes", A below is required	icable
	Is the system required to employ a Nitrogen BN BMP=Best Management Practice(s) specif	IP? ☐ Yes ☐	No If "yes", B below is required	
	If the answer to both questions is "no",	_		
	Compliance criteria		·	
	a Operating Permit number:			
	Have the Operating Permit requirements I	peen met?	☐ Yes ☐ No	
			□ Voc. □ No.	
	b. Is the required nitrogen BMP in place and		☐ Yes ☐ No	

Any "no" answer indicates Noncompliance.

Property address: 10300 Perkins Ave N, Stillwater, MN 55082

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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Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

This information will be used for the purpose of conducting an MPCA Compliance Inspection.

7	I m: 42.00 = 2.5		
Date of Inspection: March 28, 2019	Time: 12:00 PM		
Property Address: 10300 Perkins Ave N, Stillwater, MN	Zip: 55082		
Property Owner: Charles Chasney	Phone: 651-983-4939		
□ Aerobic □ Plastic □ Gravelless trench □ Exp □ Lift □ Metal □ Chamber trench □ Ces	Other ernative system perimental system sspool system er system		
Are the tank maintenance covers accessible? ⊠ Yes ☐ No *If no, pro performed through the maintenance holes. Maintenance hole covers show			
the ground surface to facilitate access and proper maintenance of the syst			
\@	gals.): 2-1000		
How long has seller owned the property? Number of residents			
Number of bedrooms? 5 Are all floors drained by gravity?	Y		
Garbage disposal? N Whirlpool bath? N			
More than one system (laundry, etc.)? N	4 9		
Does this property have any footing drain tiles connected to the septic sy	stem?		
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? 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 ro	oots, 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? 2018 Name of pumper: Pi	nky's Sewer Service		
	nonitoring 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. I also considered "non-compliant/failing" per MPCA rules, that the inspector must by law sub local government unit within 15 days of the date of inspection completion. I also agree this report, that I/we are ultimately responsible for payment of all fees for all work performance.	omit a copy of this report to the e that unless otherwise noted in		

Date:

by Inspect Minnesota and Midwest Soil Testing.

Owner/Occupant:

Log Of Soil Borings

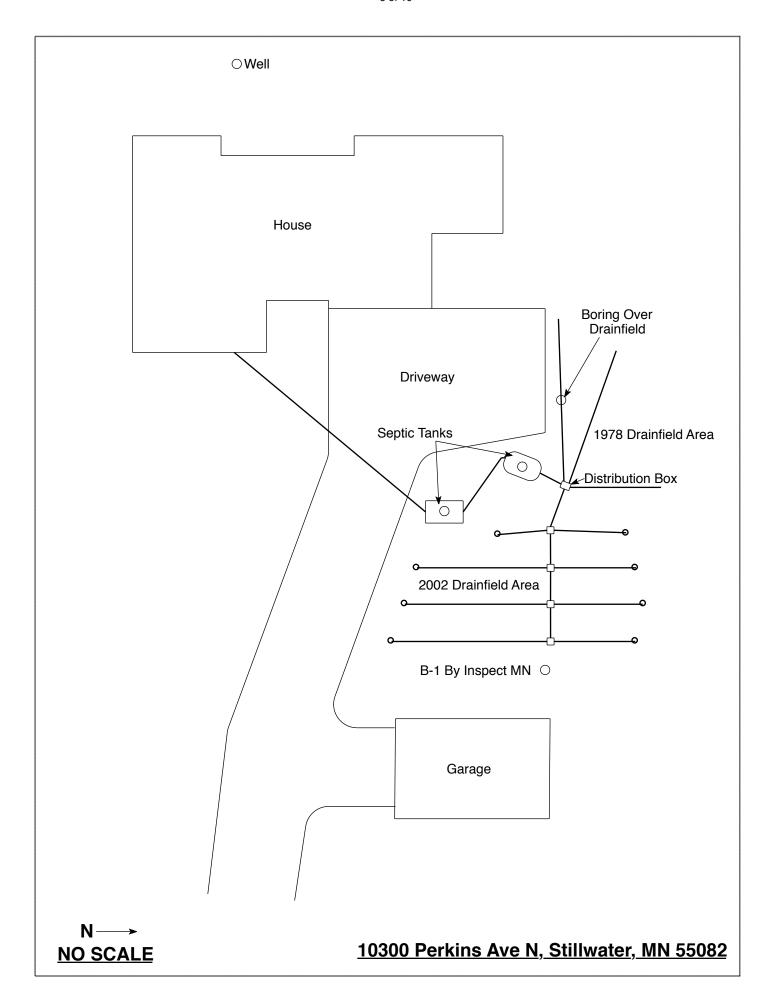
Location of Project: 10300 Perkins Ave N, Stillwater, MN 55082					
Borings Made By: Inspect Minnesota				3/28/19	
Auger Used: Hand/Bucket		Classi	fication System:	USDA	
В	Boring Number:	1		Boring Number:	
Surface Elevation of Boring	I I	und surface as last ofield trench	Surface Elevation of Boring	of	
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	ncountered_
0-9 9-19 19-26 26-41 41-60 60-73 73-80	10YR 3/3 10YR 3/4 10YR 3/4 10YR 4/4 Mei 10YR 4/4 10YR 5/4 I	2 Loamy Sand 3 Sandy Loam 4 Sandy Loam 5 Medium Sand 6 Medium Sand 7 Medium Sand 8 Fine Sand With 1 Iae Banding			
80" D	epth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same El	levation Of Boring	g Relative To System	E	Elevation Of Boring	Relative To System
-32" D	epth To Bottom (Of Distribution Media		Depth To Bottom C	of Distribution Media
≥48" Of Separation			Of Separation		
5 1 0 C P At					
	and Of Boring At:	80"		End Of Boring At:	
	edox Present At: Vater Present At:	None		Redox Present At: Water Present At:	
Standing W	vater Fresent At.	None	Stariumy	vvater riesent At.	

Bottom Of Distribution Medium At: 32 Inches

Log Of Soil Borings

Location of Project: 10300 Perkins Ave N, Stillwater Township, MN 55082					
Borings Made By: Inspect Minnesota			Date:	7/11/13	
Auger Used: Hand/Bucket		Classi	ification System:	USDA	
	Boring Number:	1		Boring Number:	
Surface	Same ground	surface as inspection	Surface		
Elevation	of pipe at mide	dle of last drainfield	Elevation	of	
Boring		trench	Boring		
Depth In	Soils E	ncountered	Depth In	Soils Encountered	
Inches 0-14		/3 Loamy Sand	Inches		
14-20		andy Clay Loam			
20-40	7.5YR 4/4	Medium Sand			
40-52 52-72		ine Medium Sand			
JZ-/Z	7.31K 3/4 ME	dium Coarse Sand			
72"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
				-	
·		Elevation Of Boring Relative To System			
-32" Depth To Bottom Of System ≥40" Of Separation		Depth To Bottom Of System Of Separation			
	End Of Boring At:	72"		End Of Boring At:	
Redox Present At: None		None	Redox Present At:		
Standing	Water Present At:	None	Standing	Water Present At:	

Bottom Of Distribution Medium At:	32 Inches



DISCLAIMER

Brian L. Humpal, Inc. dba. 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

Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2019

Issued: 11/20/2018

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #	Name	Certification Expires:
C9633	Anthony P Scully	3/5/2020
	Installer, Designer (Apprentice)	
C5342	Brian L Humpal	10/15/2023
	Installer, Maintainer, Serv Prov, Adv	Designer, Adv Inspector
C9852	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