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: 77 Long Lake Road, Mahtomedi, MN 55115

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Bill Griggs, and have reviewed the original design/permit records on file at Washington County. This system consists of two pre-cast septic tanks, a precast lift tank, and a rock trench drainfield.

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.

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.

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): 7/8/2017				
· · · · · · · · · · · · · · · · · · ·	mpliant – Notice of Noncompliance grade Requirements on page 3)			
Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminent threat Other Compliance Conditions (Compliance Component #3) – Imminent 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	reat to public health and safety ter otect groundwater vater			
Property Information Parcel ID# or Sec/Twp/Rar	ge:			
·	for inspection: Requested By City			
Property owner: Bill Griggs Owner's	Owner's phone: 651-248-8750			
or .				
•	Representative phone:			
Brief system description: Two pre-cast septic tanks, a pre-cast lift tank, and rock tr				
Comments or recommendations:				
Certification				
I hereby certify that all the necessary information has been gathered to determine the 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 Certifica	tion number: _L5342			
Business name: Inspect Minnesota, Midwest Soil Testing Lice	nse number: L2896			
Inspector signature: Brian Humpal Ph	one number: 651-492-7550			
Necessary or Locally Required Attachments				
	local ordinance			
☑ Other information (list): Report Summary, Property Information, Disclaimer, L	cense			

Property address: 77 Long Lake Road, Mahtomedi, MN 55115

Inspector initials/Date: 08/07/2017

<u>1.</u>	lm	Impact on Public Health – Compliance component #1 of 5							
	Co	Compliance criteria:				Verification method(s):			
		rstem discharge sewage to the bund surface.	☐ Yes ⊠] No	\boxtimes	Searched for seeping in yard/backup in home			
		stem discharge sewage to drain tile surface waters.	☐ Yes ⊠] No		Homeowner testimony (See Comments/Explanation)			
		rstem cause sewage backup into relling or establishment.	☐ Yes ⊠] No		"Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test			
		Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.			☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)				
		Comments/Explanation: None of the above found.							
2.	Ta	ank Integrity – Compliance con	nponent #2	of 5					
		ompliance criteria:	<u>'</u>		Ve	rification method(s):			
	Sy	rstem consists of a seepage pit,	☐ Yes ⊠	No		Probed tank(s) bottom			
		sspool, drywell, or leaching pit.				Examined construction records			
	Se	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 signed operating depth.	☐ Yes ⊠] No		Examined empty (pumped) tanks(s)			
	lf y	es, which sewage tank(s) leaks:				Probed outside tank(s) for "black soil" Unable to verify (See Comments/Explanation)			
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			r.	☐ Other methods not listed (See Comments/Explanation)				
	Сс	omments/Explanation:							
		wered underwater camera into tanks -							
	Lif	t pump and alarm were operational at	the time of th	ne inspection.					
_	_								
<u>3.</u>	Ot	ther Compliance Conditions	– Complia	nce componen	t #3	3 of 5			
	a.	Maintenance hole covers are damage	d, cracked, ur	nsecured, or appe	ear t	o structurally unsound. ☐ Yes* ☒ No ☐ Unknown			
	b.	Other issues (electrical hazards, etc.) to i *System is an imminent threat to put			act	public health or safety. ☐ Yes* ☒ No ☐ Unknown			
		Explain:							
	C.	c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☒ No *System is failing to protect groundwater				ned by inspector ☐ Yes* ☒ No			
		Explain:							

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Property address: 77 Long Lake Road, Mahtomedi, MN 55115

Inspector initials/Date: 08/07/2017

4.	Soil Separation – Compliance compor	nent #4 o	f 5					
	Date of installation: 2002	Unkn	own	Ver	ification meth	od(s):		
	Shoreland/Wellhead protection/Food Beverage Lodging?		☐ No		observation doe			
	Compliance criteria:							
	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	☐ Yes	□ No		requirements differ. Conducted soil observation(s) (Attach boring to Two previous verifications (Attach boring to Not applicable (Holding tank(s), no drainfield Unable to verify (See Comments/Explanation)		h boring logs) drainfield)	
	separation distance from periodically saturated soil or bedrock.			\boxtimes (Other (See Comm	nents/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:	⊠ Yes	□No		nments/Explanat iewed design an		S.	
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*							
	"Experimental", "Other", or "Performance"	☐Yes	□No	Indi	cate depths o	f elevations		
	systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)			A. B	ottom of distribution	on media	See Attached Boring Log(s)	
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.				eriodically saturate	ed soil/bedrock		
				D. R	Required compliand	ce separation*		
	Any "no" answer above indicates to Failing to Protect Groundwater.	ne syste	em is		*May be reduced up to 15 percent if allowed by Local Ordinance.			
				_	manoc.			
5.	Operating Permit and Nitrogen B	MP* – C	omplianc	e compo	nent #5 of 5	⊠ Not appl	icable	
	Is the system operated under an Operating Per	mit?	☐ Yes	⊠ No	lf "yes", A belo	w is required		
	Is the system required to employ a Nitrogen BMP?							
	BMP=Best Management Practice(s) specified in the system design							
	If the answer to both questions is "no",	this sec	tion does	s not nee	ed to be comp	leted.		
	Compliance criteria							
	a. Operating Permit number:							
		the Operating Permit requirements been met?			Yes No			
	b. Is the required nitrogen BMP in place and properly functioning?			ı? [☐ Yes ☐ No			
	Any "no" answer indicates Noncom							
	-	-						

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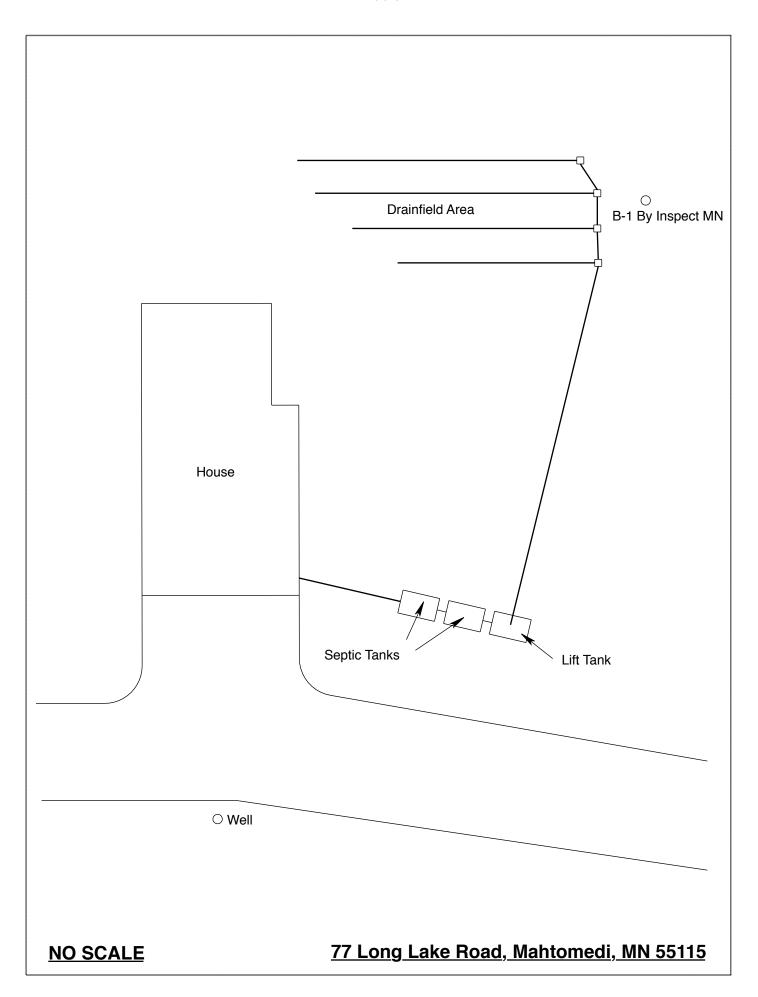
Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: August 7, 2017 Time: 12:00 PM							
Property Address: 77 Long Lake Road, Mahtomedi, MN	Zip: 55115						
Property Owner: Bill Griggs	Phone: 651-248-8750						
Tank(s) Tank(s)Material Soil Treatment System	Other						
Septic 2 Fiberglass Son Freatment System	Alternative system						
Aerobic Plastic Gravelless trench	Experimental system						
☐ Lift ☐ Metal ☐ Chamber trench	Cesspool system						
Holding Concrete Seepage bed	Other system						
Other: Block Mound							
Other At-grade							
Are the tank maintenance covers accessible? \square Yes \boxtimes No *I							
performed through the maintenance holes. Maintenance hole co	vers should be made accessible to						
the ground surface to facilitate access and proper maintenance of	f the system.						
Year house built: 2002 Year septic installed: 2002	Tank size (gals.): 2-1000						
How long has seller owned the property? 2002 Number of a	residents in home? 5						
Number of bedrooms? 4 Are all floors drained by	gravity? Lower Pumped						
Garbage disposal? Y Whirlpool bath	n? N						
More than one system (laundry, etc.)? N							
Does this property have any footing drain tiles connected to the	septic system? N						
Are any buildings on this property such as garages or out-buildings connected to this system? N							
Are there any additional systems on this property serving other b	ouildings? N						
Location of septic system on lot? North Side							
Location of water well on lot? East Side Is t	ne 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 pu	mper: Smilie's Sewer Service						
How often pumped in previous years? Every 2-3 Is system on a monitoring plan? N							
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: Bill Grigg's Signature On File Date: 08/07/2017



Log Of Soil Borings

Location of Project: 77 Long Lake Road, Mahtomedi, MN 55115							
Borings Made By: Inspect Minnesota			Date: 8/7/17				
Auger Used: Hand/Bucket			Classification System: USDA				
Boring Number: 1			Boring Number:				
Surface Elevation of Boring Same ground surface as last drainfield trench		Surface Elevation Boring	of				
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils En	Soils Encountered		
0-12 12-35 35-80	10YR 3/4 Mediu ≈15-20% 10YR 4/4 Medium (2 Loamy Sand Im Sand With Gravel Rock Fragments Course Sand With Gravel ock Fragments					
80" Depth To End Of Boring Or Redox		I	Depth To End Of Bo	oring Or Redox			
Same Elevation Of Boring Relative To System			Elevation Of Boring	Relative To System			
-36" Depth To Bottom Of Distribution Media			Depth To Bottom O	of Distribution Media			
≥44" Of Separation			Of Separation				
	E. LOCB. I At	00"		E. J. Of D. J At			
End Of Boring At: 80"				End Of Boring At:			
Redox Present At: None			Redox Present At:				
Standing Water Present At: None			Standing	Water Present At:			

Bottom Of Distribution	Medium At:	36 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: 12/22/2017

Issued: 11/29/2016

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #

Name

Certification Expires:

C5342

Brian L Humpal

10/15/2017

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

C9852

Christopher R Uebe

3/4/2018

Designer, Inspector



St. Paul. Minnesota 55155-4194

Steven Giddings, Manager

Prevention and Solid Waste Management Section