Inspect Minnesota & Midwest Soil Testing

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Designer & Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM COMPLIANCE REPORT

Date: June 21, 2016 Time: 8:30 PM Owner: Kathy Hoppe

Inspection Address: 8011 Hidden Bay Trail N, Lake Elmo, MN 55042

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this septic system and have reviewed the original design/permit records on file at the City of Lake Elmo. This system consists of two pre-cast septic tanks and a rock trench drainfield.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils. This system <u>is not</u> an imminent threat to public health or safety per MPCA rule 7080.1500 Subp. 4(A).

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact Washington County Environmental Specialist, Mr. Chris LeClair (651-430-4052), to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

Brian Humpal
Brian Humpal



St. Paul, MN 55155-4194

Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	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): 6/21/2016	
•	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 to ☐ Other Compliance Conditions (Compliance Component #3) – Imminent tho ☐ 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	reat to public health and safety ter otect groundwater vater
Property Information Parcel ID# or Sec/Twp/Ran	ao.
·	ge. for inspection: Property Sale
	phone: 651-426-3216
or	
•	ntative phone:
· · · · · · · · · · · · · · · · · · ·	ry authority phone: 651-430-4052
Brief system description:	
Comments of 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 unknow possible abuse of the system, inadequate maintenance, or future water usage.	
Inspector name: Brian Humpal Certification	tion number: L5342
	nse number: <u>L2896</u>
Inspector signature: Brian Humpal Pho	one number: 651-492-7550
Necessary or Locally Required Attachments	
	local ordinance
☐ Other information (list): Report Summary, Property Information, Disclaimer, Li	

1.	ln	npact on Public Health – Cor	mpliance compone	nt #1 of 5				
	C	ompliance criteria:		Verification method(s):				
		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) ☐ "Black soil" above soil dispersal system 				
		vstem cause sewage backup into velling or establishment.	☐ Yes ⊠ No	☐ 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)				
		omments/Explanation: one of the above found.						
	INC	one of the above found.						
2.	Ta	ank Integrity – Compliance con	nponent #2 of 5					
	C	ompliance criteria:		Verification method(s):				
		vstem consists of a seepage pit,	☐ Yes ⊠ No	□ 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	☐ Yes ⊠ No	Examined empty (pumped) tanks(s)				
		esigned operating depth. yes, which sewage tank(s) leaks:		☐ Probed outside tank(s) for "black soil"				
		· · · · · · · · · · · · · · · · · · ·	otoo the	☐ Unable to verify (See Comments/Explanation)				
		ny "yes" answer above indica ⁄stem is Failing to Protect Gr		☑ Other methods not listed (See Comments/Explanation)				
	Сс	omments/Explanation:						
	Lo	wered underwater camera into tanks -	baffles and tank wa	lls OK.				
_	•							
3.	U	ther Compliance Conditions	·					
	a.	_		d, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown				
	b.	Other issues (electrical hazards, etc.) to i *System is an imminent threat to pu	-	ersely impact public health or safety. Yes* No Unknown Pty				
		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:						

Property address: 8011 Hidden Bay Trail N, Lake Elmo, MN 55042

Inspector initials/Date: 6/21/2016

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1.	Soil Separation – Compliance compor	nent #4 c	of 5				
	Date of installation: 1998 Shoreland/Wellhead protection/Food Beverage	Unkr			erification method(s):		
	Lodging? Compliance criteria:	☐ Yes	⊠ No	0	Soil observation does not expire. Probservations by two independent parties site conditions have been all	parties are sufficient,	
	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 saturated soil or bedrock.	Yes	□No	re	unless site conditions have been altered or local requirements differ. ☐ Conducted soil observation(s) (Attach boring ☐ Two previous verifications (Attach boring logs ☐ Not applicable (Holding tank(s), no drainfield) ☐ Unable to verify (See Comments/Explanation) ☐ Other (See Comments/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	C	Comments/Explanation:		
	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 or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)	☐ Yes ☐ No	□No	 _ <u>_</u>	ndicate depths of elevations		
				<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		
	saturated soil of bedrock.			D	. Required compliance separation*		
5	Any "no" answer above indicates the system is Failing to Protect Groundwater. *May be reduced up to 15 percent if allowed by Local Ordinance. Ordinance. Not applicable						
<u>, </u>			•			licable	
Is the system operated under an Operating Permit? Yes No If "yes", A below is required 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: Have the Operating Permit requirements been met?				☐ Yes ☐ No		
	b. Is the required nitrogen BMP in place and	properly	functioning'	?	☐ Yes ☐ No		
	Any "no" answer indicates Noncompliance.						

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.

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

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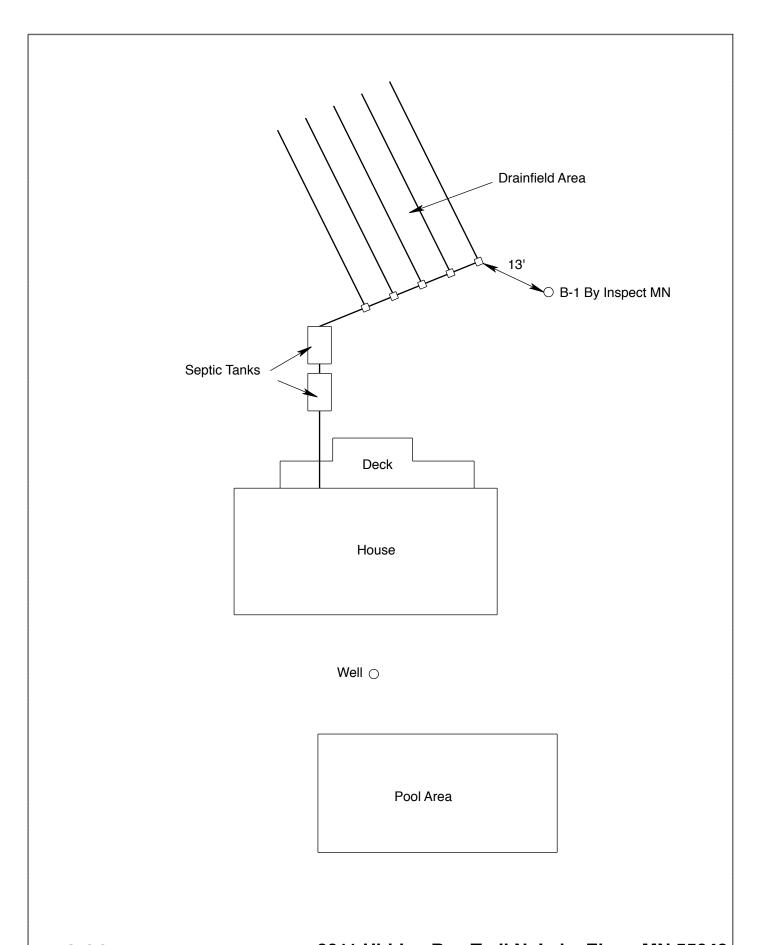
Property address: 8011 Hidden Bay Trail N, Lake Elmo, MN 55042

Inspector initials/Date: 6/21/2016

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: June 21, 2016	Time: 8:30 AM				
Property Address: 8011 Hidden Bay Trail N, Lake Elmo, MN	Zip: 55042				
Property Owner: Kathy Hoppe	Phone: 651-426-3216				
Tank(s) Tank(s)Material Soil Treatment System Septic 2 Fiberglass Soil Treatment System Aerobic Plastic Gravelless trench Lift Metal Chamber trench Holding 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 no, proper maintenance must be performed through the maintenance holes. Maintenance hole covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system.					
	Tank size (gals.): 2-1000				
	sidents in home?				
Number of bedrooms? 4 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 se	eptic 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? North 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? If yes, explain:					
When was the system last pumped? Name of pum	1				
How often pumped in previous years? 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. 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:				



NO SCALE

Log Of Soil Borings

Location of Project: 8011 Hidden Bay Trail N, Lake Elmo, MN 55042						
Borings Made By: Inspect Minnesota				Date:	6/21/16	
Auger Used: Hand/Bucket		Classi	ification System:	USDA		
Boring Number: 1			Boring Number:			
TEIEVALION OU		and surface as last offield trench	Surface Elevation Boring	of		
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	Soils Encountered	
Depth In InchesSoils Encountered0-17 17-4010YR 2/2 Loam 10YR 4/3 Silt Loam With Trace Of Gravel & Iron Nodules40-50 50-6610YR 4/3 Sandy Loam With Trace Of Gravel & Iron Nodules And 7.5YR 5/8 & 10YR 6/2 Redox 10YR 3/4 Sandy Loam With Trace Of Gravel & Iron Nodules And 7.5YR 5/8 & 10YR 6/2 Redox And 						
40" Depth To End Of Boring Or Redox		1	Depth To End Of Bo	oring Or Redox		
Same Elevation Of Boring Relative To System			Elevation Of Boring	Relative To System		
-35" Depth To Bottom Of Distribution Media =5" Of Separation			Depth To Bottom C Of Separation	of Distribution Media		
End Of Boring At: 70"			End Of Boring At:			
Redox Present At: 40"			Redox Present At:			
Standing Water Present At: None			Standing	Water Present At:		

Bottom Of Distribution Medium At: 35 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.

Sulbsurface Sewage Treatment Systems

Non-transferable



License # L2896

Maintainer License Expires:

Adv Inspector License Expires:

Oct 28, 2015 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016

Adv Designer License Expires:

Date of Issuance:

Installer License Expires:

Certification

Inspect Minnesota, Midwest Soil Testing

Expires

10/15/2017 10/15/2017

Advanced Designer (Certified) Advanced Inspector (Certified)

Maintainer (Certified)

Certification Type

Designated Certified

Individual (DCI) Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal

10/15/2017

10/15/2017

10/15/2017

Service Provider (Certified)

Installer (Certified)

Designer (Certified) Inspector (Certified)

Christopher R. Uebe Christopher R. Uebe

03/04/2018

03/04/2018

Steven Giddings Manager Environmental Business Assistance Section



Minnesota Pollution Control Agency

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