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 COMPLIANCE REPORT

Inspection Address: 8517 Hidden Bay Trl N, Lake Elmo, MN 55042

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at City of Lake Elmo. This older system (installed in 1993) 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.

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 <u>verify</u> 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



Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	Boo Type. Complained and Emoreoment				
Instructions: Inspection results based on Minnesota Pollution Control Agency (M requirements and attached forms – additional local requirements may also apply.	PCA) For local tracking purposes:				
Submit completed form to Local Unit of Government (LUG) and system ow within 15 days	ner				
System Status					
System status on date (mm/dd/yyyy): 4/12/2018					
	ncompliant – Notice of Noncompliance se Upgrade Requirements on page 3)				
Reason(s) for noncompliance (check all applicable) ☐ Impact on Public Health (Compliance Component #1) – Imminent the ☐ Other Compliance Conditions (Compliance Component #3) – Immin ☐ Tank Integrity (Compliance Component #2) – Failing to protect ground other Compliance Conditions (Compliance Component #3) – Failing ☐ Soil Separation (Compliance Component #4) – Failing to protect ground other Component (Compliance Component #4) – Failing to protect ground other Component (Compliance Component #4) – Failing to protect ground other Component (Compliance Component #4) – Failing to protect ground other Component (Compliance Component #4) – Failing to protect ground other Component #4) – Failing t	ent threat to public health and safety undwater g to protect groundwater oundwater				
Property Information Parcel ID# or Sec/Tw	p/Range:				
• •	ason for inspection: Property Transfer				
· · ·	Owner's phone:				
or					
	presentative phone:				
· · · · · · · · · · · · · · · · · · ·	Regulatory authority phone: 651-430-4052				
Brief system description: Two pre-cast septic tanks and a rock trench drainfie	ld.				
Comments or recommendations: d					
Certification					
I hereby certify that all the necessary information has been gathered to determin determination of future system performance has been nor can be made due to u possible abuse of the system, inadequate maintenance, or future water usage.	•				
Inspector name: Brian Humpal Ce	rtification number: L5342				
Business name: Inspect Minnesota, Midwest Soil Testing	License number: L2896				
Inspector signature: Brian Humpal	Phone number:651-492-7550				
Necessary or Locally Required Attachments					
	ns per local ordinance				
☐ Other information (list): Report Summary, Property Information, Disclaim	•				
Z outer members (not).					

Property address: 8517 Hidden Bay Trl N, Lake Elmo, MN 55042

Inspector initials/Date: 4/12/2018

<u>1.</u>	lm	Impact on Public Health – Compliance component #1 of 5					
	Co	Compliance criteria:			Verification method(s):		
		stem 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		Excessive ponding in soil system/D-boxes Homeowner testimony (See Comments/Explanation) "Plack soil" above soil dispersal system	
		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)		
		omments/Explanation: one of the above found.					
2.	Ta	ank Integrity — Compliance com	ponent #2	of 5			
	Co	ompliance criteria:			Ve	rification method(s):	
		stem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes ⊠	No		Probed tank(s) bottom	
		epage pits meeting 7080.2550 may be				Examined construction records Examined Tank Integrity Form (Attach)	
	CO	mpliant if allowed in local ordinance.				Observed liquid level below operating depth	
		ewage tank(s) leak below their signed operating depth.	☐ Yes ⊠] No		Examined empty (pumped) tanks(s)	
		yes, which sewage tank(s) leaks:			Probed outside tank(s) for "black soil"		
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			r.	 ☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation) 		
	Comments/Explanation:						
	Lowered underwater camera into tanks - baffles and tank walls OK.						
_	_						
3.	U	ther Compliance Conditions					
	a.	Maintenance hole covers are damaged		• •			
	 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.	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

Property address: 8517 Hidden Bay Trl N, Lake Elmo, MN 55042

Inspector initials/Date: 4/12/2018

Data of installations 4000					
Date of installation: 1993 Shoreland/Wellhead protection/Food Beverage	Unkr		Verification method(s):		
Lodging?	⊠ Yes □ No		Soil observation does not expire. Previous soil observations by two independent parties are sufficier		
Compliance criteria:	Compliance criteria:			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 Two previous verifications (A Not applicable (Holding tank(s)	ttach boring logs)	
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.			☐ 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	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	☐ Yes	Yes No	Indicate depths of elevation		
or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)			A. Bottom of distribution media	See Attached Boring Log(s)	
Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.			B. Periodically saturated soil/bedrock C. System separation	ζ	
			D. Required compliance separation*		
Any "no" answer above indicates to Failing to Protect Groundwater.	*May be reduced up to 15 percent if allowed by Local Ordinance.				
. Operating Permit and Nitrogen B	MP* – 0	Compliance	e component #5 of 5 🛮 🖂 Not a r	plicable	
Is the system operated under an Operating Per	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 sec	tion 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?

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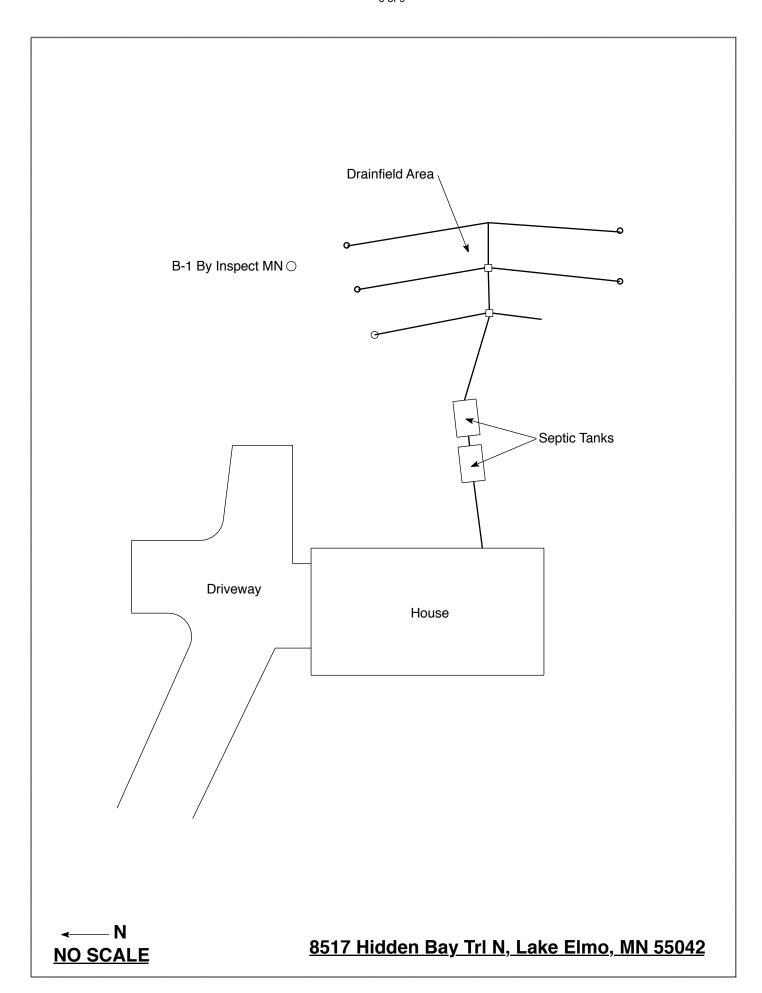
Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

	- -				
Date of Inspection: April 12, 2018	Time: 9:00 AM				
Property Address: 8517 Hidden Bay Trl N, Lake Elmo, MN	Zip: 55042				
Property Owner: Kevin Herber	Phone:				
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	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				
How long has seller owned the property? Number of r					
Number of bedrooms? 2 Are all floors drained by	3				
Garbage disposal? Whirlpool bath	?				
More than one system (laundry, etc.)?					
Does this property have any footing drain tiles connected to the septic 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 b	uildings?				
Location of septic system on lot? East Side					
	e well a deep well? Y				
Have you ever experienced any problems with the system such as					
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? 2017 Name of pur	nper: Pinky's Sewer Service				
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? Y					
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					

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.



Log Of Soil Borings

Location of Project: 8517 Hidden Bay Trl N, Lake Elmo, MN 55042					
Borings Made By: Inspect Minnesota			Date: 4/12/18		4/12/18
Auger Used: Hand/Bucket			Classification System: USDA		USDA
Boring Number: 1		Boring Number:			
Surface Elevation of Boring Same ground surface as last drainfield trench		Surface Elevation Boring			
Depth In Inches	N In Soils Encountered		Depth In Inches	Soils Er	ncountered
0-12 12-41 41-60	10YR 3/3 10YR 3/4 M	2 Loamy Sand Medium Sand edium Sand With 3 10YR 7/2 Redox			
41"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same	Elevation Of Boring	g Relative To System		Elevation Of Boring	Relative To System
-37" Depth To Bottom Of Distribution Media				of Distribution Media	
=4" Of Separation			Of Separation		
	End Of Boring At:	60"		End Of Boring At:	
	Redox Present At:	41"		Redox Present At:	
Standing Water Present At: None			Standing	Water Present At:	
110110					

Bottom Of Distribution Medium At: 37 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: 12/22/2018

Issued: 10/10/2017

es:

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #	Name	Certification Expire
C9633	Anthony P Scully	7/28/2018
	Installer, Designer (Conditional)	
C5342	Brian L Humpal	10/15/2020
	Installer, Maintainer, Serv Prov,	Adv Designer, Adv Inspector
C9852	Christopher R Uebe	3/4/2018
	Designer, Inspector	



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

Charles K Thompson, Supervisor Certification & Training Unit