### **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Advanced Inspector

### SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

**Inspection Address:** 5451 Hilltop Ave N, Lake Elmo, MN 55042

### REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Leslie Dady, and have reviewed the original design/permit records, along with a previous compliance inspection from 2011, which were on file at Washington County. This very old system (install in 1978 & 1985) consists of a pre-cast septic 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 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.

Brian Humpal



Other information (list):

St. Paul, MN 55155-4194

### **Compliance Inspection Form**

### Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

For local tracking purposes: Instructions: Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply. Submit completed form to Local Unit of Government (LUG) and system owner within 15 days System Status System status on date (mm/dd/yyyy): 11/21/2016 Compliant – Certificate of Compliance Noncompliant - Notice of Noncompliance (Valid for 3 years from report date, unless shorter time (See Upgrade Requirements on page 3) frame outlined in Local Ordinance.) Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) - Imminent threat to public health and safety Other Compliance Conditions (Compliance Component #3) - Imminent threat to public health and safety ☐ 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) – Noncompliant **Property Information** Parcel ID# or Sec/Twp/Range: Property address: 5451 Hilltop Ave N, Lake Elmo, MN 55042 Reason for inspection: Property Sale Property owner: Michael Parent & Leslie Dady Owner's phone: or Owner's representative: Representative phone: Local regulatory authority: Washington County Regulatory authority phone: 651-430-4052 Brief system description: A pre-cast septic tank and a rock trench drainfield. Comments or recommendations: Certification I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage. Inspector name: Brian Humpal Certification number: L5342 Business name: Inspect Minnesota, Midwest Soil Testing License number: L2896 Inspector signature: Phone number: 651-492-7550 **Necessary or Locally Required Attachments** Soil boring logs System/As-built drawing

Report Summary, Property Information, Disclaimer, License

1.	lm	<b>npact on Public Health</b> – Cor	mpliance compone	nt #1 of 5			
	Co	ompliance criteria:		Verification method(s):			
		stem discharge sewage to the bund surface.	☐ Yes ⊠ No	<ul><li>☑ Searched for surface outlet</li><li>☑ Searched for seeping in yard/backup in home</li></ul>			
		stem discharge sewage to drain tile surface waters.	☐ Yes ⊠ No	<ul> <li>☑ Excessive ponding in soil system/D-boxes</li> <li>☑ Homeowner testimony (See Comments/Explanation)</li> <li>☑ "Black soil" above soil dispersal system</li> </ul>			
		stem cause sewage backup into velling or establishment.	☐ Yes ⊠ No	System requires "emergency" pumping Performed dye test			
		ny "yes" answer above indicates I Imminent Threat to Public Heal		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
	No	omments/Explanation: one of the above found. soil boring over the drainfield indicated	I no signs of ponding	g or black/grey soils.			
2.	Ta	ank Integrity – Compliance com	nponent #2 of 5				
	Co	ompliance criteria:		Verification method(s):			
		stem consists of a seepage pit,	☐ Yes ⊠ No	Probed tank(s) bottom			
		sspool, drywell, or leaching pit.  epage pits meeting 7080.2550 may be		☐ Examined Construction records			
		mpliant if allowed in local ordinance.		<ul><li>Examined Tank Integrity Form (Attach)</li><li>Observed liquid level below operating depth</li></ul>			
		wage tank(s) leak below their signed operating depth.	☐ Yes ⊠ No	☐ Examined empty (pumped) tanks(s)			
	lf y	ves, which sewage tank(s) leaks:		<ul><li>☐ Probed outside tank(s) for "black soil"</li><li>☐ Unable to verify (See Comments/Explanation)</li></ul>			
		ny "yes" answer above indica stem is Failing to Protect Gr		<ul> <li>Other methods not listed (See Comments/Explanation)</li> </ul>			
3.	Lo	omments/Explanation: wered underwater camera into tanks - ther Compliance Conditions					
	a.	Maintenance hole covers are damaged	d, cracked, unsecure	d, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown			
b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. ☐ Yes* ☒ No *System is an imminent threat to public health and safety							
		Explain:					
	C.	System is non-protective of ground wa *System is failing to protect ground		as as determined by inspector ☐ Yes* ☒ No			
		Explain:					

Property address: 5451 Hilltop Ave N, Lake Elmo, MN 55042

Inspector initials/Date: \_\_11/21/2016

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • 3 off9TY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 2 of 3

Date of installation: 1978/1985	Unknow	n <b>V</b> e	erification method(s):			
Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes ⊠		Soil observation does not expire. Previous soil			
Compliance criteria:				observations by two independent parties are sufficient, unless site conditions have been altered or local		
For systems built prior to April 1, 1996, and	⊠ Yes □	No re	quirements differ.			
not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:			Conducted soil observation(s) (Attack Two previous verifications (Attack	ch boring logs)		
Drainfield has at least a two-foot vertical			Not applicable (Holding tank(s), not applied to verify (See Comments)			
separation distance from periodically saturated soil or bedrock.			<ul> <li>☐ Unable to verify (See Comments/Explanation)</li> <li>☑ Other (See Comments/Explanation)</li> </ul>			
Non-performance systems built April 1,	☐ Yes ☐	No Co	omments/Explanation:			
1996, or later or for non-performance systems located in Shoreland or Wellhead		Re	eviewed previous compliance insp	ection from 2011.		
Protection Areas or serving a food, beverage, or lodging establishment:		Re	eviewed design and permit record	S.		
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*						
"Experimental", "Other", or "Performance"	☐ Yes ☐	No <b>In</b>	dicate depths of elevations			
systems built under pre-2008 Rules; Type IV		<u> </u>	dicate depths of cievations	See Attached		
or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)		_A	Bottom of distribution media	Boring Log(s)		
Drainfield meets the designed vertical		<u>B.</u>	Periodically saturated soil/bedrock			
separation distance from periodically saturated soil or bedrock.		C.	System separation			
			Required compliance separation*			
Any "no" answer above indicates t Failing to Protect Groundwater.	May be reduced up to 15 percent in Ordinance.	f allowed by Local				
			_			
. Operating Permit and Nitrogen B	<b>MP*</b> – Com	pliance comp	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 BMP?						
BMP=Best Management Practice(s) specified in the system design						
BMP=Best Management Practice(s) specif			and to be completed			
BMP=Best Management Practice(s) specifif the answer to both questions is "no",	this section	n does not n	reed to be completed.			
	this section	n does not n	reed to be completed.			
If the answer to both questions is "no",	this section	n does not n	· 			
If the answer to both questions is "no", Compliance criteria		n does not n	Yes No			

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. www.pca.state.mn.us • 800-657-3864 • 4 of ISTY 651-282-5332 or 800-657-3864 • Available in alternative formats

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

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Inspector initials/Date: 1121/2016

### **Inspect Minnesota & Midwest Soil Testing**

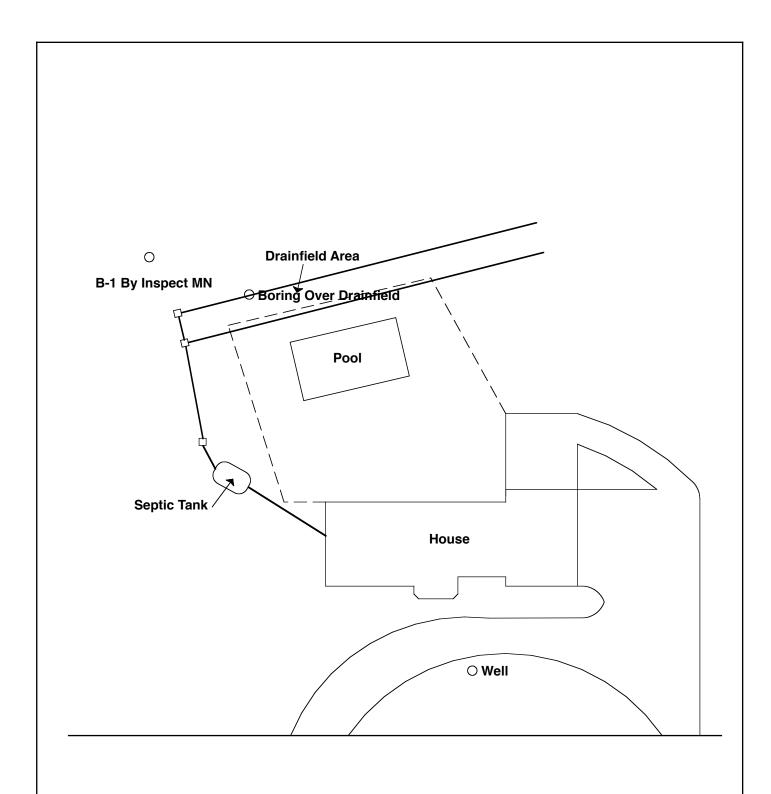
### Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: November 21, 2016 Time: 11:30 AM					
Property Address: 5451 Hilltop Ave N, Lake Elmo, MN Zip: 55042					
Property Owner: Michael Parent & Leslie Dady	Phone:				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       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.					
*	Γank size (gals.): 1200				
	sidents in home? 2				
Number of bedrooms? 4 Are all floors drained by gr	2				
Garbage disposal? Y Whirlpool bath?	N				
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the se	ptic 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 buildings? N					
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: 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? 2015 Name of pum	per: Pinky's Sewer Service				
How often pumped in previous years? Every 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? N					
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: Leslie Dady's Signature On File Date: 11/21/2016



**NO SCALE** 

5451 Hilltop Ave N, Lake Elmo, MN 55042

### **Log Of Soil Borings**

Location of Project: 5451 Hilltop Ave N, Lake Elmo, MN 55042						
Borings Made By: Inspect Minnesota				Date:	11/21/16	
Auger Used: Hand/Bucket			Classification System: Us		USDA	
Boring Number: 1			Boring Number:			
Surface	Same arou	ind surface as last	Surface			
Elevation	of Same ground surface as last drainfield trench		Elevation	of		
Boring			Boring			
Depth In	Soils Encountered		Depth In	Soils En	Soils Encountered	
Inches 0-10	10VP 3	/2 Silt Loam	Inches			
10-20		/4 Silt Loam				
20-66		Medium Sand				
66-80	10YR 5/3 Fine	e To Medium Sand				
80"	Denth To End Of B	oring Or Redov		Denth To End Of Bo	oring Or Redov	
	•	pth To End Of Boring Or Redox		Depth To End Of Boring Or Redox		
	Elevation Of Boring Relative To System		Elevation Of Boring Relative To System			
	Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media Of Separation			
	Of Separation			OI SEPAIALIUII		
	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	: 45 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 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.

# 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