#### **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

**Time:** 2:15 PM Date: February 7, 2017 Owner: Steve & Lisa Rutkowski **Inspection Address:** 8839 36<sup>th</sup> St N. Lake Elmo. MN **Site Conditions:** 4" Snow 12" Frost

#### REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Lisa Rutokski, and have reviewed the original design records, along with a previous compliance inspection from 2005 and 2008, which were on file at Washington County. This system consists of a pre-cast septic tank, which was installed in approximately 1995 and a very old rock trench drainfield, which was installed in 1974. It should be noted that the septic tank is currently due for maintenance pumping and should be pumped when possible.

Predicated on my inspection of the system, my review of the history of the system with the owner, and my review of 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.



St. Paul, MN 55155-4194

## **Compliance Inspection Form**

## Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	<b>3</b> , ,						
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): 2/7/2017							
	npliant – Notice of Noncompliance rade Requirements on page 3)						
Reason(s) for noncompliance (check all applicable)							
<ul> <li>☐ Impact on Public Health (Compliance Component #1) – Imminent threat to</li> <li>☐ Other Compliance Conditions (Compliance Component #3) – Imminent threat thr</li></ul>	reat to public health and safety ter otect groundwater ater						
Property Information Parcel ID# or Sec/Twp/Range	ge:						
46	or inspection: Property Sale						
	phone: 651-775-6727						
or							
	ntative phone:						
	ry authority phone: 651-430-4052						
Brief system description: A pre-cast septic tank and a rock trench drainfield.  Comments or recommendations:							
It should be noted that the septic tank is currently due for maintenance pumping and sl	nould be pumped when possible.						
Certification  I hereby certify that all the necessary information has been gathered to determine the o							
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.	n conditions during system construction,						
Inspector name: Brian Humpal Certificat	ion number: _L5342						
	nse number: L2896						
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, Lice							

1.	Impact on Public Health — Compliance component #1 of 5				
Compliance criteria:			Verification method(s):		
	System discharge sewage to the ground surface.	☐ Yes  ☐ No	<ul> <li>✓ Searched for surface outlet</li> <li>✓ Searched for seeping in yard/backup in home</li> </ul>		
	System discharge sewage to drain tile or surface waters.	☐ Yes ⊠ No	<ul> <li>☑ Excessive ponding in soil system/D-boxes</li> <li>☑ Homeowner testimony (See Comments/Explanation)</li> </ul>		
	System cause sewage backup into dwelling or establishment.	☐ Yes  ☐ No	<ul><li>"Black soil" above soil dispersal system</li><li>System requires "emergency" pumping</li><li>Performed dye test</li></ul>		
	Any "yes" answer above indicates an Imminent Threat to Public Heal		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)		
	Comments/Explanation: None of the above found. A soil boring over the drainfield indicated no signs of ponding or black/grey soils.				
2.	Tank Integrity – Compliance con	nponent #2 of 5			
	Compliance criteria:		Verification method(s):		
	System consists of a seepage pit, cesspool, drywell, or leaching pit.	☐ Yes ⊠ No	<ul><li>☑ Probed tank(s) bottom</li><li>☑ Examined construction records</li></ul>		
	Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		<ul><li>Examined Tank Integrity Form (Attach)</li><li>Observed liquid level below operating depth</li></ul>		
	Sewage tank(s) leak below their designed operating depth.	☐ Yes ⊠ No	☐ Examined empty (pumped) tanks(s)		
	If yes, which sewage tank(s) leaks:		<ul><li>☐ Probed outside tank(s) for "black soil"</li><li>☐ Unable to verify (See Comments/Explanation)</li></ul>		
	Any "yes" answer above indica system is Failing to Protect Gr		☐ Chable to Verny (ecc Comments Explanation) ☐ Other methods not listed (See Comments/Explanation)		
3.	Comments/Explanation: Lowered underwater camera into tank - baffles and tank walls OK. It should be noted that the septic tank is currently due for maintenance pumping and should be pumped when possible.  Other Compliance Conditions — Compliance component #3 of 5				
	•		r appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown		
	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. 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: 8839 36th St N, Lake Elmo, MN 55042

Inspector initials/Date: 2/7/2017

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1.	. Soil Separation - Compliance component #4 of 5				
	Date of installation: 1974 & 1995	Unknown	Verification method(s):		
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes ☒ No	Soil observation does not expire. Pro observations 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:	⊠ Yes □ No	requirements differ.  ☐ Conducted soil observation(s) (Attach boring) ☐ Two previous verifications (Attach boring logs) ☐ Not applicable (Holding tank(s), no drainfield)		
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	oot vertical Unable to verify (See Comments/Expl		Explanation)	
	Non-performance systems built April 1,	☐ Yes ☐ No	Comments/Explanation:		
	1996, or later or for non-performance systems located in Shoreland or Wellhead		Reviewed previous compliance insp	ection from 2008.	
	Protection Areas or serving a food,		Reviewed previous compliance insp	ection from 2005.	
	beverage, or lodging establishment:  Drainfield has a three-foot vertical		Reviewed design records.		
	separation distance from periodically saturated soil or bedrock.*				
	"Experimental", "Other", or "Performance"	☐ Yes ☐ No	Indicate depths of 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. Bottom of distribution media	See Attached Boring Log(s)	
	Drainfield meets the designed vertical		B. Periodically saturated soil/bedrock		
	separation distance from periodically saturated soil or bedrock.		C. System separation		
	Saturated 3011 of Bearook.		D. Required compliance separation*		
_	Any "no" answer above indicates the system is Failing to Protect Groundwater.  *May be reduced up to 15 percent if allowed by Local Ordinance.				
) <u>.</u>	Operating Permit and Nitrogen B			icable	
	Is the system operated under an Operating Per		•		
	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 section does not need to be completed.				
	Compliance criteria				
a. Operating Permit number:					
	Have the Operating Permit requirements been met?				
	b. Is the required nitrogen BMP in place and	properly functioning?	Yes No		
	Any "no" answer indicates Noncompliance.				

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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Property address: 8839 36th St N, Lake Elmo, MN 55042

Inspector initials/Date: 2/7/2017

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

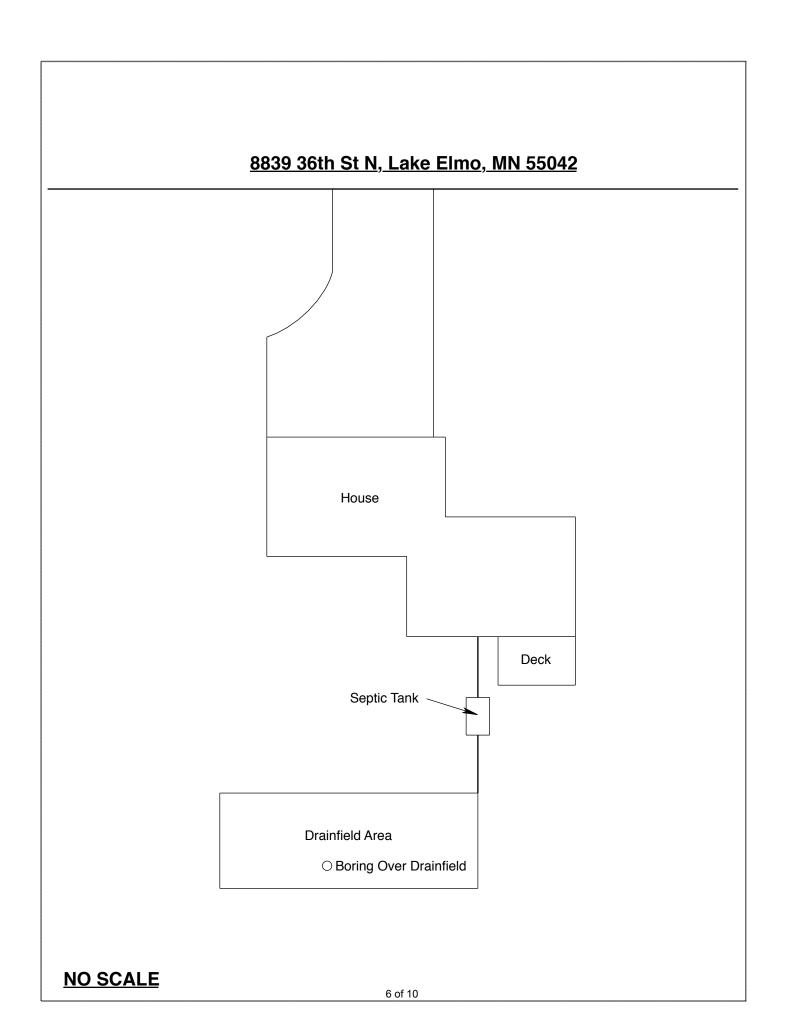
#### Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: February 7, 2017	Time: 2:15 PM				
Property Address: 8839 36 <sup>th</sup> St N, Lake Elmo, MN	Zip: 55042				
Property Owner: Steve & Lisa Rutkowski	Phone: 651-775-6727				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Scook trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Alternative system  Experimental system  Cesspool system  Other system				
Are the tank maintenance covers accessible?   Yes   No performed through the maintenance holes. Maintenance hole the ground surface to facilitate access and proper maintenance	covers should be made accessible to				
Year house built: 1974 Year septic installed: 1974 & 9					
	of residents in home? 2-4				
Number of bedrooms? 3 Are all floors drained by	, c ,				
Garbage disposal? N Whirlpool b	eath? 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 buildings? N					
Location of septic system on lot? South Side					
	s the well a deep well? N/A				
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:					
	pumper: Pinky's Sewer Service				
How often pumped in previous years? Due For Pump					
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: Lisa Rutkowski's Signature On File Date: 2/7/2017



### **Log Of Soil Borings**

Location of Project: 8839 36th Street N, Lake Elmo, MN 55042					
Borings Made By: Inspect Minnesota			,	Date:	12/6/08
Auger Used: Hand/Bucket			Classi	USDA	
	Boring Number:	1		Boring Number:	
Surface Same as ground surface at sw and		Surface Elevation Boring			
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Encountered	
0-3 3-34 34-52 52-102	7.5YR 4/3 Clay 7.5YR 4/4 Loa	l/Grass Mat y Loam With Gravel amy Sand & Gravel my Sand & Gravel			
102" Depth To End Of Boring Or Mottled Soils			Depth To End Of Bo	oring Or Mottled Soils	
Same Elevation Of Boring Relative To System			Elevation Of Boring	Relative To System	
-54" Depth To Bottom Of System		Depth To Bottom Of System			
>/=48" Of Separation			Of Separation		
	E - LOCB - t At	102"		E. LOCB. I At	
Matil	End Of Boring At:	102"	N/ - 1 1 1	End Of Boring At:	
Mottled Soil Present At: None		Mottled Soil Present At:			
Standing Water Present At: None			Standing	Water Present At:	

Rottom	Of	Distribution	Medium	Δt·	54	Inches
DULLUIII	Oi	Distribution	Mediuili	AL.	J <del>1</del>	THUCHES

Logs o	of Soil Borings
Location or Project 4339 - 36	th. 51. P.
Borings made by	13.7. Date 10-12-05
Classification System: AASHO; USD	DA-SCS; Unified; other
	ower; Flight, or Bucket X; other
Depth, Boring number	Depth, Boring number
in feet Surface elevation	feet Surface elevation
8-30"	7   8 -
0.730	
1- 7.5 FRY/4 CLAY	
2 — LUAM	1 2 1
3- 30 - 114"	]   3 —
4- 10 TR S/4 SAND	
, —	, -
6 —	6 —
7 —	/ -
	1°-1
60.8. e 9.51	
and of Boring at: 114 Inches	End of Boring at: Inches
Mottled Soil Present: Yes (NO Mottled Soil at: Inches	Mottled Soil Present: Yes NO Mottled Soil at: Inches
standing Water Present: Yes NO Standing Water Present at:Inches	Standing Water Present: Yes NO Standing Water Present at: Inches
TOP OF DISTRIBUTION MEDIUM AT:	INCHES
BOTTOM OF DISTRIBUTION MEDIUM AT	T: INCHES
REMARKS:	NO X

When performing the soil boring (s) relative to this septic system inspection, site evaluation or design, the depth to distinct redoximorphic features (commonly know as "mottled solls") were determined by using the definition for "distinct" as defined in MPCA rules 7080.0020 Subp. 13a. adopted through September 2002: "Distinct" means a soil color that varies from another color by one or more hues, more than two units of value, or more than one unit of chroma.

I/IL has been advised through training and conversations with the MPCA that the above procedure for determining redoximorphic features (mottled soils) must be used in all cases; no other definitions will be allowed. The only exceptions would be when the difference in soil colors are attributed to other soil features such as lamellae banding, chelation from tannic acids, calcium carbonates, etc.

#### **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.

## Subsurface Sewage Treatment Systems



# 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

Prevention and Solid Waste Management Section