### **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

Date: April 12, 2018 Time: 11:00 AM Owner: Rod Stivland

**Inspection Address:** 15234 50<sup>th</sup> St S, Afton, MN 55001

### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Rod Stivland, and have reviewed the original design/permit records on file at the City of Afton. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and a mound.

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

<b>Instructions:</b> 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):4/12/2018		
	npliant – Notice of Noncompliance rade 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 threat 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 #4)	reat to public health and safety ter otect groundwater ater	
Property Information Parcel ID# or Sec/Twp/Range	ge:	
41-	or inspection: Property Transfer	
Property owner: Rod Stivland Owner's	phone: 952-250-0909	
Or Oursell assessmentation	Action when a	
	resentative phone:ulatory authority phone: 651-430-4052	
Brief system description: Two pre-cast septic tanks, a pre-cast lift tank, and a moun	· · · · · · · · · · · · · · · · · · ·	
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 Certificat	ion number: L5342	
<del>- ' _ '                                </del>	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, Lic	cense	

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Property address: \_ 15234 50th St S, Afton, MN 55001

Inspector initials/Date: 4/12/2018

<u>1.</u>	lm	Impact on Public Health – Compliance component #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> </ul>		
		stem cause sewage backup into velling 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>		
		ny "yes" answer above indicates 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.	<del>-</del>			
2.	Ta	ank Integrity – Compliance com	nponent #2 of 5			
			Verification method(s):			
		stem consists of a seepage pit,	☐ Yes ⊠ No	□ Probed tank(s) bottom		
		sspool, drywell, or leaching pit.		Examined construction records		
	Se co	epage pits meeting 7080.2550 may be mpliant if allowed in local ordinance.		Examined Tank Integrity Form (Attach)		
		ewage tank(s) leak below their signed operating depth.	☐ Yes   No	☐ Observed liquid level below operating depth ☐ Examined empty (pumped) tanks(s) ☐ Probad outside tank(s) for "block soil"		
	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>		
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			☐ Officially (See Comments/Explanation)  ☐ 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 the inspection.			
_	_					
<u>3.</u>	Ot	ther Compliance Conditions	5 – Compliance compone	nt #3 of 5		
	a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound.   Yes*   No  Unknow					
	b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. ☐ Yes* ☒ No ☐ Unknown 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			ermined by inspector ☐ Yes* ☒ No		
		Explain:				

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Property address: 15234 50th St S, Afton, MN 55001			Inspector initials/Date: 4/12/2018		
4.	Soil Separation — Compliance compor	nent #4 of 5			
	Date of installation: 2002	Unknown	Verification method(s):		
	Shoreland/Wellhead protection/Food Beverage Lodging?  Compliance criteria:	☐ Yes ⊠ No	Soil observation does not expire. Pro observations by two independent pa unless site conditions have been alt	arties 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	requirements differ.  Conducted soil observation(s) (At action of the conducted soil observation) (At action of the conducted soil observation) (At action of the conducted observation) (At action obs	h boring logs) o drainfield) 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: Reviewed design and permit records	S.	
	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	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		
	Any "no" answer above indicates the system is Failing to Protect Groundwater.		D. Required compliance separation*  *May be reduced up to 15 percent if allowed by Local Ordinance.		
5.	Operating Permit and Nitrogen B	<b>MP*</b> – Compliance o	component #5 of 5 🔀 <b>Not appl</b>	icable	
Is the system operated under an Operating Permit?					
	Operating Permit number:     Have the Operating Permit requirements in the control of the c	peen met?	☐ Yes ☐ No		
	b. Is the required nitrogen BMP in place and	properly functioning?	☐ Yes ☐ No		
	Any "no" answer indicates Noncom	nlianco			

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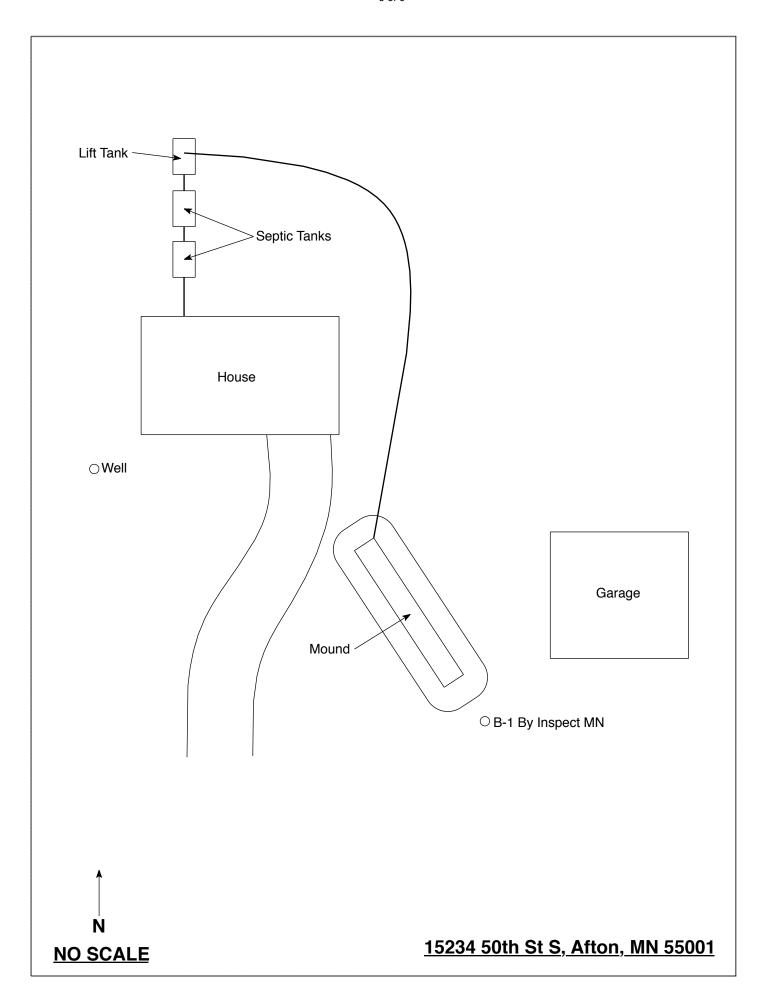
# Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: April 12, 2018	Time: 11:00 AM		
Property Address: 15234 50 <sup>th</sup> St S, Afton, MN	Zip: 55001		
Property Owner: Rod Stivland	Phone: 952-250-0909		
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 r performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface access and proper maintenance of the second surface access and the second surface access	ers should be made accessible to		
1	Tank size (gals.): 2-1000		
	sidents in home? 2		
Number of bedrooms? 3 Are all floors drained by gr	-		
Garbage disposal? Y Whirlpool bath?	Y		
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? Tanks - North Side, Mound - South Side			
Location of water well on lot? Southwest Side Is the	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? Y If yes, explain: Replaced lift pump			
When was the system last pumped? 2015 Name of pum	per: Unknown		
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: Rod Stivland's Signature On File Date: 4/12/2018



### **Log Of Soil Borings**

Location of Project: 15234 50th St S, Afton, MN 55001					
Borings Made By: Inspect Minnesota		Date:		4/12/18	
Auger Used: Hand/Bucket		Classification System:		USDA	
Boring Number: 1		Boring Number:			
Surface Elevation of Boring  41" below top of mound on original contour		Surface Elevation Boring			
Depth In Inches	Soils E	ncountered	Donth In		ncountered
0-12 12-20 20-36	10YR 3	/2 Silt Loam /4 Silt Loam ine Sandy Loam			
36"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
+41"	Elevation Of Boring	g Below Top Of Mound		Elevation Of Boring	Relative To System
-28" Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media		of Distribution Media	
≥49" Of Separation			Of Separation		
Find Of Daving Att			End Of Boring At:		
End Of Boring At: 36"  Redox Present At: None			Redox Present At:		
Redox Present At: None Standing Water Present At: None			Standing Water Present At:		
110110					

Bottom Of Distribution Medium At: 28 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.

# 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