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: October 4, 2018 Time: 11:00 AM Owner: Deb Hendel

Inspection Address: 14555 57th St S, Afton, MN 55001

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at Washington County. This system consists of a precast septic tank and a rock trench drainfield.

Predicated on my inspection of the system and my review of the original design/permit 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.

Christopher Uebe

Brian Humpal

Brian Humpal



Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

	Doc Type: Compliance and Enforcement
Instructions: Inspection results based on Minnesota Pollution Control Agency requirements and attached forms – additional local requirements may also apply	
Submit completed form to Local Unit of Government (LUG) and system of within 15 days	owner
System Status	
System status on date (mm/dd/yyyy): 10/4/2018	
	Noncompliant – Notice of Noncompliance (See Upgrade Requirements on page 3)
Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminen Other Compliance Conditions (Compliance Component #3) – Imm Tank Integrity (Compliance Component #2) – Failing to protect graph of the Compliance Conditions (Compliance Component #3) – Failing Soil Separation (Compliance Component #4) – Failing to protect Operating permit/monitoring plan requirements (Compliance Component #4)	ninent threat to public health and safety roundwater ling to protect groundwater groundwater
Property Information Parcel ID# or Sec/7	Twp/Range:
th	Reason for inspection: Property Transfer
· · · · · · · · · · · · · · · · · · ·	Owner's phone: 651-436-1790
or	
Owner's representative: I	Representative phone:
	Regulatory authority phone: 651-430-6655
Brief system description: A pre-cast septic tank and rock trench drainfield.	
Comments or recommendations:	
Certification	
I hereby certify that all the necessary information has been gathered to determ determination of future system performance has been nor can be made due to possible abuse of the system, inadequate maintenance, or future water usage	o unknown conditions during system construction,
Inspector name: _Brian Humpal/Christopher Uebe	Certification number: C5342/C9852
Business name: Inspect Minnesota, Midwest Soil Testing	License number: _L2896
Inspector signature: Brian Humpal for the	Phone number:651-492-7550
Necessary or Locally Required Attachments	
	orms per local ordinance
☐ Other information (list): Report Summary, Property Information, Disclar	·
	•

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 1 of 3 Property address: 14555 57th St S, Afton, MN 55001

Inspector initials/Date: 10/4/2018

1.	. Impact on Public Health - Compliance component #1 of 5			
	Compliance criteria:		Verification method(s):	
	System discharge sewage to the ground surface.	☐ Yes ⊠ No	☑ Searched for surface outlet☑ Searched for seeping in yard/backup in home	
	System discharge sewage to drain tile or surface waters.	☐ Yes ⊠ No	 Excessive ponding in soil system/D-boxes Homeowner testimony (See Comments/Explanation) "Black soil" above soil dispersal system 	
	System cause sewage backup into dwelling or establishment.	☐ Yes No	System requires "emergency" pumping Performed dye test	
	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.			
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	☑ Probed tank(s) bottom☑ Examined construction records	
	Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		Examined Tank Integrity Form (Attach)Observed liquid level below operating depth	
	Sewage tank(s) leak below their designed operating depth.	☐ Yes No	☐ Examined empty (pumped) tanks(s) ☐ Probed outside tank(s) for "black soil"	
	If yes, which sewage tank(s) leaks:		☐ Unable to verify (See Comments/Explanation)	
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.		☐ Other methods not listed (See Comments/Explanation)	
	Comments/Explanation:			
	Lowered underwater camera into tank -	oatties and tank walls OK	•	
_				
<u>3.</u>	Other Compliance Conditions			
	_		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 wa *System is failing to protect ground		determined by inspector ☐ Yes* ☒ No	
	Explain:			

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erty address: 14555 57th St S, Afton, MN 550	001	Inspector initials/Date: _ 10/	4/2018 B# ()	
Soil Separation – Compliance compor	nent #4 of 5			
Date of installation:	☑ Unknown	Verification method(s):		
Shoreland/Wellhead protection/Food Beverage Lodging?	⊠ Yes □ No	Soil observation does not expire. Pr		
Compliance criteria:	observations by two independen unless site conditions have been			
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) (Attack Two previous verifications (Attack Not applicable (Holding tank(s), not	ch boring logs)	
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.		☐ Unable to verify (See Comments/Explanation)	Explanation)	
Non-performance systems built April 1,	⊠ Yes □ No	Comments/Explanation:		
1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:		Reviewed design and permit records	S.	
Drainfield has a three-foot vertical 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 Attach Boring Log	
Drainfield meets the designed vertical		B. Periodically saturated soil/bedrock		
separation distance from periodically saturated soil or bedrock.		C. System separation		
		D. Required compliance separation*		
Any "no" answer above indicates to Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent if Ordinance.	allowed by Lo	
Operating Permit and Nitrogen B	MP* – Complian	ce component #5 of 5 Not appl	licable	
s the system operated under an Operating Per	mit?	oxtimes No $$ If "yes", A below is required		
s the system required to employ a Nitrogen BN	IP? ☐ Yes	oximes No $$ If "yes", B below is required		
BMP=Best Management Practice(s) specifi	ied in the system d	esign		
f the answer to both questions is "no",	this section do	no not nood to be completed		

Any "no" answer indicates Noncompliance.

Have the Operating Permit requirements been met?

b. Is the required nitrogen BMP in place and properly functioning?

a. Operating Permit number:

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.

☐ Yes ☐ No

☐ Yes ☐ No

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Log Of Soil Borings

Borings Made By: Inspect Minnesota Auger Used: Hand/Bucket Boring Number: 1 Surface Elevation of Boring	Location of Project: 14555 57th St S, Afton, MN 55001			
Surface Elevation of Boring Number: Surface Elevation of Boring	18			
Surface Elevation of Boring Depth In Inches 0-16 16-38 38-60 10YR 4/4 Fine Sand With 7.5YR 4/4 Lamellae Banding 60-80 Surface Elevation of Boring Depth In Inches Surface Elevation of Boring Depth In Inches Soils Encountered Inches	A			
Elevation of Boring Depth In Inches 0-16 16-38 38-60 10YR 4/4 Fine Sand With 7.5YR 4/4 Lamellae Banding 60-80 Same ground surface as last drainfield trench Elevation of Boring Depth In Inches Soils Encountered Inches Flevation of Boring Depth In Inches Soils Encountered Inches 10YR 3/3 Silt Loam 10YR 3/4 Silt Loam 10YR 4/4 Fine Sand With 7.5YR 4/4 Lamellae Banding 10YR 5/4 Fine Sand With				
Inches Solls Encountered Inches Solls Encountered 0-16 10YR 3/3 Silt Loam 16-38 10YR 3/4 Silt Loam 38-60 10YR 4/4 Fine Sand With 7.5YR 4/4 Lamellae Banding 60-80 10YR 5/4 Fine Sand With				
0-16				
80" Depth To End Of Boring Or Redox Depth To End Of Boring Or Redo	X			
Same Elevation Of Boring Relative To System Elevation Of Boring Relative To S	System			
-41" Depth To Bottom Of Distribution Media Depth To Bottom Of Distribution	Media			
≥39" Of Separation Of Separation				
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: 41 Inches

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

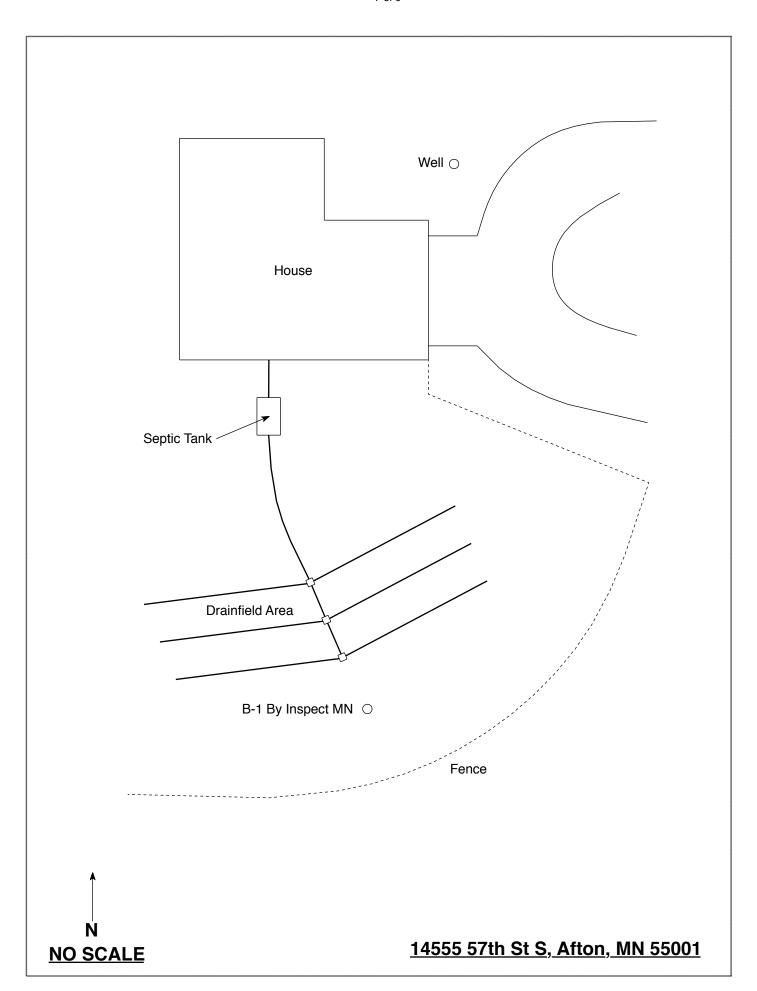
This information will be used for the purpose of conducting an MPCA Compliance Inspection.

This information will be used for the purpose of conducting this information.	27 Compitance inspection.		
Date of Inspection: October 4, 2018	Time: 11:00 AM		
Property Address: 14555 57 th St S, Afton, MN	Zip: 55001		
Property Owner: Deb Hendel	Phone: 651-436-1790		
Tank(s) Septic 1 Sept			
Are the tank maintenance covers accessible? \(\subseteq \text{Yes} \text{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.			
Year house built: 1976 Year septic installed:	Tank size (gals.): 1250		
How long has seller owned the property? Number of:	residents in home?		
Number of bedrooms? 5 Are all floors drained by	gravity? Lower Pumped		
Garbage disposal? Whirlpool bath	1?		
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 buildings?			
Location of septic system on lot? South Side			
	he 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? 2017 Name of pu	mper: Meyer Sewer Service		
	m 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 knowled considered "non-compliant/failing" per MPCA rules, that the inspector must local government unit within 15 days of the date of inspection completion. I this report, that I/we are ultimately responsible for payment of all fees for all	by law submit a copy of this report to the also agree that unless otherwise noted in		

Date:

by Inspect Minnesota and Midwest Soil Testing.

Owner/Occupant:



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