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

P.O. Box 10853 White Bea	Brian Humpal			
651-492-7550/Brian@Midwestsoiltesting.com		MPCA Licensed Advanced Inspector		
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT				
Date: August 6, 2019	<b>Time:</b> 10:15 AM	<b>Owner:</b> Mary Bos		
Inspection Address: 11020 Stonebridge Trail N, Stillwater, MN 55082				

#### **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 very old system (installed in 1985) consists of a pre-cast septic tank and a rock trench drainfield. In addition, there is separate system for the kennel attached to the house, which consists of a pre-cast septic tank and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years. This house is presently vacant. It is unknown when the septic tank for the kennel has been pumped. If it has been longer then three years, maintenance pumping should be scheduled as soon as possible.

Although not a compliance criteria, I recommend covering the kennel drain to prevent rainwater from entering the kennel septic system. In addition, there appears to be heat tape in the line, this may be an indicator that the kennel septic system has experience freezing issues.

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

**NOTE:** This report is not complete without the inclusion/attachment of the additional pages which consist of up to three (3) MPCA drafted Compliance Inspection Documents, one (1) Homeowner/Occupant Information Sheet (when obtainable), one (1) site diagram, one (1) log of soil boring(s), one (1) Brian L Humpal, Inc. Disclaimer Sheet, and one (1) MPCA License.

3	Minnesota Pollution	Со
_	Control Agency	
	520 Lafavetta Boad North	Existin

520 Lafayette Road North St. Paul, MN 55155-4194

# **Compliance Inspection Form**

### Existing Subsurface Sewage Treatment Systems

(SSTS)

Doc Type: Compliance and Enforcement

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): 8/6/2019

#### Compliant – Certificate of Compliance

(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

#### ] Noncompliant – Notice of Noncompliance

For local tracking purposes:

(See Upgrade Requirements on page 3)

#### 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: 11020	Stonebridge Trail N, Stillwater, MN 55082	Reason for inspection:	Property Transfer
Property owner: Mary B	DS	Owner's phone: 651-2	270-6560
or			
Owner's representative:		Representative phone:	
Local regulatory authority: Washington County		Regulatory authority pho	one: 651-430-6655
Brief system description: A pre-cast septic tank and a rock trench drai		ld.	

Comments or recommendations:

It is unknown when the septic tank for the kennel has been pumped. If it has been longer then three years, maintenance pumping should be scheduled as soon as possible. Although not a compliance criteria, I recommend covering the kennel drain to prevent rainwater from entering the kennel septic system. In addition, there appears to be heat tape in the line, this may be an indicator that the kennel septic system has experience freezing issues.

#### 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/Christopher Uebe	Certification number:	C5342/C9852
Business name:	Inspect Minnesota, Midwest Soil Testing	License number:	L2896
Inspector signatur	e: Brian Humpak Africa Un	Phone number:	651-492-7550

#### **Necessary or Locally Required Attachments**

🛛 Soil boring logs	System/As-built drawing	Forms per local ordinance
Other information (list):	Report Summary, Property Information	, Disclaimer, License

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#### 1. Impact on Public Health – Compliance component #1 of 5

Property address: 11020 Stonebridge Trail N, Stillwater, MN 55082

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	Excessive ponding in soil system/D-boxes Homeowner testimony (See Comments/Explanation)
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		<ul> <li>I enormed uye test</li> <li>Unable to verify (See Comments/Explanation)</li> <li>Other methods not listed (See Comments/Explanation)</li> </ul>

#### Comments/Explanation:

It is unknown when the septic tank for the kennel has been pumped. If it has been longer then three years, maintenance pumping should be scheduled as soon as possible. Although not a compliance criteria, I recommend covering the kennel drain to prevent rainwater from entering the kennel septic system. In addition, there appears to be heat tape in the line, this may be an indicator that the kennel septic system has experience freezing issues

#### 2. Tank Integrity – Compliance component #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.		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)
If yes, which sewage tank(s) leaks:		Probed outside tank(s) for "black soil"
Any "yes" answer above indic system is Failing to Protect G		<ul> <li>Unable to verify (See Comments/Explanation)</li> <li>Other methods not listed (See Comments/Explanation)</li> </ul>

Comments/Explanation:

Lowered underwater camera into tank - baffles and tank walls OK.

#### 3. Other Compliance Conditions – Compliance component #3 of 5

a.	Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound.	□ Yes*	🛛 No	Unknown
b.	Other issues ( <i>electrical hazards, etc.</i> ) to immediately and adversely impact public health or safety. <b>*System is an imminent threat to public health and safety</b>	□ Yes*	🛛 No	Unknown
	Explain:			
C.	System is non-protective of ground water for other conditions as determined by inspector	∕es* ⊠	No	

#### \*System is failing to protect groundwater

Explain:

#### **4. Soil Separation** – Compliance component #4 of 5

Date of installation: 1985	Unknown	Verification method(s):		
Shoreland/Wellhead protection/Food Beverage Lodging?	🗌 Yes 🛛 No	Soil observation does not expire. Previous so observations by two independent parties are unless site conditions have been altered or lo		
Compliance criteria:				
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:Image: Stable Stabl	🖾 Yes 🔲 No	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (Attach boring logs)</li> <li>Two previous verifications (Attach boring logs)</li> <li>Not applicable (Holding tank(s), no drainfield)</li> <li>Unable to verify (See Comments/Explanation)</li> </ul>		
saturated soil or bedrock.		Other (See Comments/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" systems built under pre-2008 Rules; Type IV	🗌 Yes 🔲 No			
r V systems built under 2008 Rules (7080. 350 or 7080.2400 (Advanced Inspector cense required)		A. Bottom of distribution media	See Attache Boring Log(s	
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 the Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent in Ordinance.	f allowed by Loca	
Operating Permit and Nitrogen B	<b>MP*</b> – Complian	ce component #5 of 5 🛛 🖂 Not app	licable	
s the system operated under an Operating Peri	mit? 🗌 Yes	□ No If "yes", A below is required		
s the system required to employ a Nitrogen BM		□ No If "yes", B below is required		
BMP=Best Management Practice(s) specifi		•		

a.	Operating Permit number:	
	Have the Operating Permit requirements been met?	🗌 Yes 🗌 No
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, 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.

## Inspect Minnesota & Midwest Soil Testing

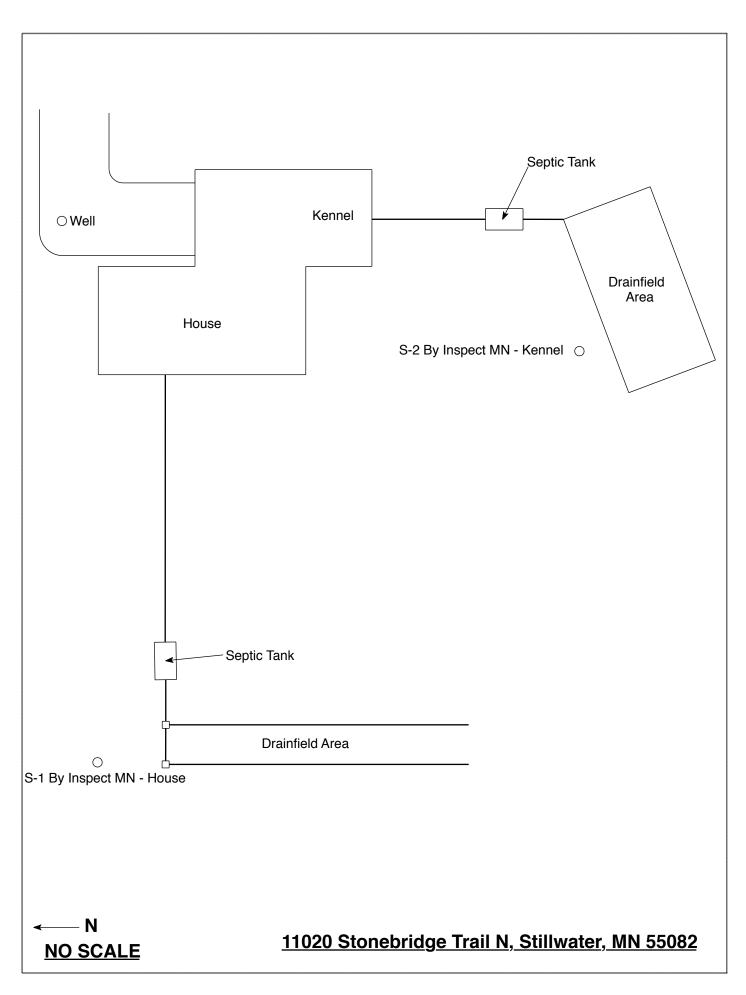
#### Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: August 6, 2019	Time: 10:15 AM			
Property Address: 11020 Stonebridge Trl N, Stilly	vater, MN Zip: 55082			
Property Owner: Mary Bos	Phone: 651-270-6560			
Tank(s)       Tank(s)Material       Soil Tre         Septic 1       Fiberglass       Seck         Aerobic       Plastic       Grav         Lift       Metal       Char	System     Other       a trench     Alternative system       elless trench     Experimental system       nber trench     Cesspool system       age bed     Other system       nd			
Are the tank maintenance covers accessible? $\boxtimes$ Ye performed through the maintenance holes. Mainten the ground surface to facilitate access and proper m	ance hole covers should be made accessible to			
Year house built: 1985 Year septic installed	: 1985 Tank size (gals.): 1250			
How long has seller owned the property?	Number of residents in home?			
Number of bedrooms?2Are all floor	rs drained by gravity? Y			
Garbage disposal?	/hirlpool bath?			
More than one system (laundry, etc.)?				
Does this property have any footing drain tiles conr				
Are any buildings on this property such as garages or out-buildings connected to this system?				
Are there any additional systems on this property so the house has its own septic system.	erving other buildings? The kennel attached to			
Location of septic system on lot? House System - V	Vest Side, Kennel System - South Side			
Location of water well on lot? East 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? If yes, explain:				
When was the system last pumped? House 2017 Name of pumper: Meyer 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? N				
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 by Inspect Minnesota and Midwest Soil Testing.

Owner/Occupant:



## Soil Observations Log

Location of Project: 11020 Stonebridge Trail N, Stillwater, MN 55082 - House							
Observat	ions Made By:	Inspect Minnesota			Date:	8/6/19	
Classific	ation System:	USDA					
Soi	Soil Observation: House S-1		Soil Observation:		Kennel S-2		
Surface Elevation of Observation	-	ame ground surface as last drainfield trench		face tion of vation	Same ground surface as last drainfield trench		
Depth In Inches Rock %	Soils Encountered		Depth In Inches	Rock %	Soils Encountered		
0-28 28-40 40-80	10YR 3/4	8 Medium Sand 4 Medium Sand 4 Medium Sand	0-10 10-25 25-30 30-67		10YR 10YR 3 10YR 4/4	8/3 Medium Sand 3/4 Loamy Sand 8/4 Medium Sand Medium Sand With hellae Banding	
80" Depth 7	ro End Of Soil O	67"	Depth T	To End Of Soil Observation Or Redox			
Same Elevation Of Observation Relative To System				Elevation Of Observation Relative To System			
-52" Depth To Bottom Of Distribution Media			-41" Depth To Bottom Of Distribution Media				
≥28"  Of Separation			≥26" Of Separation				
End Of Soil Observation At: 80"			End Of Soil Observation At: 67"				
Redox Present At: None			Redox Present At: None				
Standing Water Present At: None			Standing Water Present At: None				

Bottom Of Distribution Medium At: 52 Inches For Soil Observation 1 41 Inches For Soil Observation 2

Afra

Signature:

#### 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<sup>®</sup>Treatment Systems Non-transferable Business License

# Inspect Minnesota, Midwest Soil Testing

License Expires: 12/22/2019

Issued: 11/20/2018

## **Specialty Area(s):**

License # L2896

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

# **Designated Certified Individual(s):**

Cert #	Name	<b>Certification Expires:</b>	
C9633	Anthony P Scully	3/5/2020	
•	Installer, Designer (Apprentice)		
C5342	Brian L Humpal	10/15/2023	
	Installer, Maintainer, Serv Prov, Adv De	esigner, Adv Inspector	
C9852	Christopher R Uebe	3/4/2021	
	Designer, Inspector		

## MINNESOTA POLLUTION CONTROL AGENCY

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

Nich Haig

Nick Haig, Supervisor Certification and Training Unit