# **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 10853 White Bear Lake, MN 55110 Brian Humpal MPCA Licensed Advanced Inspector 651-492-7550/Brian@Midwestsoiltesting.com SUBSURFACE SEWAGE TREATMENT SYSTEM COMPLIANCE REPORT Date: September 11, 2018 **Time:** 8:45 AM **Owner:** Ellen Considine

Inspection Address: 14842 Oakhill Rd N, Scandia, MN 55073

## **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Shane, and have reviewed the original design/permit records, along with a previous compliance inspection from 2006, which were on file at Washington County. This very old system (installed in 1987) consists of a pre-cast septic tank, a pre-cast lift tank, and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(E) because of the lack of the required two foot separation between the bottom of the drainfield and seasonally saturated soils.

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact the Washington County Department of Public Health & Environment (651-430-6655) to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

<u>Brian</u> Humpol Brian Humpol





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): \_\_\_\_9/11/2018

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: 14842	Oakhill Rd N, Scandia, MN 55073	Reason for inspection	n: Property Transfer
Property owner: Ellen Considine		Owner's phone: 651-235-2684	
or			
Owner's representative:		Representative phor	ne:
Local regulatory authority:	Washington County	Regulatory authority	phone: 651-430-6655
Brief system description:	A pre-cast septic tank, a pre-cast lift tank, and a	a rock trench drainfield	I
0	- 4'		

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 Hum	pal/Christo	pher Ue	ebe			Certification number:	C	5342/C9852
Business name:	Inspect Mi	nnesota, N	lidwest \$	Soil Testin	g		License number:	L2	2896
Inspector signatu	re:	Prian ;	Hump	al Africa	- 1/1	<u> </u>	Phone number:	65	51-492-7550
Necessary or	Locally	Require	d Atta	achmen	ts				
🛛 Soil boring lo	ogs	🛛 Syst	em/As-b	ouilt drawir	ng		Forms per local ordinar	nce	
🛛 Other inform	ation (list):	Report S	Summary	/, Property	<sup>,</sup> Inforr	nation, Dis	claimer, License		
www.nca.state.mn	us • 651	-296-6300	• 80	0-657-3864		TTY 651-2	282-5332 or 800-657-3864		Available in alternative formats

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

Property address: 14842 Oakhill Rd N, Scandia, MN 55073

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. System cause sewage backup into	□ Yes ⊠ No □ 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> <li>System requires "emergency" pumping</li> </ul>
dwelling or establishment. Any "yes" answer above indicate an Imminent Threat to Public Hea	•	<ul> <li>Performed dye test</li> <li>Unable to verify (See Comments/Explanation)</li> <li>Other methods not listed (See Comments/Explanation)</li> </ul>
Comments/Explanation:		

#### 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	Probed tank(s) bottom
Seepage pits meeting 7080.2550 may be		<ul> <li>Examined construction records</li> <li>Examined Tank Integrity Form (Attach)</li> </ul>
compliant if allowed in local ordinance.		<ul> <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 indic system is Failing to Protect G		Other methods not listed (See Comments/Explanation)

Comments/Explanation:

None of the above found.

Lowered underwater camera into tanks - baffles and tank walls OK. Lift pump and alarm were operational at the time of the inspection.

#### 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
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b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. \*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:

### 

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

Date of installation: 1987	Unknown	Verification method(s):	
Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria:	🗌 Yes 🛛 No	Soil observation does not expire. Previous soil observations by two independent parties are suffi unless site conditions have been altered or local	
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	<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> <li>Other (See Comments/Explanation)</li> </ul>	
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: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☐ Yes ☐ No	<i>Comments/Explanation:</i> Reviewed previous compliance inspection from 2006.	
"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080.	☐ Yes ☐ No	Indicate depths of elevations See Attached	
2350 or 7080.2400 (Advanced Inspector License required)		A. Bottom of distribution media 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 t Failing to Protect Groundwater.	he system is	D. Required compliance separation* *May be reduced up to 15 percent if allowed by Local Ordinance.	

#### 5. Operating Permit and Nitrogen BMP\* – Compliance component #5 of 5 Kot applicable

Is the system operated under an Operating Permit?	🗌 Yes 🛛 No	If "yes", A below is required
Is the system required to employ a Nitrogen BMP?	🗌 Yes 🛛 No	If "yes", B below is required

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?	🗌 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.* 

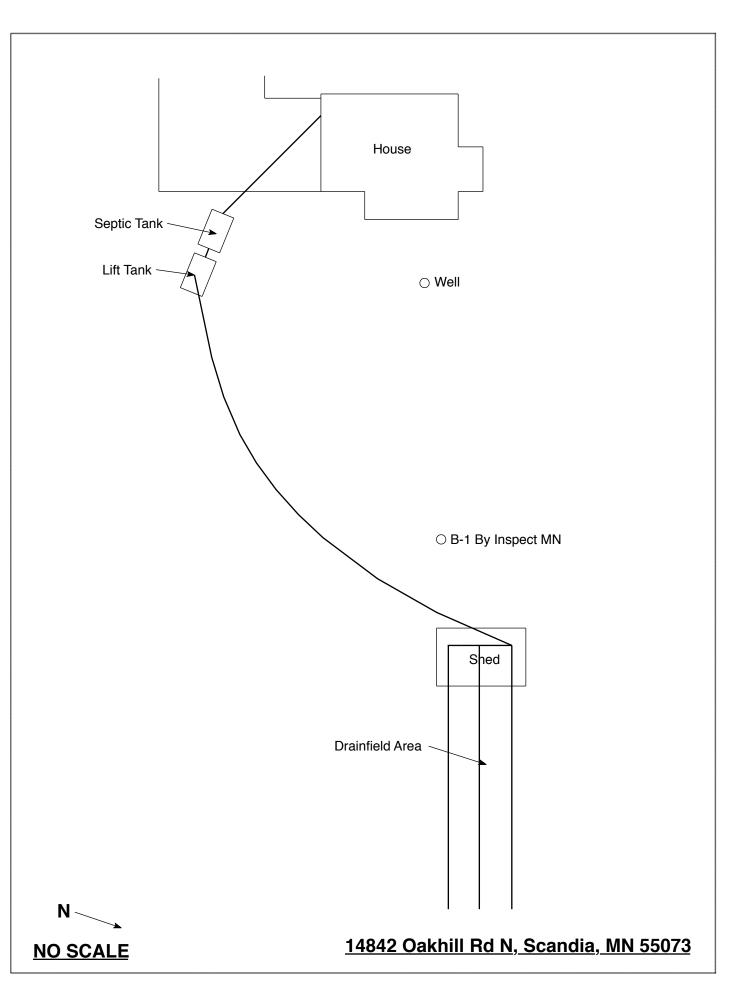
## Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: September 11, 2018	Time: 8:45 AM		
Property Address: 14842 Oakhill Rd N, Scandia, N	$\Lambda$ $Z_{in}$ : 55072		
Property Address: 14842 Oakhill Rd N, Scandia, N Property Owner: Ellen Considine	AN Zip: 55073 Phone: 651-235-2684		
1 5	atment System Other		
Septic 1 Fiberglass Rock	trench Alternative system		
	elless trench Experimental system		
	nber trench     Cesspool system       age bed     Other system		
Other: Block Mou			
Other At-gr	ade		
Are the tank maintenance covers accessible? $\Box$ Ye	s $\boxtimes$ No *If no, proper maintenance must be		
performed through the maintenance holes. Mainten			
the ground surface to facilitate access and proper m	aintenance of the system.		
Year house built: 1891 Year septic installed	: 1987 Tank size (gals.): 1200		
How long has seller owned the property? 2011	Number of residents in home? 2-3		
	s drained by gravity? Y		
	/hirlpool 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? East Side			
Location of water well on lot? East Side	Is the well a deep well? Y		
Have you ever experienced any problems with the s			
surfacing of sewage onto the ground, septic tank ov	erflowing, etc.; or have any repairs been made		
to the system? N If yes, explain:			
When was the system last number 2017	Name of number: Smilie's Source Service		
When was the system last pumped? 2017 How often pumped in previous years? Every 2	Name of pumper: Smilie's Sewer ServiceIs 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			
Do you have any additional information that should			
,			

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: Shane's Signature On File



## Log Of Soil Borings

Location of Project: 14842 Oakhill Rd N, Scandia, MN 55073					
	Borings Made By: Inspect Minnesota			Date:	9/11/18
	Auger Used:	Hand/Bucket	Classifi	cation System:	USDA
B	oring Number:	1	E	Boring Number:	
Surface Elevation of Boring	-	Ind surface as last nfield trench	Surface Elevation of Boring	f	
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches	Soils Er	countered
0-8 8-19 19-33 33-40 40-50 50-60	Soils Encountered 10YR 2/2 Loamy Fine Sand 10YR 3/4 Loamy Fine Sand 7.5YR 4/4 Loamy Fine Sand 7.5YR 4/4 Silt Loam With 10YR 6/2 & Few 7.5YR 5/8 Redox 7.5YR 4/4 Fine Sandy Loam With 7.5YR 5/8 Redox 7.5YR 5/4 Fine Sand With Few 7.5YR 5/8 Redox				
33" De	Depth To End Of Boring Or Redox		D	epth To End Of Bo	oring Or Redox
Same El	ame Elevation Of Boring Relative To System		Elevation Of Boring Relative To System		
				epth To Bottom O f Separation	f Distribution Media
Er	nd Of Boring At:	60"	E	ind Of Boring At:	
	edox Present At:	33"		edox Present At:	
Standing Water Present At: None			Standing W	Vater Present At:	

Bottom Of Distribution Medium At: 34 Inches

#### 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

# Specialty Area(s):

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

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

Name	Certification Expires:
Anthony P Scully	7/28/2018
Installer, Designer (Conditiona	1)
Brian L Humpal	10/15/2020
Installer, Maintainer, Serv Prov	v, Adv Designer, Adv Inspector
Christopher R Uebe	3/4/2018
Designer, Inspector	
	Anthony P Scully Installer, Designer (Conditiona Brian L Humpal Installer, Maintainer, Serv Prov Christopher R Uebe

## MINNESOTA POLLUTION CONTROL AGENCY

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

Charles K Thompson, Supervisor Certification & Training Unit