Inspect Minnesota & Midwest Soil Testing

P.O. Box 10853 White Bear	Lake, MN 55110	Brian Humpal
651-492-7550/Brian@Midwestsoiltesting.com		MPCA Licensed Advanced Inspector
SUBSURFACE SEWAGE T	REATMENT SYSTEM	(SSTS) COMPLIANCE REPORT
Date: September 3, 2019	Time: 11:00 AM	Owner: Dee Giesregen
Inspection Address: 16145 Upp	per 2 nd St N. Lakeland, MN	V 55043

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 1986) 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.

Although not a compliance criteria, it should be noted that the septic tank manhole cover is buried. I recommend extending this cover to the ground surface to facilitate easier access and proper maintenance. It should also be noted that the septic tanks are currently due for maintenance pumping.

Additionally, my inspection indicated excessive ponding in all of the drop boxes and ponding over the drainfield. This is an indicator that the drainfield may be nearing the end of its useful life.

Predicated on my inspection of the system 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	Co
_	Control Agency	
-		Exist

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.

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): _____9/3/2019

Compliant – Certificate of Compliance

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

Noncompliant – Notice of Noncompliance

(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:	16145 Upper 2 nd St N, Lakeland, MN 55043	Reason for inspection: Property Transfer
Property owner:	Dee Giesregen	Owner's phone:651-815-2060
or		
Owner's representation	ative:	Representative phone:
Local regulatory au	thority: Washington County	Regulatory authority phone: _651-430-6655
Brief system descr	ption: A pre-cast septic tank and a rock trench d	rainfield.

Comments or recommendations:

Although not a compliance criteria, it should be noted that the septic tank manhole cover is buried. I recommend extending this cover to the ground surface to facilitate easier access and proper maintenance. It should also be noted that the septic tanks are currently due for maintenance pumping. Additionally, my inspection indicated excessive ponding in all of the drop boxes and ponding over the drainfield. This is an indicator that the drainfield may be nearing the end of its useful life.

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 signature	Brian Humpal After 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: 16145 Upper 2nd St N, Lakeland, MN 55043

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)
System cause sewage backup into dwelling or establishment.	🗌 Yes 🖾 No	 Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test
Any "yes" answer above indicates an Imminent Threat to Public Hea		 Unable to verify (See Comments/Explanation) Other methods not listed (See Comments/Explanation)

Comments/Explanation:

Additionally, my inspection indicated excessive ponding in all of the drop boxes and ponding over the drainfield. This is an indicator that the drainfield may be nearing the end of its useful life.

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:		Verification method(s):	
System consists of a seepage pit,	🗌 Yes 🛛 No	Probed tank(s) bottom	
cesspool, drywell, or leaching pit.		Examined construction records	
Seepage pits meeting 7080.2550 may be		Examined Tank Integrity Form (Attach)	
compliant if allowed in local ordinance.		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		 Unable to verify (See Comments/Explanation) Other methods not listed (See Comments/Explanation) 	

Comments/Explanation:

Lowered underwater camera into tanks - baffles and tank walls OK. It should be noted that the septic tank manhole cover is buried. I recommend extending this cover to the ground surface to facilitate easier access and proper maintenance. It should also be noted that the septic tanks are currently due for maintenance pumping.

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
	Other issues <i>(electrical hazards, etc.)</i> to immediately and adversely impact public health or safety. *System is an imminent threat to public health and safety	□ Yes*	🛛 No	Unknown

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector \Box Yes* \boxtimes No ***System is failing to protect groundwater**

Explain:

4. Soil Separation – Compliance component #4 of 5

Date of installation: 1986	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: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	⊠ Yes 🔲 No	requirements differ. Conducted soil observation(s) (A Two previous verifications (Attac Not applicable (Holding tank(s), not Unable to verify (See Comments/Explanation, Other (See Comments/Explanation,	h boring logs) o drainfield) 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	5.
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 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	
		D. Required compliance separation*	
Any "no" answer above indicates t Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent if Ordinance.	allowed by Local
Operating Permit and Nitrogen B	MP* – Compliance	component #5 of 5 🛛 🛛 Not appl	icable
Is the system operated under an Operating Per	mit? 🗌 Yes 🗌] No If "yes", A below is required	
Is the system required to employ a Nitrogen BM	/IP?	No If "yes", B below is required	
BMP=Best Management Practice(s) specif	fied in the system desig	gn	

If the answer to both questions is "no", this section does not need to be completed.

Compliance criteria

5.

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 3, 2019	Time: 11:00 AM
Property Address: 16145 Upper 2 nd St N, Lakeland, MN	Zip: 55043
Property Owner: Dee Giesregen	Phone: 651-815-2060
Tank(s)Tank(s)MaterialSoil Treatment SSeptic 1FiberglassRock trenchAerobicPlasticGravelless treLiftMetalChamber trerHoldingConcreteSeepage bedOther:BlockMoundOtherAt-grade	Alternative system ench Experimental system nch Cesspool system Other system
Are the tank maintenance covers accessible? \Box Yes \boxtimes N performed through the maintenance holes. Maintenance h the ground surface to facilitate access and proper maintena	ole covers should be made accessible to
Year house built: 1986 Year septic installed: 1986	Tank size (gals.): 1200
How long has seller owned the property? Numb	per of residents in home?
Number of bedrooms? 4 Are all floors drain	ed by gravity? Y
Garbage disposal? Whirlpo	ol bath?
More than one system (laundry, etc.)?	
Are any buildings on this property such as garages or out-b Are there any additional systems on this property serving of	
Location of septic system on lot? Southwest Side Location of water well on lot? North Side	Is the well a deep well? Y
Have you ever experienced any problems with the system	1
surfacing of sewage onto the ground, septic tank overflow to the system? If yes, explain:	
	e of pumper: Ron's Sewer Service
	s system on a monitoring plan?
Have you received notices from any government agency c	
Is your property located in a shoreland management area?	
Do you have any additional information that should be giv	

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:

 $\text{Well} \ \bigcirc$ Driveway House ○ S-1 By Inspect MN Septic Tank Outbuilding **Drainfield Area** Boring Over Drainfield ϕ Shed Ν 16145 Upper 2nd St N, Lakeland, MN 55043 NO SCALE

Soil Observations Log

Location of Project: 16145 Upper 2nd St N, Lakeland, MN 55043									
Observations Made By: Inspect Minnesota						Date:	9/3/19		
Classification System: USDA									
Soil Observation: 1			1	Soil Observation:					
Surface Elevation of Observation		Same ground surface as last drainfield trench		Surface Elevation of Observation					
Depth In Inches	Rock %	Soils Encountered		Depth In Inches	Rock %	Soils Encountered			
0-8 8-22 22-46 46-70		10YR 3/3 10YR 3/4 10YR 4/4 M Lamel	1 Loamy Sand 3 Medium Sand 4 Medium Sand edium Sand With lae Banding						
70"	Depth T	o End Of Soil O		Depth T	o End Of Soil	Observation Or Redox			
Same Elevation Of Observation Relative To System				Elevation Of Observation Relative To System					
-32" Depth To Bottom Of Distribution Media				Depth To Bottom Of Distribution Media					
≥38" Of Separation					Of Separation				
End Of Soil Observation At: 70"				End Of Soil Observation At:					
Redox Present At: None				Redox Present At:					
Standing Water Present At: None					Standing Water Present At:				

Bottom Of Distribution Medium At: 32 Inches

Signature:

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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 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	Certification Expires:
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