Inspect Minnesota & Midwest Soil Testing

P.O. Box 383 Hugo, MN 55038		Brian Humpal			
651-492-7550/Brian@midwo	MPCA Licensed Advanced Inspector				
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT					
Date: October 17, 2016	Time: 1:15 PM	Owner: Lisa Hartwig			
Inspection Address: 299 Ideal Ave N, Mahtomedi, MN 55115					

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2014, which were on file at Washington County. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and two seepage beds.

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.

Brian Humpal

Brian Humpal

Minnesota Pollution Control Agency 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 requirements and attached forms – additional local re	0) ()
Submit completed form to Local Unit of Governn within 15 days	ent (LUG) and system owner
System Status System status on date (mm/dd/yyyy): _10/	7/2016
Compliant – Certificate of Comp (Valid for 3 years from report date, unless frame outlined in Local Ordinance.)	_ · ·
Reason(s) for noncompliance (check a	l applicable)
	mponent #1) – Imminent threat to public health and safety
	ce Component #3) – Imminent threat to public health and safety
Tank Integrity (Compliance Component	
	ce Component #3) – Failing to protect groundwater
Soil Separation (Compliance Componer	t #4) – Failing to protect groundwater

Operating permit/monitoring plan requirements (Compliance Component #5) - Noncompliant

Property Information

Parcel ID# or Sec/Twp/Range:

Property address:	299 Ideal Ave N, Mahtomedi, MN 55115	Reason for inspection: Requested By City
Property owner:	Lisa Hartwig	Owner's phone: 612-325-3997
or		
Owner's represent	ative:	Representative phone:
Local regulatory at	uthority: Washington County	Regulatory authority phone: _651-430-4052
Brief system descr	iption:Two pre-cast septic tanks, a pre-cast lift	tank, and two seepage beds.
Comments or reco	mmendations:	

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 Humpal	Certification number:	L5342
Business name:	Inspect Minnesota, Midwest Soil Testing	License number:	L2896
Inspector signatur	e: Brian Humpal	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

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

Compliance criteria: System discharge sewage to the ground surface. System discharge sewage to drain tile or surface waters. System cause sewage backup into dwelling or establishment.

Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.

Comments/Explanation:

None of the above found.

Verification method(s):

- Searched for surface outlet
- Searched for seeping in yard/backup in home
- Excessive ponding in soil system/D-boxes
- Homeowner testimony (See Comments/Explanation)
- "Black soil" above soil dispersal system
- System requires "emergency" pumping
- Performed dye test
- Unable to verify (See Comments/Explanation)
- Other methods not listed (See Comments/Explanation)

2. Tank Integrity - Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, or leaching pit.	🗌 Yes	🛛 No
Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		
Sewage tank(s) leak below their designed operating depth.	🗌 Yes	🛛 No
If yes, which sewage tank(s) leaks:		

Any "yes" answer above indicates the system is Failing to Protect Groundwater.

Comments/Explanation:

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

Verification method(s):

Probed tank(s) bottom
 Examined construction records
 Examined Tank Integrity Form (Attach)
 Observed liquid level below operating depth
 Examined empty (pumped) tanks(s)
 Probed outside tank(s) for "black soil"
 Unable to verify (See Comments/Explanation)
 Other methods not listed (See Comments/Explanation)

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

a.	Maintenance hole covers are dama	ged, cracked	, unsecured,	or appear to structura	ally 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 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: _1994	Unknown	Verification method(s):			
Shoreland/Wellhead protection/Food Beverage Lodging?	🛛 Yes 🗌 No	Soil observation does not expire. Previous soil			
Compliance criteria:		 observations by two independent parties are suffi unless site conditions have been altered or local requirements differ. Conducted soil observation(s) (Attach boring log) Two previous verifications (Attach boring logs) Not applicable (Holding tank(s), no drainfield) Unable to verify (See Comments/Explanation) Other (See Comments/Explanation) 			
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				
Non-performance systems built April 1, 1996, or later or for non-performance	🛛 Yes 🗌 No	Comments/Explanation:			
systems located in Shoreland or Wellhead		Reviewed previous compliance inspe			
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 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			
	h i-	D. Required compliance separation*			
Any "no" answer above indicates t Failing to Protect Groundwater.	ne system is	*May be reduced up to 15 percent if Ordinance.	allowed by Local		
Operating Permit and Nitrogen B	MP* – Compliand	ce component #5 of 5 🛛 🛛 Not appli	icable		
Is the system operated under an Operating Per	mit? 🗌 Yes				
Is the system required to employ a Nitrogen BM					
BMP=Best Management Practice(s) specif	ïed in the system de	esign			
If the answer to both questions is "no",	If the answer to both questions is "no", this section does not need to be completed.				

Con	Compliance criteria				
a.	Operating Permit number:	∏Yes ∏No			
	Have the Operating Permit requirements been met?				
b.	Is the required nitrogen BMP in place and properly functioning?	🗌 Yes 🗌 No			

Any "no" answer indicates Noncompliance.

5.

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.*

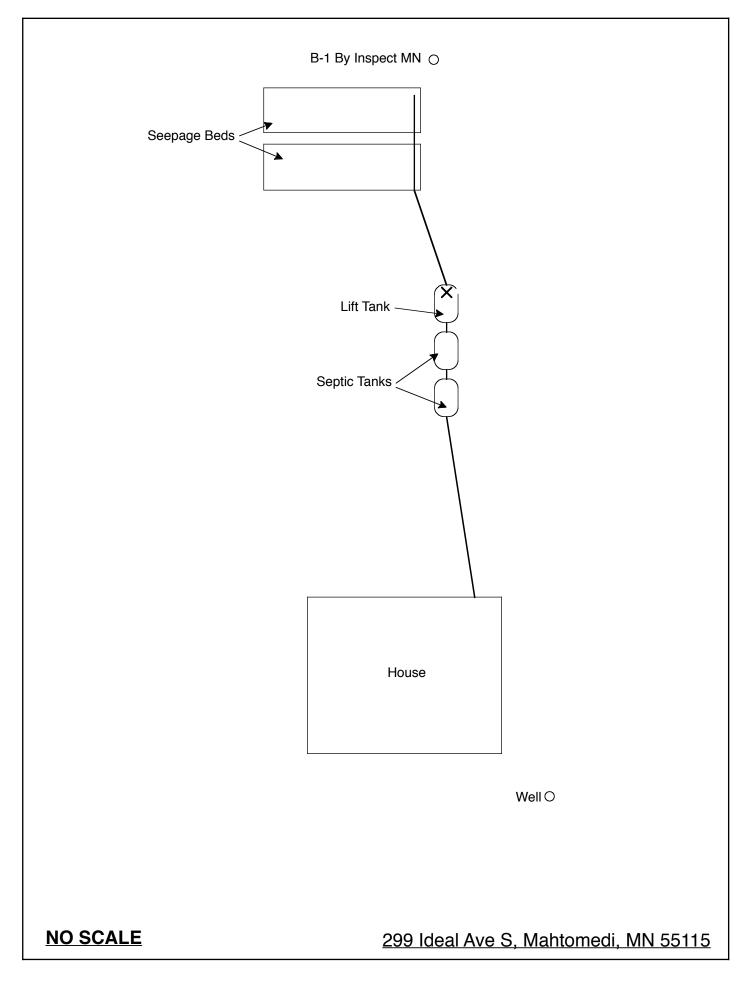
Inspect Minnesota & Midwest Soil Testing

Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: October 17, 2016	Time: 1:15 PM					
Property Address: 200 Ideal Ave N. Mehtemedi N	MN Zip: 55115					
Property Address: 299 Ideal Ave N, Mahtomedi, I Property Owner: Lisa Hartwig	MN Zip: 55115 Phone: 612-325-3997					
	eatment System Other					
	c trench Alternative system					
	relless trench Experimental system					
	nber trench Cesspool system					
	epage beds Other system					
Other: Block Mou						
Other At-g						
Are the tank maintenance covers accessible? \boxtimes Ye						
performed through the maintenance holes. Mainten						
the ground surface to facilitate access and proper m	aintenance of the system.					
Year house built: 1937 Year septic installed	: 1994 Tank size (gals.): 2-1000					
How long has seller owned the property?	Number of residents in home?					
	rs drained by gravity? Y					
	Vhirlpool bath?					
More than one system (laundry, etc.)?						
Does this property have any footing drain tiles com	nected 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? West 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	system such as: tree roots, sewage back-ups,					
surfacing of sewage onto the ground, septic tank ov	verflowing, etc.; or have any repairs been made					
to the system? If yes, explain:						
When was the system last pumped? 2012	Name of pumper: Smilies 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.



Log Of Soil Borings

Location of Project: 299 Ideal Ave N, Mahtomedi, MN 55115					
Borings Made By: Inspect Minnesota				Date:	10/17/16
		Hand/Bucket	Classi	fication System:	USDA
Bo	pring Number:	1		Boring Number:	
Surface Elevation of Boring	Surface Elevation of Same ground surface as last		Surface Elevation o Boring		
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches	Soils En	countered
0-10 10-30 30-43 43-55 55-64 64-68	10YR 4 10YR 5/3 10YR 4/4 L 10YR 5/4 7.5YR 5/8 8	/2 Fine Sand /3 Fine Sand Fine Sand With amellae Banding /4 Fine Sand Fine Sand With 10YR 7/2 Redox			
64" De	pth To End Of B	oring Or Redox	Depth To End Of Boring Or Redox		
Same Ele	evation Of Borin	g Relative To System	E	Elevation Of Boring	Relative To System
	pth To Bottom (Separation	Of Distribution Media		Depth To Bottom O Of Separation	f Distribution Media
En	d Of Boring At:	68"		End Of Boring At:	
	dox Present At:	64"		Redox Present At:	
Standing Water Present At: None			Standing Water Present At:		

Bottom Of Distribution Medium At: 29 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 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

License # L2896

Adv Inspector License Expires: Adv Designer License Expires: Maintainer License Expires: Installer License Expires: Date of Issuance:

Oct 28, 2015 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016

Inspect Minnesota, Midwest Soil Testing

Certificatio Expires	10/15/2017	10/15/2017	10/15/2017	10/15/2017	10/15/2017	03/04/2018	03/04/2018
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Minnesota Pollution Control Agency

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



Steven Giddings Manager Environmental Business Assistance Section