Inspect Minnesota & Midwest Soil Testing

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Designer & Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM COMPLIANCE REPORT

Inspection Address: 195 Bevins Lane, Mahtomedi, MN 55115

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this septic system have reviewed the history of the system with the Owner, Marvin Holmstrom. This very old system (installed in 1973) consists of a cesspool and a rock trench drainfield.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the cesspool(s) and the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils. This system was not an imminent threat to public health and safety per MPCA rule 7080.1500 Subp. 4(A) at the time of the inspection.

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 Washington County Environmental Specialist, Mr. Chris LeClair (651-430-4052), to verify the County's position.

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

Brian Humpal



Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	sults based on Minnesota Pollution Control Agency (Norms – additional local requirements may also apply.	MPCA) For local tracking purposes:			
Submit completed form to within 15 days	o Local Unit of Government (LUG) and system ov	vner			
System Status					
System status on da	ate (mm/dd/yyyy): <u>12/4/2016</u>				
(Valid for 3 years	•	oncompliant – Notice of Noncompliand ee Upgrade Requirements on page 3)			
☐ Impact on Publ☐ Other Complian☐ Tank Integrity (☐ Other Complian☐ Soil Separation☐	compliance (check all applicable) lic Health (Compliance Component #1) – Imminent to the Conditions (Compliance Component #3) – Imminent #2) – Failing to protect groupe Conditions (Compliance Component #3) – Failing to protect group (Compliance Component #4)	nent threat to public health and safety oundwater og to protect groundwater roundwater			
Proporty Informatio	D 11011 0 17	(D			
Property address: 105 Bo					
· •		Reason for inspection: Requested By City Owner's phone: 651-770-8989			
or					
Owner's representative:	Re	Representative phone:			
Local regulatory authority:		Regulatory authority phone: 651-430-4052			
Brief system description: Comments or recommenda	Cesspool and a rock trench drainfield.				
odifficial of recommenda					
Certification					
determination of future syst	necessary information has been gathered to determine tem performance has been nor can be made due to om, inadequate maintenance, or future water usage.				
Inspector name: Brian H	umpal Co	ertification number: _L5342			
Business name: Inspect	Minnesota, Midwest Soil Testing	License number: L2896			
Inspector signature:	Brian Humpal	Phone number: 651-492-7550			
Necessary or Locall	y Required Attachments				
⊠ Soil boring logs	· <u>-</u>	ms per local ordinance			
	-	·			

(Compliance criteria:		Verification method(s):			
5	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 the system is an Imminent Threat to Public Health and Safety.		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
	Comments/Explanation: None of the above found.					
2.	Fank Integrity – Compliance cor	mponent #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)			
I	f yes, which sewage tank(s) leaks:	All Tank(s)	□ Probed outside tank(s) for "black soil"□ Unable to verify (See Comments/Explanation)			
			☐ Other methods not listed (See Comments/Explanation)			
	Any "yes" answer above indic system is Failing to Protect Gi		<u> </u>			
- 3 (-	tank of block construction	☑ Other methods not listed (See Comments/Explanation) on.			
- 3 (System is Failing to Protect Gr Comments/Explanation: Lowered underwater camera into tank -	tank of block construction	☑ Other methods not listed (See Comments/Explanation) on.			
3. (Comments/Explanation: Lowered underwater camera into tank - Other Compliance Condition Maintenance hole covers are damage	tank of block construction S — Compliance completed, cracked, unsecured, commediately and adverse	Other methods not listed (See Comments/Explanation) on.			
3. (a.	Comments/Explanation: Lowered underwater camera into tank - Other Compliance Condition Maintenance hole covers are damage Other issues (electrical hazards, etc.) to	tank of block construction S — Compliance completed, cracked, unsecured, commediately and adverse	Other methods not listed (See Comments/Explanation) on. onent #3 of 5 or appear to structurally unsound.			
3. (a.	Comments/Explanation: Lowered underwater camera into tank - Other Compliance Condition: Maintenance hole covers are damage Other issues (electrical hazards, etc.) to *System is an imminent threat to possible to the covers are compliance.	tank of block constructions after for other conditions a	Other methods not listed (See Comments/Explanation) on. onent #3 of 5 or appear to structurally unsound. Yes* No Unknown ely impact public health or safety. Yes* No Unknown			

Property address: 195 Bevins Lane, Mahtomedi, MN 55115

Inspector initials/Date: 12/5/2016

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4.	Soil Separation - Compliance compor	nent #4 c	of 5				
	Date of installation: 1973	Unkr	nown	V	erification method(s):		
	Shoreland/Wellhead protection/Food Beverage Lodging?		☐ No	_	Soil observation does not expire. Previous soil observations by two independent parties are sufficient		
	Compliance criteria:			uı	nless 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:	☐ Yes ☐ No			requirements differ. ☐ Conducted soil observation(s) (Attach boring logs) ☐ Two previous verifications (Attach boring logs) ☐ Not applicable (Holding tank(s), no drainfield)		
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.				☐ Unable to verify (See Comments/Explanation) ☐ Other (See Comments/Explanation)		
	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:	☐ Yes	⊠ No	C	omments/Explanation:		
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*						
	"Experimental", "Other", or "Performance"	☐ Yes	□No	In	dicate 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 separation distance from periodically saturated soil or bedrock.				Periodically saturated soil/bedrock System separation		
				D.	Required compliance separation*		
	Any fine il anguer chave indicates the system is				*May be reduced up to 15 percent if allowed by Local Ordinance.		
5.	Operating Permit and Nitrogen B	MP* – C	Compliand	ce com	ponent #5 of 5 🔀 Not app	licable	
	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?	☐ Yes	⊠ No	If "yes", B below is required		
	BMP=Best Management Practice(s) specifi	ied in the	system de	esign			
	If the answer to both questions is "no",	this sec	tion doe	s not r	need to be completed.		
	Compliance criteria						
	a. Operating Permit number: Have the Operating Permit requirements been met? b. Is the required nitrogen BMP in place and properly functioning?						
					☐ Yes ☐ No		
				☐ Yes ☐ No			

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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.

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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: December 5, 2016	Time: 8:30 AM				
Property Address: 195 Bevins Lane, Mahtomedi, MN	Zip: 55115				
Property Owner: Marvin & Linda Holmstrom	Phone: 651-770-8989				
Tank(s) Tank(s)Material Soil Treatment S □ Septic □ Fiberglass □ Rock trench □ Aerobic □ Plastic □ Gravelless trench □ Lift □ Metal □ Chamber trench □ Holding □ Concrete □ Seepage bed □ Other: □ Block □ Mound □ Other □ At-grade	Alternative system heh				
Are the tank maintenance covers accessible? \square Yes \boxtimes N performed through the maintenance holes. Maintenance ho					
the ground surface to facilitate access and proper maintenance notes.					
Year house built: 1973 Year septic installed: 1973	Tank size (gals.): 900 est				
	er of residents in home? 2				
Number of bedrooms? 4 Are all floors draine	· ·				
Garbage disposal? Y Whirlpoo	l bath? N				
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? South Side					
Location of water well on lot?	Is the well a deep well? Yes				
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:					
	of pumper: Meyer's Sewer Service				
How often pumped in previous years? Twice A Year					
Have you received notices from any government agency concerning this system? N					
Is your property located in a shoreland management area? Y					
Do you have any additional information that should be given to the new owner? N					

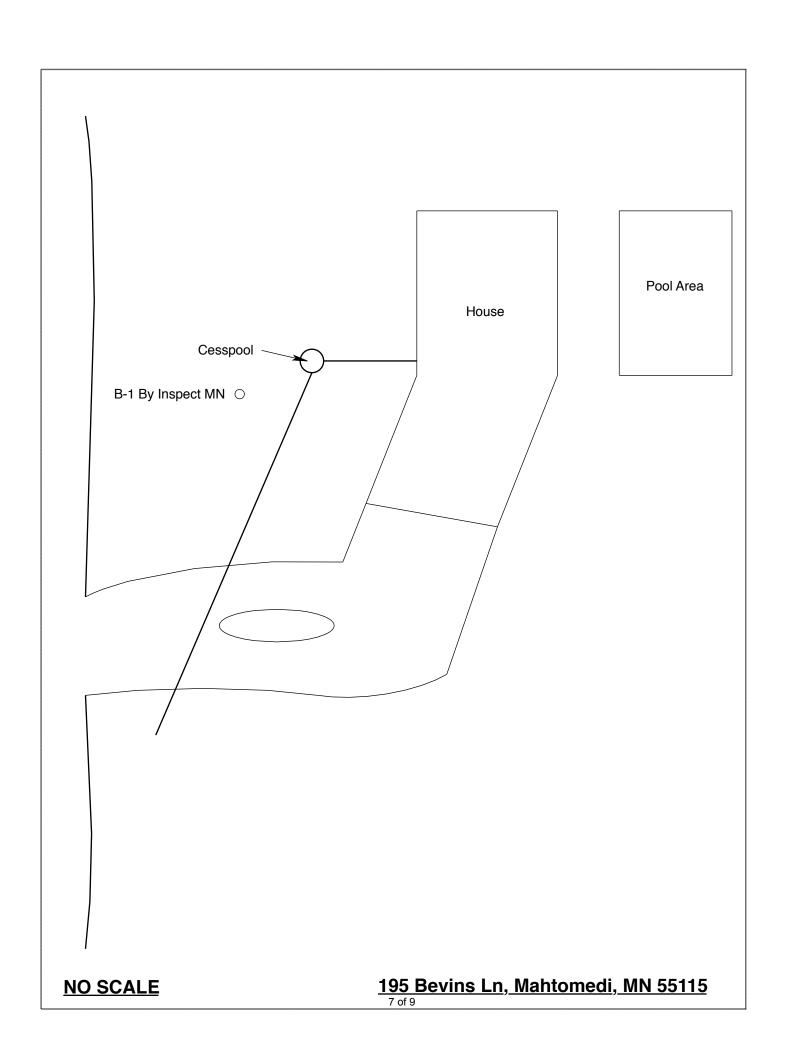
I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection 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: Marvin Holmstrom's Signature On File Date: 12/5/2016

Log Of Soil Borings

Location of Project: 195 Bevins Lane, Mahtomedi, MN 55115					
Borings Made By: Inspect		Inspect Minnesota	Date:		12/5/16
Auger Used: Hand/Bucket		Hand/Bucket	Classification System:		USDA
Boring Number: 1		1	Boring Number:		
Surface			Surface		
Elevation of Same ground		surface as cesspool	Elevation (of	
Boring			Boring		
Depth In Soils En		ncountered	Depth In Soils E		countered
Inches 0-10			Inches	-	
10-10	10YR 2/2 Loamy Sand 10YR 4/3 Medium Sand				
21-51		edium Sand With			
	7.5YR	5/8 Redox			
21" Depth To End Of Boring Or Redox		oring Or Redox		Depth To End Of Bo	oring Or Redox
					Relative To System
-61" Depth To Bottom Of Distribution Media				of Distribution Media	
=0" Of Separation			Of Separation	a Distribution Media	
o joi ocparación					
	End Of Boring At:	51"		End Of Boring At:	
	Redox Present At:	21"		Redox Present At:	
Standing Water Present At: None			Standing	Water Present At:	

Bottom Of Distribution Medium At: Liquid Level ≈ 61 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.

Sulbsurface Sewage Treatment Systems

Non-transferable



License # L2896

Maintainer License Expires:

Adv Inspector License Expires:

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

Adv Designer License Expires:

Date of Issuance:

Installer License Expires:

Certification

Inspect Minnesota, Midwest Soil Testing

Expires

10/15/2017 10/15/2017

Advanced Designer (Certified) Advanced Inspector (Certified)

Maintainer (Certified)

Certification Type

Designated Certified

Individual (DCI) Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal

10/15/2017

10/15/2017

10/15/2017

Service Provider (Certified)

Installer (Certified)

Designer (Certified) Inspector (Certified)

Christopher R. Uebe Christopher R. Uebe

03/04/2018

03/04/2018

Steven Giddings Manager Environmental Business Assistance Section



Minnesota Pollution Control Agency

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