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: 10155 199th St N, Forest Lake, MN 55025

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the history of the system with the owner, Bob Lund. This older system (installed in 1987) consists of a pre-cast septic tank and a rock trench drainfield.

My inspection indicates that this system is an imminent threat to public health and safety per MPCA rule 7080.1500 Subp. 4(A) because of the discharge of effluent to the ground surface. Additionally, there is excessive ponding over the drainfield trenches and effluent ponding in each of drainfield trench inspection pipes. These are all indicators that the drainfield is at the end of its useful life.

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

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): 5/31/2016	
<u> </u>	mpliant – Notice of Noncompliance grade Requirements on page 3)
Reason(s) for noncompliance (check all applicable)	
 ☑ Impact on Public Health (Compliance Component #1) – Imminent threat to ☐ Other Compliance Conditions (Compliance Component #3) – Imminent tho ☐ Tank Integrity (Compliance Component #2) – Failing to protect groundwate ☐ Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwate ☐ Soil Separation (Compliance Component #4) – Failing to protect groundwate ☐ Operating permit/monitoring plan requirements (Compliance Component 	reat to public health and safety ter otect groundwater vater
Property Information Parcel ID# or Sec/Twp/Rar	ge:
· · ·	for inspection: Property Sale
Property owner: Bob & Annette Lund Owner's or	priorie:
Owner's representative:Jeff Carpenter (LaBelle Real Estate) Represe	ntative phone:651-983-9052
	ory authority phone: 651-430-4052
Brief system description: Pre-cast septic and a rock trench drainfield.	
Comments or recommendations: Effleunt is ponding in the system and surfacing onto the ground	
Ellieunt is politiling in the system and surfacing onto the ground	
Certification	
I hereby certify that all the necessary information has been gathered to determine the determination of future system performance has been nor can be made due to unknown possible abuse of the system, inadequate maintenance, or future water usage.	
Inspector name: Brian Humpal Certifica	tion number: <u>L5342</u>
	nse number: L2896
Inspector signature: Brian Humpal Ph	one number: 651-492-7550
Necessary or Locally Required Attachments	
	local ordinance
☑ Other information (list): Report Summary, Property Information, Disclaimer, Li	

1.	Impact on Public Health – Compliance component #1 of 5					
	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) ☑ "Black soil" above soil dispersal system 			
	System cause sewage backup into dwelling or establishment.	☐ Yes ⊠ No	System requires "emergency" pumping Performed dye test			
	Any "yes" answer above indicate an Imminent Threat to Public Hea		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
	Comments/Explanation: Effleunt is ponding in the system and su	rfacing onto the grou	und			
		aog omo mo gro	•••			
2.	Tank Integrity – Compliance cor	mponent #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 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		☐ Unable to verify (See Comments/Explanation)☑ Other methods not listed (See Comments/Explanation)			
	system is Failing to Protect Gr	ounawater.	_ , ,			
	Comments/Explanation:	hafflag and tank wal	la OK			
	Lowered underwater camera into tank -	banies and tank war	is Or.			
3.	Other Compliance Conditions	s – Compliance co	omponent #3 of 5			
	•	•	·			
	 a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally 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 wa *System is failing to protect ground		ns as determined by inspector ☐ Yes* ☒ No			
	Explain:					
	•					

Property address: 10155 199th St N, Forest Lake, MN 55025

Inspector initials/Date: 5/31/2016

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 Page 370%9651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 206%9651-282-5332 or 800-657-3864 • 8

4.	Soil Separation — Compliance compor	nent #4 c	of 5		
_	Date of installation: 1987 Shoreland/Wellhead protection/Food Beverage Lodging?	Unkr		Verification method(s): Soil observation does not expire. Previous soil	,
	Compliance criteria:			observations by two independent parties are sufficie unless site conditions have been altered or local	∍nt,
	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	Comments/Explanation:	
	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 Attache Boring Log(s	
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.			B. Periodically saturated soil/bedrock C. System separation	
	Saturated 3011 of Bearook.			D. Required compliance separation*	
	Any "no" answer above indicates the system is Failing to Protect Groundwater. *May be reduced up to 15 percent if allowed by Local Ordinance.				al
5.	Operating Permit and Nitrogen B	MP* – C	Compliand	ce component #5 of 5 Not applicable	
	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	ïed in the	system de	esign	
	If the answer to both questions is "no",	this sec	tion doe	es not need to be completed.	
	Compliance criteria				
	a. Operating Permit number:			□ Vee □ Ne	
	Have the Operating Permit requirements I	been met	?	Yes No	
	b. Is the required nitrogen BMP in place and	properly	functioning	ng?	
	Any "no" answer indicates Noncompliance.				

Inspector initials/Date: 5/31/2016

Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law. www.pca.state.mn.us • 651-296-6300 • 800-657-3864 Page 47ወዥ 9651-282-5332 or 800-657-3864 • Available in alternative formats Page 3 of 3

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, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas,

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Inspect Minnesota & Midwest Soil Testing

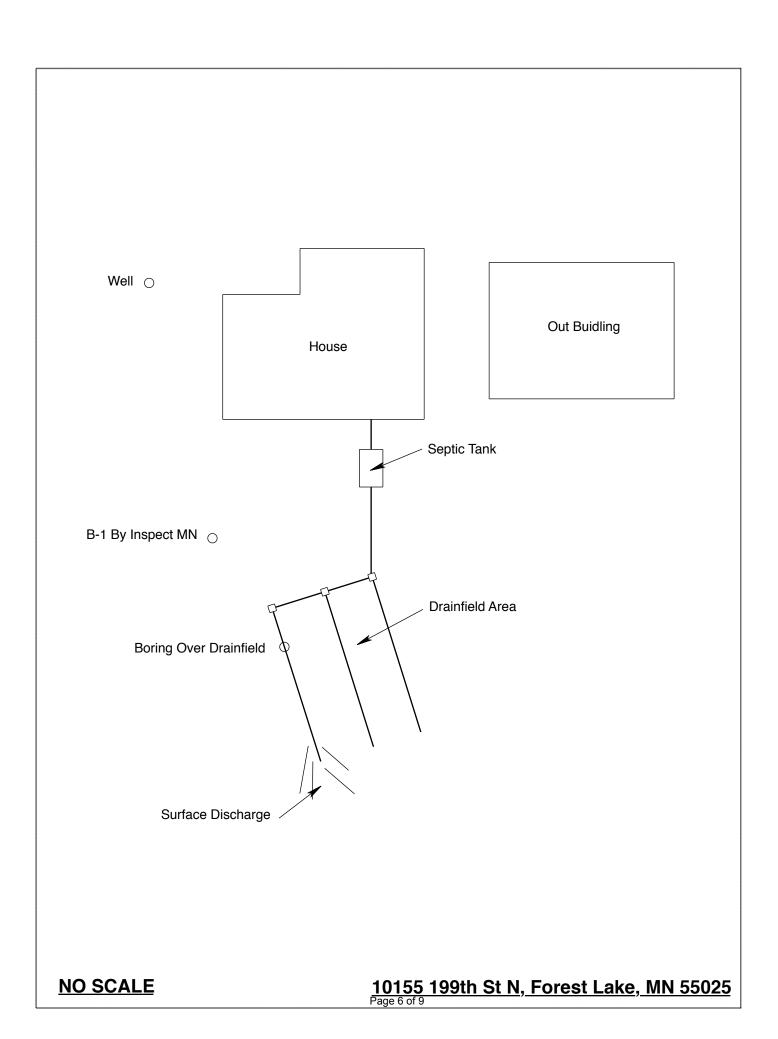
Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: May 31, 2016	Time: 3:15			
Property Address: 10155 199th St N, Forest Lake,	MN Zip: 55025			
Property Owner: Bob & Annette Lund	Phone:			
Tank(s) Tank(s)Material Soil Tre Septic 1 □ Fiberglass □ Rock □ Aerobic □ Plastic □ Grave □ Lift □ Metal □ Chan	atment System trench			
Year house built: 1987 Year septic installed:				
<u> </u>	Number of residents in home? 2-5			
	s drained by gravity? Y			
	hirlpool bath? N			
More than one system (laundry, etc.)? N	impoor oun: 14			
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? West 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? N If yes, explain:				
When was the system last pumped? 2015	Name of pumper: Olson's Sewer Service			
How often pumped in previous years? Every 3	Is 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 area? N				
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: Bob Lund's Signature On File Date: 5/31/2016



Log Of Soil Borings

Location of Project: 10155 199th St N, Forest Lake, MN 55025					
Borings Made By: Inspect Minnesota			Date:	5/31/16	
Auger Used: Hand/Bucket		Classification System: USDA		USDA	
Boring Number: 1		Boring Number:			
Surface	Cama ara	and curfoco ac lact	Surface		
Elevation	()[[and surface as last	Elevation	of	
Boring	uraii	nfield trench	Boring		
Depth In	Soils F	Soils Encountered		Soils En	countered
Inches			Inches	<u> </u>	<u>icountereu</u>
0-8 8-38 38-72	10YR 4/4	Medium Sand 4 Loamy Sand 4 Loamy Sand			
72"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same				Elevation Of Boring	Relative To System
-32" Depth To Bottom Of Distribution Media				f Distribution Media	
≥40"	Of Separation			Of Separation	
	End Of Boring At:	72"		End Of Boring At:	
	Redox Present At:			Redox Present At:	
Standing Water Present At: None		Standing	Water Present At:		
Standing Water Fresent At. None		- carraing			

В	Bottom Of Distribution Medium At:	32 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: Installer License Expires: Date of Issuance:

Adv Inspector License Expires:

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

Adv Designer License Expires:

Inspect Minnesota, Midwest Soil Testing

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0	8
Designated	Individual

Brian L. Humpal

Brian L. Humpal

Advanced Designer (Certified) Advanced Inspector (Certified)

Maintainer (Certified)

Certification Type

Brian L. Humpal

Brian L. Humpal

Christopher R. Uebe Brian L. Humpal

Christopher R. Uebe

Service Provider (Certified) Designer (Certified)

Installer (Certified)

Inspector (Certified)

10/15/2017 10/15/2017 10/15/2017

Certification

Expires

10/15/2017

10/15/2017

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