#### **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 10853 White Bear Lake, MN 55110 651-492-7550/Brian@Midwestsoiltesting.com

Brian Humpal

MPCA Licensed Advanced Inspector

#### SUBSURFACE SEWAGE TREATMENT SYSTEM COMPLIANCE REPORT

**Inspection Address:** 400 Lincoln Ave, Cottage Grove, MN 55016

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the history of the system with the owner, John Pole. A cesspool, a cesspool with a pump, and a rock trench drainfield. There is a pre-cast tank that is connected to the upper part of the house and a bathroom in the pool area. This tank feeds into the cesspool system. Additional cesspool(s) and/or drainfield may exist beyond the cesspool with pump.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(E) because of cesspools and 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 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

<b>Instructions:</b> Inspection results based on Minnesota Pollution Control Agency (MPCA requirements and attached forms – additional local requirements may also apply.	For local tra	cking 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): 10/17/2017		
· · · · · · · · · · · · · · · · · · ·	-	otice of Noncompliance ments on page 3)
Reason(s) for noncompliance (check all applicable)  ☐ Impact on Public Health (Compliance Component #1) – Imminent threat ☐ Other Compliance Conditions (Compliance Component #3) – Imminent the ☐ Tank Integrity (Compliance Component #2) – Failing to protect groundw ☐ Other Compliance Conditions (Compliance Component #3) – Failing to p ☐ Soil Separation (Compliance Component #4) – Failing to protect ground ☐ Operating permit/monitoring plan requirements (Compliance Component	nreat to public h ater rotect groundwa water	nealth and safety
Property Information Parcel ID# or Sec/Twp/Ra	nge:	
	-	Property Transfer
• •	phone: 612	
or		
	entative phone:	
	ory authority ph	ione: 651-430-4052
Brief system description:		
Comments or recommendations:  A cesspool, a cesspool with a pump, and a rock trench drainfield. There is a pre-cas house and a bathroom in the pool area. This tank feeds into the cesspool system. As beyond the cesspool with pump.		
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	ition number:	L5342
Business name: Inspect Minnesota, Midwest Soil Testing Lice	nse number:	L2896
Inspector signature: Brian Humpal Pr	one number: _	651-492-7550
Necessary or Locally Required Attachments		
	r loool ordina	
<ul><li>☑ Soil boring logs</li><li>☑ System/As-built drawing</li><li>☑ Forms pe</li><li>☑ Other information (list):</li><li>Report Summary, Property Information, Disclaimer, L</li></ul>	r local ordinand	, <del>C</del>
Es Other information (1191). Neport Summary, Property information, Discidiner, L	ICCHSC	

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Property address: 400 Lincoln Ave, Cottage Grove, MN 55016

Inspector initials/Date: 10/17/2017

<u>1.</u>	ln	<b>npact on Public Health</b> – Cor	mpliance component #1 o	of 5	
_	Co	ompliance criteria:		Verification method(s):	
		stem discharge sewage to the ound surface.	☐ Yes ⊠ No	<ul> <li>☑ Searched for surface outlet</li> <li>☑ Searched for seeping in yard/backup in home</li> </ul>	
		stem discharge sewage to drain tile surface waters.	☐ Yes ⊠ No	<ul> <li>☑ Excessive ponding in soil system/D-boxes</li> <li>☑ Homeowner testimony (See Comments/Explanation)</li> </ul>	
		rstem cause sewage backup into relling or establishment.	☐ Yes ⊠ No	<ul><li>☐ "Black soil" above soil dispersal system</li><li>☐ System requires "emergency" pumping</li><li>☐ Performed dye test</li></ul>	
		ny "yes" answer above indicates Ilmminent Threat to Public Heal		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)	
		omments/Explanation:			
	No	one of the above found.			
2.	т:	ank Integrity — Compliance con	anapant #2 of 5		
<u> </u>		<u> </u>	iponent #2 of 5	Varification mathed/a):	
	- 00	ompliance criteria:		Verification method(s):	
		stem consists of a seepage pit, sspool, drywell, or leaching pit.	⊠ Yes □ No	<ul><li>☑ Probed tank(s) bottom</li><li>☑ Examined construction records</li></ul>	
		epage pits meeting 7080.2550 may be mpliant if allowed in local ordinance.		<ul><li>☐ Examined Tank Integrity Form (Attach)</li><li>☐ Observed liquid level below operating depth</li></ul>	
		ewage tank(s) leak below their signed operating depth.	☐ Yes ☐ No	Examined empty (pumped) tanks(s)	
If yes, which sewage tank(s) leaks:  All Tanks		All Tanks	<ul><li>☐ Probed outside tank(s) for "black soil"</li><li>☐ Unable to verify (See Comments/Explanation)</li></ul>		
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.				
	Comments/Explanation:				
	Lo	were underwater camera into tank - ta	ınk of block construction.		
<u>3.</u>	Ot	ther Compliance Conditions	5 – Compliance compone	nt #3 of 5	
	a.	Maintenance hole covers are damaged	d, cracked, unsecured, or ap	pear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown	
	b.	Other issues (electrical hazards, etc.) to i *System is an imminent threat to put		npact public health or safety. ☐ Yes* ☒ No ☐ Unknown	
		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:			

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Prop	perty address: 400 Lincoln Ave, Cottage Grove	e, MN 550	16		Inspector initials/Date:10	)/17/2017 <b>BH</b>	
4.	Soil Separation — Compliance compor	nent #4 o	f 5				
	Date of installation: Shoreland/Wellhead protection/Food Beverage Lodging?	☑ Unkn		S	erification method(s): oil observation does not expire. Pa		
	Compliance criteria:				bservations by two independent p nless site conditions have been al		
	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/ 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	С	omments/Explanation:		
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*			_			
	"Experimental", "Other", or "Performance"	☐ Yes ☐ No		<u>lr</u>	ndicate 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)			<u>A</u> .	Bottom of distribution media	See Attached Boring Log(s)	
	Drainfield meets the designed vertical			<u>B</u> .	Periodically saturated soil/bedrock		
	separation distance from periodically saturated soil or bedrock.			<u>C.</u>	System separation		
	Any "no" answer above indicates the	he systi	em is		Required compliance separation*	if allowed by Local	
	*May be reduced up to 15 percent if allowed by Local Ordinance.						
5.	Operating Permit and Nitrogen Ba	<b>MP*</b> – C	ompliand	ce com	ponent #5 of 5 🔀 <b>Not app</b>	licable	
	Is the system operated under an Operating Peri	mit?	☐ Yes	⊠ No	If "yes", A below is required		
	Is the system required to employ a Nitrogen BM	P?	☐ Yes	⊠ No	If "yes", B below is required		
	BMP=Best Management Practice(s) specifi	ed 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						
	Operating Permit number:     Have the Operating Permit requirements by	een met?	?		☐ Yes ☐ No		
	b. Is the required nitrogen BMP in place and	properly 1	functioning	g?	☐ 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, repaired, 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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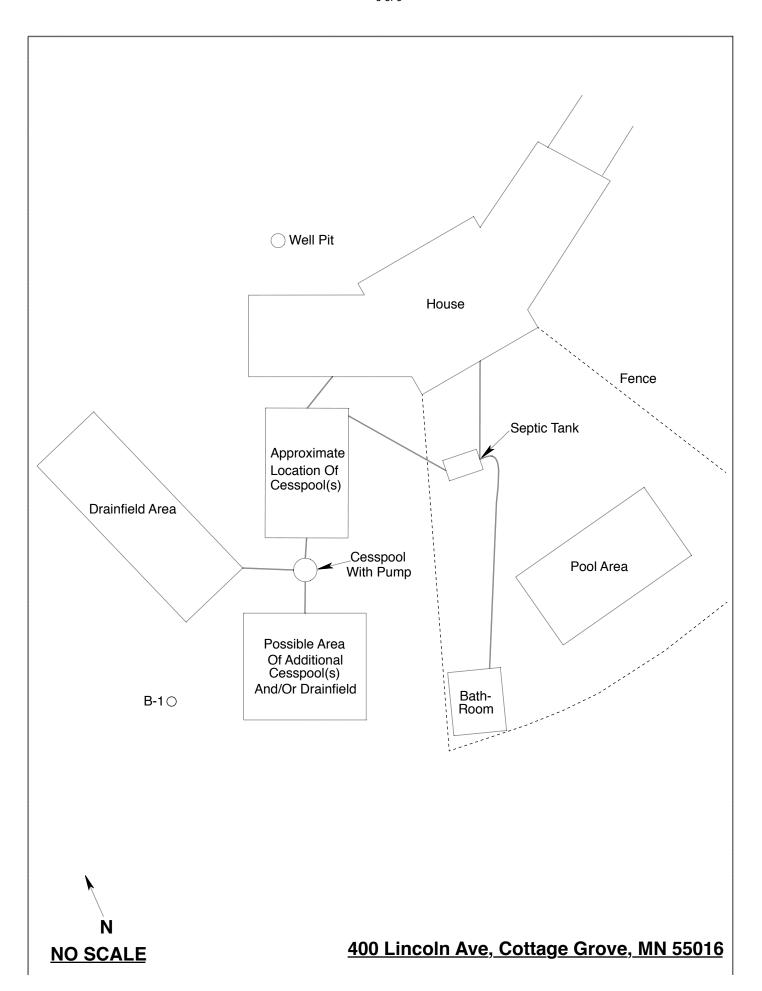
## Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: October 17, 2017	Time: 2:00 PM				
Property Address: 400 Lincoln Ave, Cottage Grove, MN	Zip: 55016				
Property Owner: John & Linda Pole	Phone: 612-810-6812				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Other  Alternative system  Experimental system  Cesspool system 1 or more  Other system Cesspool with pump				
Are the tank maintenance covers accessible?   Yes   No *If performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface access and proper maintenance of the second surface access and proper maintenance of the second surface access and the second surface access acces	ers should be made accessible to				
	Tank size (gals.):				
	sidents in home? 2-4				
Number of bedrooms? 4 Are all floors drained by g	,				
Garbage disposal? Y Whirlpool 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?  Bathroom outside and another part of the house go into a separate tank, which then goes to the system.					
Are there any additional systems on this property serving other buildings? N					
Location of septic system on lot? West Side					
	e 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? Y If yes, explain: Replaced pump in approximately 2010					
When was the system last pumped? 2017 Name of pum	per: Schlomka				
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: John Pole's Signature On File Date: 10/17/2017



#### **Log Of Soil Borings**

Borings Made By: Inspect Minnesota Auger Used: Hand/Bucket  Surface Elevation of Boring Depth In Inches	Location of Project: 400 Lincoln Ave, Cottage Grove, MN 55016					
Surface Elevation of Boring  Same ground surface as last drainfield trench  Soils Encountered  Inches  0-8 8-20 10YR 2/2 Silt Loam 10YR 4/3 Silt Loam 10YR 6/4 Fine Silt Loam With 10YR 7/1 & 7.5YR 5/8 Redox  37" Depth To End Of Boring Or Redox  Dorth In Inches  Soils Encountered Inches  Soils Encountered Inches  Soils Encountered Inches  Soils Encountered Inches  Depth In Inches  Soils Encountered  Inches  Depth In Inches  Soils Encountered  Depth In Inches  Depth In Inches  Soils Encountered  Depth In Inches  Depth To End Of Boring Or Redox		ings Made By:	Inspect Minnesota			10/17/17
Surface Elevation of Boring  Depth In Inches				Classi	fication System:	USDA
Elevation of Boring  Depth In Inches	Во	ring Number:	1		Boring Number:	
Inches	Elevation of Boring	_		Elevation of Boring	of	
8-20 20-37 10YR 4/3 Silt Loam 10YR 6/4 Fine Silt Loam With 10YR 7/1 & 7.5YR 5/8 Redox  37" Depth To End Of Boring Or Redox Depth To End Of Boring Or Redox Depth To End Of Boring Or Redox	•	Soils E	ncountered	•	Soils Er	<u>icountered</u>
	8-20 20-37	10YR 3 10YR 4 10YR 6/4 Fir	/3 Silt Loam /3 Silt Loam ne Silt Loam With			
	37" Depth To End Of Boring Or Redox			Depth To End Of Bo	oring Or Redox	
Same Elevation Of Boring Relative To System Elevation Of Boring Relative To System	Same Elevation Of Boring Relative To System		E	Elevation Of Boring	Relative To System	
-49" Depth To Bottom Of Distribution Media Depth To Bottom Of Distribution Media						
=0" Of Separation Of Separation	=0" Of Separation			Of Separation		
End Of Boring At: 48" End Of Boring At:	End Of Boring At: 48"			End Of Boring Ato		
Redox Present At: 37" Redox Present At:	3					
Standing Water Present At: None Standing Water Present At:						

Bottom Of Distribution Medium At: 49 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 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: 12/22/2017

Issued: 11/29/2016

### Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

### Designated Certified Individual(s):

Cert #

Name

**Certification Expires:** 

C5342

**Brian L Humpal** 

10/15/2017

Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector

C9852

Christopher R Uebe

3/4/2018

Designer, Inspector



St. Paul. Minnesota 55155-4194

Steven Giddings, Manager

Prevention and Solid Waste Management Section