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	
Date: March 2, 2017 Time: 12:30 PM	Owner: Brian & Carma Wilkinson	
Inspection Address: 10600 67th St S, Cottage Grove, MN 55016		
REPORT SUMMARY		

I have performed an "MPCA Compliance Inspection" on this septic system. This older system (installed in 1989) consists of a pre-cast septic tank 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)(E) because of 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 Brian Humpal

Control Agency 520 Lafayette Road North St. Paul, MN 55155-4194

Minnesota Pollution

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): 3/2/2017

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:	10600 67 th St S, Cottage Grove, MN 55016	Reason for inspection: Property Sale
Property owner: Brian & Carma Wilkinson		Owner's phone: 651-336-0886
or		
Owner's represen	tative:	Representative phone:
Local regulatory a	uthority: Washington County	Regulatory authority phone: 651-430-4052
Brief system desc	ription: <u>A pre-cast septic tank and a rock trench d</u>	rainfield.
Commonte or roce	mmondations	

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

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Property address: 10600 67th St S, Cottage Grove, MN 55016

Inspector initials/Date: 3/2/2017

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.

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 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. \Box Yes* \boxtimes No \Box 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: 1989	Unkn	own	Verification method(s):	
Shoreland/Wellhead protection/Food Beverage Lodging?	🗌 Yes	🛛 No	Soil observation does not expire. Problem observations by two independent particular problem of the second part	
Compliance criteria:			unless site conditions have been altered or	
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	☐ Yes	🖾 No	 requirements differ. Conducted soil observation(s) (Attach boring logs) Two previous verifications (Attach boring logs) Not applicable (Holding tank(s), no drainfield) Unable to verify (See Comments/Explanation) 	
separation distance from periodically saturated soil or bedrock.			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" systems built under pre-2008 Rules; Type IV				
or V systems built under pre-2008 Rules, Type TV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)				See Attached Boring Log(s)
Drainfield meets the designed vertical				
separation distance from periodically saturated soil or bedrock.				
			D. Required compliance separation*	
Any "no" answer above indicates the Failing to Protect Groundwater.	he syste	em is	*May be reduced up to 15 percent in Ordinance.	f allowed by Loca
Operating Permit and Nitrogen B	MP* – C	ompliance	component #5 of 5 🛛 🖂 Not app	licable
s the system operated under an Operating Per	mit?	🗌 Yes 🛛	No If "yes", A below is required	
s the system required to employ a Nitrogen BM	1P?	🗌 Yes 🛛	If "yes", B below is required No If "yes", B below is required	
BMP=Best Management Practice(s) specif	ïed in the s	system desi	gn	
Diffi Deet Management (raeliee(e) opeen				

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.

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

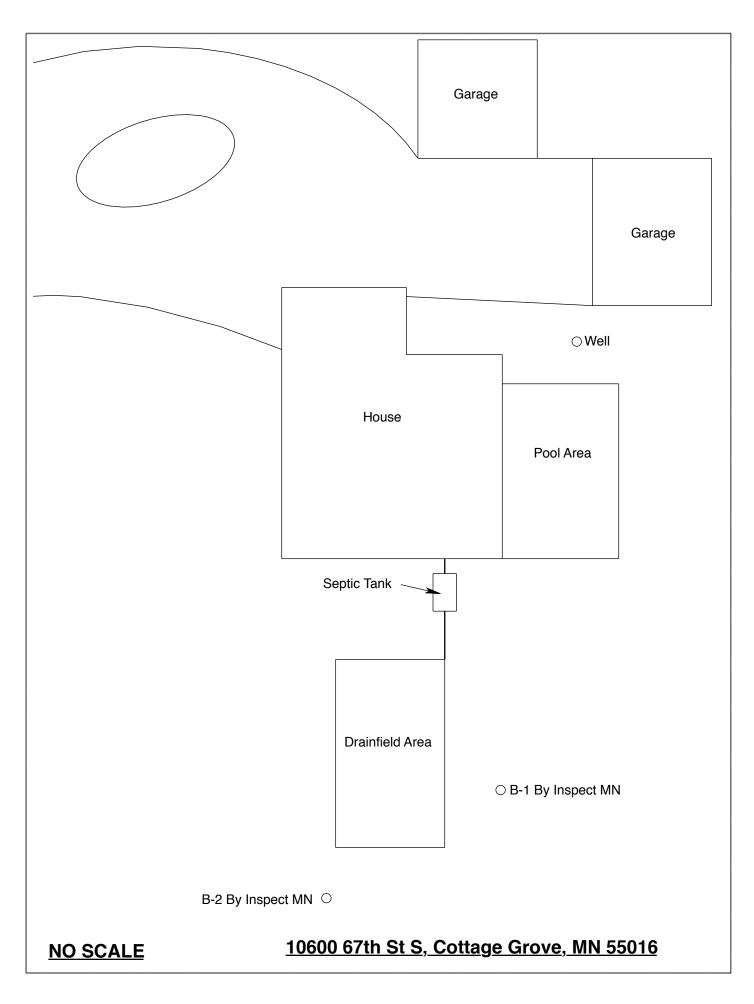
Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: March 2, 2017	Time: 12:30 PM	
Property Address: 10600 67 th St S, Cottage Grove,	, MN Zip: 55016	
Property Owner: Brian & Carma Wilkinson	Phone: 651-336-0886	
1 2	atment System Other	
$\square I = \square I $		
	elless trench Experimental system	
	age bed Cesspool system	
Other: Block Mou		
Other At-gr	ade	
Are the tank maintenance covers accessible?	s \boxtimes No *If no, proper maintenance must be	
performed through the maintenance holes. Mainten		
the ground surface to facilitate access and proper m	aintenance of the system.	
Year house built: 1989 Year septic installed	: 1989 Tank size (gals.): 1200	
How long has seller owned the property?	Number of residents in home?	
Number of bedrooms? 4 Are all floor	s drained by gravity? Lower Pumped	
Garbage disposal?	/hirlpool bath?	
More than one system (laundry, etc.)?		
Does this property have any footing drain tiles conn	ected to the septic system?	
Are any buildings on this property such as garages of	or out-buildings connected to this system?	
Ano theme any additional systems on this monarty as	un sin a seth an hysildin and	
Are there any additional systems on this property se	aving other buildings?	
Location of septic system on lot? East Side Location of water well on lot? Northwest Side	L. the second of the second 119 X	
	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? If yes, explain:		
to the system? If yes, explain.		
When was the system last pumped? 2015	Name of pumper:	
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.

Owner/Occupant:



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Log Of Soil Borings

Locat	ion of Project:	10600 67th St S Cot	tage Grov		4N 55016	
Location of Project: 10600 67th St S, Cot Borings Made By: Inspect Minnesota				<u>, r</u>	Date:	3/2/17
		Hand/Bucket	Class	sifica	ation System:	USDA
B	oring Number:	1	0.000		pring Number:	2
Surface Elevation of Boring	Same grou	Ind surface as last	Surface Elevation of Boring Same ground surface as drainfield trench		nd surface as last	
Depth In Inches	Soils E	ncountered	Depth In Inches		Soils En	countered
0-12 12-29 29-38 38-46	10YR 3/ 10YR 5/ 10YR 5/3 5YR 5/8, 7.5YR 10YR 3/4 10YR 3/4 M Silt Lo	/2 Silt Loam /3 Clay Loam /3 Clay Loam Clay Loam With 6/8, & 10YR 6/1 Redox Medium Sand edium Sand With oam Pieces Loam (Saturated)	0-10 10-25 25-45 45-55	7.5	10YR 3/3 10YR 5/3 C YR 5/8, 7.5YR 6	2 Silt Loam 3 Clay Loam lay Loam With 5/8, & 10YR 6/1 Redox Medium Sand
38" De	Depth To End Of Boring Or Redox		25"	Dep	oth To End Of Bo	oring Or Redox
Same Ele	evation Of Boring	g Relative To System	Same Elevation Of Boring Relative To Syste		Relative To System	
			-52" =0"		oth To Bottom O Separation	f Distribution Media
Fr	nd Of Boring At:	85"		Fn	d Of Boring At:	55"
	edox Present At:	38"			dox Present At:	25"
	ater Present At:	None	Standing		ater Present At:	None

Bottom Of Distribution Medium At: 52 Inches

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 # 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
C9852	Installer, Maintainer, Serv Prov, Christopher R Uebe	3/4/2018
C9052	Designer, Inspector	5/4/2016



Minnesota Pollution Control Agency

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

Steven Giddings, Manager Prevention and Solid Waste Management Section