#### **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:** January 10, 2017 **Time:** 2:30 PM **Owner:** Richard Nauman **Inspection Address:** 2070 Racine Ave S, LSCB, MN **Site Conditions:** 8" Snow 10" Frost

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this septic system and have reviewed the original design/permit records on file at Washington County. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and gravelless trench drainfield.

My inspection indicates that this system is presently "non-compliant" due to the imminent threat to public health and safety per MPCA rule 7080.1500 Subp. 4(A). because of the surface discharge to the ground surface from the distribution box. Washington County issued sewage treatment permit #2000-99011 for the installation of this septic system.

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



St. Paul, MN 55155-4194

**Necessary or Locally Required Attachments** 

System/As-built drawing

Soil boring logs

Other information (list):

### **Compliance Inspection Form**

## Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

For local tracking purposes: Instructions: Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply. Submit completed form to Local Unit of Government (LUG) and system owner within 15 days System Status System status on date (mm/dd/yyyy): 1/10/2017 Compliant – Certificate of Compliance Noncompliant - Notice of Noncompliance (Valid for 3 years from report date, unless shorter time (See Upgrade Requirements on page 3) frame outlined in Local Ordinance.) 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: 2070 Racine Ave S, Lake St Croix Beach, MN 55043 Reason for inspection: Property Sale Owner's phone: 651-324-1041 Property owner: Richard Nauman or Owner's representative: Representative phone: Local regulatory authority: Washington County Regulatory authority phone: 651-430-4052 Brief system description: Two pre-cast septic tanks, a pre-cast lift tank, and a gravelless trench drainfield. Comments or recommendations: This system is an imminent threat to public health and safety per MPCA 7080.1500 Subp.4(A), because of the surface discharge to the ground surface from the distribution box. 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 signature: Phone number: 651-492-7550

Report Summary, Property Information, Disclaimer, License

1.	Impact on Public Health – Compliance component #1 of 5					
	Compliance criteria:		Verification method(s):			
	System discharge sewage to the ground surface.	⊠ Yes □ No	<ul> <li>✓ Searched for surface outlet</li> <li>✓ Searched for seeping in yard/backup in home</li> </ul>			
	System discharge sewage to drain tile or surface waters.	☐ Yes ⊠ No	<ul> <li>☑ Excessive ponding in soil system/D-boxes</li> <li>☐ Homeowner testimony (See Comments/Explanation)</li> </ul>			
	System cause sewage backup into dwelling 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>			
	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:					
	This system is an imminent threat to pu discharge to the ground surface from th		per MPCA 7080.1500 Subp.4(A). because of the surface			
2.	Tank Integrity – Compliance co	mponent #2 of 5				
	Compliance criteria:		Verification method(s):			
	System consists of a seepage pit, cesspool, drywell, or leaching pit.	☐ Yes ⊠ No	<ul><li>☑ Probed tank(s) bottom</li><li>☑ Examined construction records</li></ul>			
	Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		<ul><li>Examined Tank Integrity Form (Attach)</li><li>Observed liquid level below operating depth</li></ul>			
	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 indicates the system is Failing to Protect Groundwater.		<ul> <li>☐ Unable to verify (See Comments/Explanation)</li> <li>☐ Other methods not listed (See Comments/Explanation)</li> </ul>			
3.	Comments/Explanation: Lowered underwater camera into tanks Lift pump and alarm were operational at	the time of the inspec	ction.			
	Maintenance hole covers are damage	ed, 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 ☐ U*System is an imminent threat to public health and safety					
	Explain:					
	<ul> <li>c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☐ No</li> <li>*System is failing to protect groundwater</li> <li>Explain:</li> </ul>					

Property address: 2070 Racine Ave S, Lake St Croix Beach, MN 55043 Inspector initials/Date: 1/10/2017

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1.	Soil Separation – Compliance compor	nent #4 c	of 5				
	Date of installation: 1999  Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Unkr		S	erification method(s): oil observation does not expire. Pr		
	Compliance criteria:				observations by two independent parties are sufficient, unless 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		equirements differ.  Conducted soil observation(s) (A  Two previous verifications (Attact  Not applicable (Holding tank(s), not	ch boring logs) o 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	С	omments/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)			<u>A.</u>	Bottom of distribution media	See Attached Boring Log(s)	
	Drainfield meets the designed vertical separation distance from periodically				Periodically saturated soil/bedrock  System separation		
	saturated soil or bedrock.			D	Required compliance separation*		
	Any "no" answer above indicates the system is Failing to Protect Groundwater.			*N	*May be reduced up to 15 percent if allowed by Local Ordinance.		
5.	Operating Permit and Nitrogen B	<b>MP*</b> – C	Compliance	com	ponent #5 of 5 🔀 <b>Not app</b> l	licable	
	Is the system operated under an Operating Permit?						
			If "yes", B below is required				
	BMP=Best Management Practice(s) specified in the system design						
	If the answer to both questions is "no", this section does not need to be completed.						
Compliance criteria							
	a. Operating Permit number:				☐ Yes ☐ No		
	Have the Operating Permit requirements I	peen met	een met?		163 110		
	b. Is the required nitrogen BMP in place and				Yes No		
	Any "no" answer indicates Noncompliance.						

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. www.pca.state.mn.us • 800-657-3864 • 4 of ISTY 651-282-5332 or 800-657-3864 • Available in alternative formats

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

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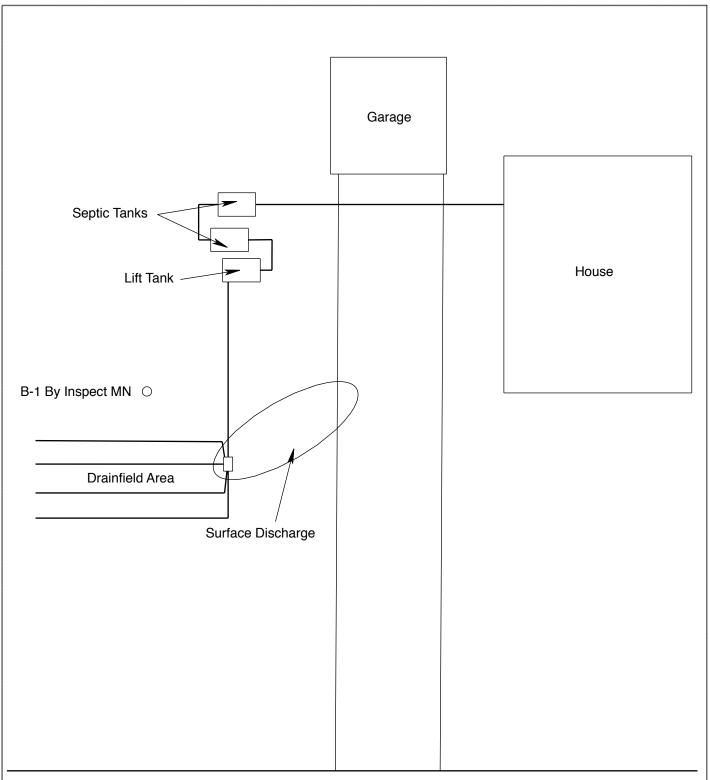
Property address: 2070 Racine Ave S, Lake St Croix Beach, MN 55043

Inspector initials/Date: 1/10/2017

#### **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: January 10, 2017	Time: 2:30 PM			
Property Address: 2070 Racine Ave S, LSCB, MN	Zip: 55043			
Property Owner: Richard Nauman	Phone: 651-324-1041			
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 2       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 Other system			
Are the tank maintenance covers accessible?   Yes   No *If i performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the second surface.	ers should be made accessible to			
1	Γank size (gals.): 2-1000			
	sidents in home?			
Number of bedrooms? 2 Are all floors drained by gr	· ·			
Garbage disposal? Whirlpool bath?	N			
More than one system (laundry, etc.)?				
Does this property have any footing drain tiles connected to the se	ptic system?			
Are any buildings on this property such as garages or out-building	s connected to this system?			
Are there any additional systems on this property serving other buildings?				
Location of septic system on lot? South Side				
ž .	well a deep well? N/A			
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:				
When was the system last pumped? 2015 Name of pum	per:			
How often pumped in previous years?				
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:	Date:			



2070 Racine Ave S, Lake St Croix Beach, MN 55043

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

Loc	Location of Project: 2070 Racine Ave S, Lake St Croix Beach, MN 55043				
Borings Made By: Inspect Minnesota				Date:	1/10/17
Auger Used: Hand/Bucket		Classification System:		USDA	
	Boring Number:	1		Boring Number:	
Surface Elevation Boring	Same ground surface as last		Surface Elevation of Boring	of	
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	<u>ncountered</u>
Depth In Soils Encountered					
60" 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	
20" Depth To Bottom Of Distribution Media ≥40" Of Separation			Depth To Bottom C Of Separation	of Distribution Media	
End Of Boring At: 60"			End Of Boring At:		
Redox Present At: None			Redox Present At:		
Standing Water Present At: None			Standing	Water Present At:	

Bottom Of	Distribution Medium At	20 Inches
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#### **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



# 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