#### **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 (SSTS) COMPLIANCE REPORT

**Date:** September 27, 2018 **Time:** 2:30 PM **Owner:** River Valley Christian Church

**Inspection Address:** 5900 Lake Elmo Ave N, Lake Elmo, MN 55042

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at the City of Lake Elmo. This older system (installed in 1996) consists of two pre-cast septic tanks and a rock trench drainfield.

Predicated on my inspection of the system and my review of the original design/permit records, it is my opinion that this system <u>presently meets</u> MPCA minimum compliance inspection requirements.

Inspect Minnesota and Midwest Soil Testing have been hired to perform a compliance inspection of this SSTS for compliance with local ordinances pursuant to Minn. Stat. § 115.55 (2013). This compliance inspection covers only the criteria required by Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011). A compliance inspection is an indication of the current compliance status of the system and does not guarantee the performance or longevity of this system beyond the date of inspection, as it is impossible to determine the future performance of any system. Inspect Minnesota and Midwest Soil Testing disclaim any use of this compliance inspection beyond determining SSTS compliance pursuant to Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011).

Please contact me should you have any questions.

Christopher Uebe

Brian Humpal

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.  Submit completed form to Local Unit of Government (LUG) and system owner within 15 days	For local tracking purposes:		
System Status			
System status on date (mm/dd/yyyy): 9/27/2018			
	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 the Tank Integrity (Compliance Component #2) – Failing to protect groundward Other Compliance Conditions (Compliance Component #3) – Failing to protect groundward Soil Separation (Compliance Component #4) – Failing to protect groundward Operating permit/monitoring plan requirements (Compliance Component	reat to public health and safety ater rotect groundwater vater		
Property Information Parcel ID# or Sec/Twp/Rar	ae.		
·	for inspection: Property Transfer		
Property owner: River Valley Christian Church Owner's	phone:		
Or	mtativa mbana.		
	Representative phone: 651-748-1078  Regulatory authority phone: 651-430-6655		
Brief system description: Two pre-cast septic tanks and a rock trench drainfield.			
Comments or recommendations:			
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/Christopher Uebe Certifica	tion number: <u>C5342/C9852</u>		
	nse number: L2896		
Inspector signature: Brian Thompsol for the Ph	one number: 651-492-7550		
Necessary or Locally Required Attachments			
	local ordinance		
☐ Other information (list): Report Summary, Property Information, Disclaimer, Li	cense		

1.	lm	Impact on Public Health — Compliance component #1 of 5				
	Syy groor Syy dw	estem discharge sewage to the bund surface.  Instem discharge sewage to drain tile surface waters.  Instem cause sewage backup into welling or establishment.  In y "yes" answer above indicates of Imminent Threat to Public Heal of Imminent Sexplanation:  In y "one of the above found.	☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No	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.	Ta	ank Integrity – Compliance con	nponent #2 of 5			
	Co	ompliance criteria:		Verification method(s):		
	Sy	estem 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) ☐ Probed outside tank(s) for "black soil"		
	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			☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)		
3.	Ot	ther Compliance Conditions	S – Compliance com	ponent #3 of 5		
	а.	Maintenance hole covers are damage	d, cracked, unsecured,	or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown		
	b.					
		Explain:				
	C.	c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☒ No *System is failing to protect groundwater  Explain:				

Property address: 5900 Lake Elmo Ave N, Lake Elmo, MN 55042 Inspector initials/Date: 9/27/2018

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Property address: 5900 Lake Elmo Ave N, Lake Elmo, MN 55042 Inspector initials/Date: 9/27/2018					
4.					
	Date of installation: 1996	Unkr	nown	Verification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?		☐ No	Soil observation does not expire. Previous observations by two independent parties ar	
	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:	☐ Yes	□ No	requirements differ.  Conducted soil observation(s) (Attach be Two previous verifications (Attach boring  Not applicable (Holding tank(s), no drainfie	g logs)
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.			☐ Unable to verify (See Comments/Explanat ☐ 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: Reviewed design and permit records.	
	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)				e Attached ing Log(s)
	Drainfield meets the designed vertical			B. Periodically saturated soil/bedrock	
	separation distance from periodically saturated soil or bedrock.			C. System separation	
				D. Required compliance separation*	
	Any "no" answer above indicates to Failing to Protect Groundwater.	he syste	em is	*May be reduced up to 15 percent if allowed Ordinance.	d by Local
5.	Operating Permit and Nitrogen B	<b>MP*</b> – C	Complianc	e component #5 of 5 🔀 <b>Not applicable</b>	,
	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 BMP?				
	BMP=Best Management Practice(s) specific	ied in the	system de	sign	
	If the answer to both questions is "no",	this sec	tion does	not need to be completed.	

Any "no" answer indicates Noncompliance.

Have the Operating Permit requirements been met?

b. Is the required nitrogen BMP in place and properly functioning?

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.

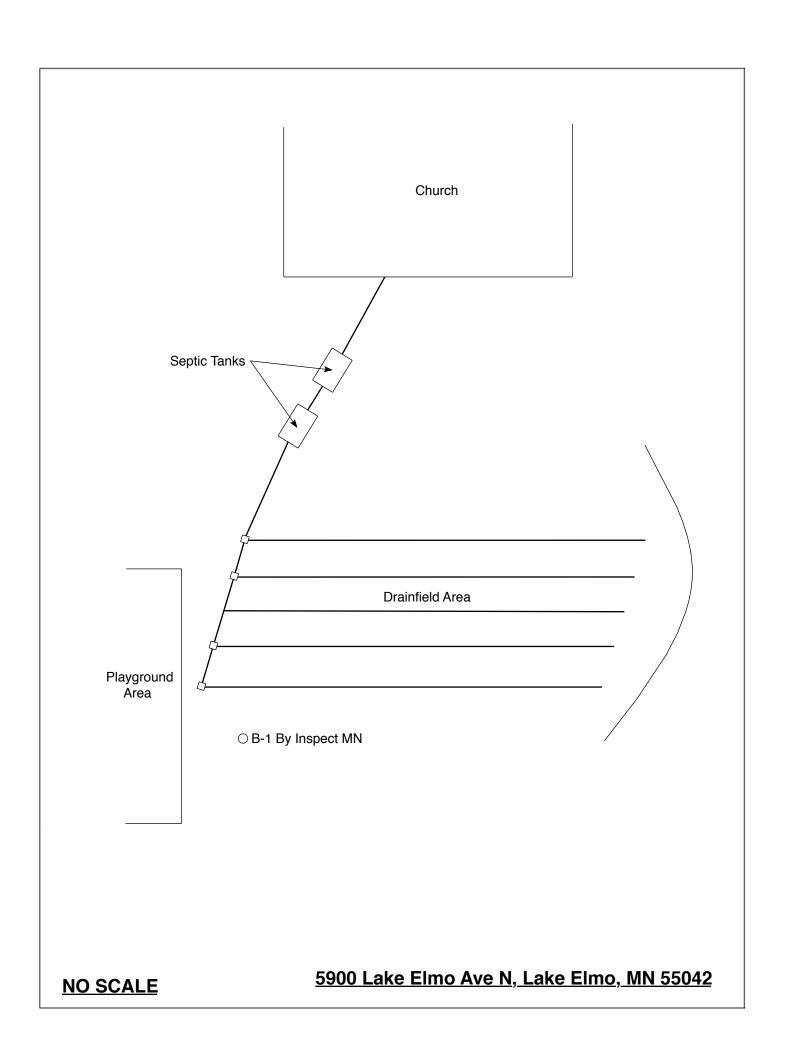
☐ Yes ☐ No

☐ Yes ☐ No

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Compliance criteria

a. Operating Permit number:



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

Location of Project: 5900 Lake Elmo Ave N, Lake Elmo, MN 55042						
Borings Made By: Inspect Minnesota		Date: 9/27/18		9/27/18		
	Auger Used:	Hand/Bucket	Classification System: USDA		USDA	
	Boring Number:	1	Boring Number:			
Surface Elevation of Boring  Same ground surface as last drainfield trench			Surface Elevation Boring			
Depth In Inches	Pepth In Soils Encountered		Depth In Inches	Soils Er	Soils Encountered	
0-11 11-17 17-22 22-38 38-55 55-86	10YR 4/4 10YR 4/4 Clay ≈35% Ro 10YR 3/6 Mediu Gravel ≈35% 10YR 3/6 Me Loamy Sand Laye 7.5YR 3/4 L	/3 Silt Loam /4 Clay Loam /6 Coarse Sand With /6 Rock Fragments /6 Roc				
86"	Depth To End Of Boring Or Redox			Depth To End Of B	oring Or Redox	
Same Elevation Of Boring Relative To System			Elevation Of Boring	g Relative To System		
-50" Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media				
≥36" Of Separation			Of Separation			
			E 1068 : ::	Ī		
	End Of Boring At:			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:	50 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**

# Business License

## Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2018

Issued: 10/10/2017

### Specialty Area(s):

Installer Maintainer Service Provider Advanced Designer

Advanced Inspector

### Designated Certified Individual(s):

Cert # Name Certification Expires: Anthony P Scully 7/28/2018 C9633 Installer, Designer (Conditional)

10/15/2020 C5342 Brian L Humpal Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector

C9852 Christopher R Uebe 3/4/2018

Designer, Inspector



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

Charles K Thompson, Supervisor Certification & Training Unit