Midwest Sewer Services

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: March 17, 2020 **Time:** 9:00 AM **Owner:** John Thompson

Inspection Address: 2119 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, along with a previous compliance inspection from 2007, which were on file at the City of Lake Elmo. This very old system (installed in 1991) consists of two pre-cast septic tanks and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years.

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

Midwest Sewer Services 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. Midwest Sewer Services 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.	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):3/17/2020	
	npliant – 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 groundware Other Compliance Conditions (Compliance Component #3) – Failing to protect groundware Soil Separation (Compliance Component #4) – Failing to protect groundware Operating permit/monitoring plan requirements (Compliance Component	reat to public health and safety ter otect groundwater vater
Property Information Parcel ID# or Sec/Twp/Ran	ge:
	or inspection: Property Transfer
· ·	phone: 612-802-9427
Owner's representative: Represe	ntative phone:
•	ry 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 unknow possible abuse of the system, inadequate maintenance, or future water usage.	
Inspector name: Brian Humpal/Christopher Uebe Certificat	ion number: <u>C5342/C9852</u>
	nse number: L2896
Inspector signature: Brian Thompal for the Pho	one number: 651-492-7550
Necessary or Locally Required Attachments	
· · · · · ·	local ordinance
☐ Other information (list): Report Summary, Property Information, Disclaimer, Lie	

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Property address: 2119 Lake Elmo Ave N, Lake Elmo, MN 55042

Inspector initials/Date: 3/17/2020 84(1)

Impact on Public Health – Compliance component #1 of 5 Compliance criteria: Verification method(s): Searched for surface outlet System discharge sewage to the ☐ Yes ☐ No Searched for seeping in yard/backup in home ground surface. System discharge sewage to drain tile ☐ Yes ☐ No ☐ Homeowner testimony (See Comments/Explanation) or surface waters. ☐ "Black soil" above soil dispersal system ☐ Yes ☐ No System cause sewage backup into ☐ System requires "emergency" pumping dwelling or establishment. ☐ Performed dye test Any "yes" answer above indicates the system is Unable to verify (See Comments/Explanation) an Imminent Threat to Public Health and Safety. Other methods not listed (See Comments/Explanation) Comments/Explanation: None of the above found. 2. Tank Integrity – Compliance component #2 of 5 Verification method(s): Compliance criteria: Probed tank(s) bottom System consists of a seepage pit, ☐ Yes ☐ No cesspool, drywell, or leaching pit. Seepage pits meeting 7080.2550 may be ☐ Examined Tank Integrity Form (Attach) compliant if allowed in local ordinance. ☐ Observed liquid level below operating depth ☐ Yes ☒ No Sewage tank(s) leak below their ☐ Examined empty (pumped) tanks(s) designed operating depth. ☐ Probed outside tank(s) for "black soil" If yes, which sewage tank(s) leaks: ☐ Unable to verify (See Comments/Explanation) Any "ves" answer above indicates the ☐ Other methods not listed (See Comments/Explanation) system is Failing to Protect Groundwater. Comments/Explanation: Lowered underwater camera into tanks - baffles and tank walls OK. 3. Other Compliance Conditions – Compliance component #3 of 5 Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes* ⊠ No ☐ Unknown a. 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: System is non-protective of ground water for other conditions as determined by inspector ☑ No *System is failing to protect groundwater Explain:

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Inspector initials/Date: 3/17/2020 **BA**() Property address: 2119 Lake Elmo Ave N, Lake Elmo, MN 55042 **Soil Separation** – Compliance component #4 of 5 Date of installation: 1991 Unknown Verification method(s): Shoreland/Wellhead protection/Food Beverage Soil observation does not expire. Previous soil Lodging? observations by two independent parties are sufficient, unless site conditions have been altered or local Compliance criteria: requirements differ. For systems built prior to April 1, 1996, and ☐ Yes ☐ No not located in Shoreland or Wellhead ☐ Conducted soil observation(s) (Attach boring logs) Protection Area or not serving a food. ☐ Two previous verifications (Attach boring logs) beverage or lodging establishment: ☐ Not applicable (Holding tank(s), no drainfield) Drainfield has at least a two-foot vertical ☐ Unable to verify (See Comments/Explanation) separation distance from periodically ○ Other (See Comments/Explanation) saturated soil or bedrock. ⊠ Yes □ No Non-performance systems built April 1, Comments/Explanation: 1996, or later or for non-performance Reviewed previous compliance inspection from 2007. systems located in Shoreland or Wellhead Protection Areas or serving a food, Reviewed design and permit records. beverage, or lodging establishment: 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 See Attached or V systems built under 2008 Rules (7080. Boring Log(s) A. Bottom of distribution media 2350 or 7080.2400 (Advanced Inspector License required) B. Periodically saturated soil/bedrock Drainfield meets the designed vertical separation distance from periodically C. System separation saturated soil or bedrock. D. Required compliance separation* Any "no" answer above indicates the system is *May be reduced up to 15 percent if allowed by Local Failing to Protect Groundwater. Ordinance. 5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 Not applicable ☐ Yes ☐ No If "yes", A below is required Is the system operated under an Operating Permit? Is the system required to employ a Nitrogen BMP? ☐ Yes ☐ No 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.

Have the Operating Permit requirements been met? b. Is the required nitrogen BMP in place and properly functioning?

Any "no" answer indicates Noncompliance.

Compliance criteria

a. Operating Permit number:

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

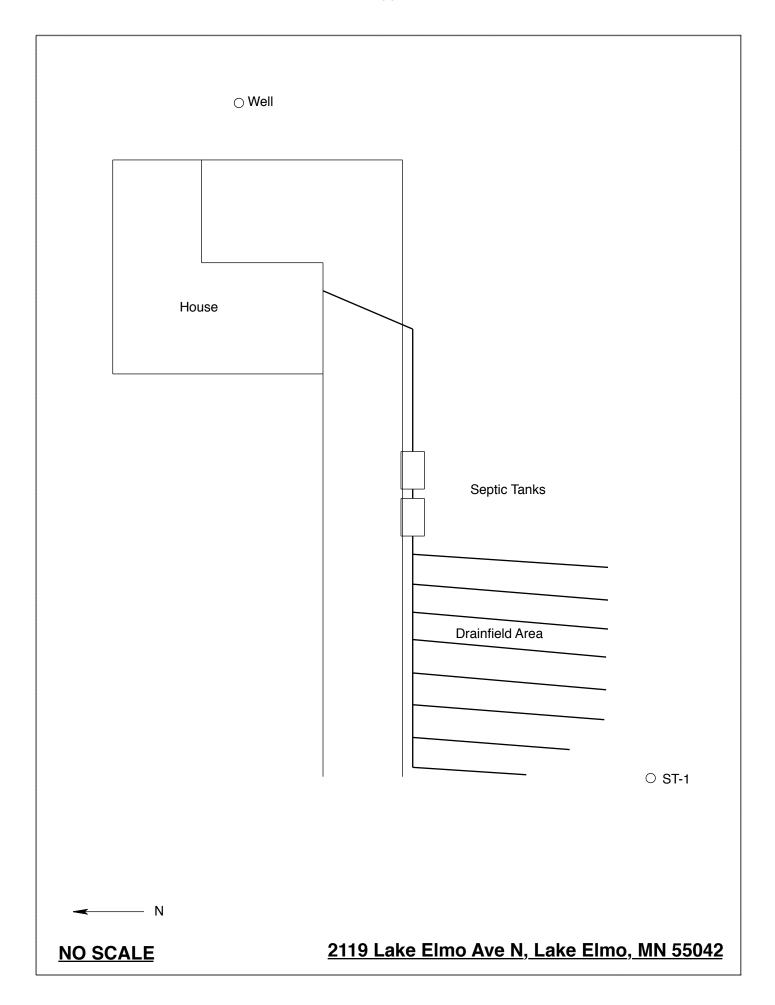
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Midwest Sewer Testing

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 17, 2020 Time: 9:00 AM Property Address: 2119 Lake Elmo Ave, Lake Elmo, MN Zip: 55042 Property Owner: John Thompson Phone: 612-802-9427 Tank(s) Tank(s)Material Soil Treatment System Other Septic 2 Fiberglass Rock trench Alternative system Aerobic Plastic Gravelless trench Experimental system Metal Chamber trench □Lift Cesspool system ⊠Concrete Seepage bed Holding Other system Block Other: Mound Other At-grade Are the tank maintenance covers accessible? ⊠ Yes □ No *If no, proper maintenance must be performed through the maintenance holes. Maintenance hole covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system. Year house built: 2008 Year septic installed: 1991 Tank size (gals.): 2-1500 How long has seller owned the property? Number of residents in home? Number of bedrooms? 3 Are all floors drained by gravity? Y Garbage disposal? Whirlpool bath? More than one system (laundry, etc.)? Does this property have any footing drain tiles connected to the septic system? Are any buildings on this property such as garages or out-buildings connected to this system? Are there any additional systems on this property serving other buildings? Location of septic system on lot? Southwest Side Location of water well on lot? East 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 If yes, explain: to the system? When was the system last pumped? 2018 Name of pumper: Pinky's Sewer Service 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? Y 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

by Inspect Minnesota and Midwest Soil Testing	
Owner/Occupant:	Date:



Soil Observations Log

Location of Project: 2119 Lake Elmo Ave, Lake Elmo, MN 55042							
Ol	Observations Made By: Midwest Sewer Services Date: 3/17/2020						3/17/2020
		sification System: USDA					
	Soil Observation: ST-1			Soil C	bservation:		
Elevat	Surface Same ground sur		nd surface as last field trench	Surface Elevation of Observation			
Depth In Inches	Rock %	Soils E	ncountered	Depth In Inches	Rock %	Soils Encountered	
0-10 10-25 25-40 40-60 60-78		10YR 3/4 l 10YR 4/4 l 7.5YR 4/4 Fir	Loamy Fine Sand Loamy Fine Sand Loamy Fine Sand To Medium Sand To Medium Sand To Loamy Sand				
78"	Depth T	o End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
Same	Elevatio	n Of Observatio	n Relative To System	Elevation Of Observation Relative To Syste			
-36" ≥42"			stribution Media	Depth To Bottom Of Distribution Media			Distribution Media
<u> </u>	Of Sepa	ii atitiii			Of Sepa	ıı atıvıı	
End	Of Soil (Observation At:	78"	End Of	Soil Ob	servation At:	
	Red	dox Present At:	None		Redo	x Present At:	
Star	nding Wa	iter Present At:	None	Standi	ng Wate	r Present At:	

Bottom Of Distribution Medium At: 36 Inches						
Signature:	Color Ole					

Log Of Soil Borings

Los	cation of Project	2119 Lake Elmo Ave.,	I plea Class			
F	Borings Made By:	Inspect Minnesota	Lake EIIIIO			
	August Hand / Dueloh					
		Class				
	Boring Number:	1		Bo	oring Number	:
Surface Elevation Boring	of Same As Top	Of Ground At End Of ainfield Trench	Surface Elevation of Boring			
Depth In	C-:1- E		Depth In			
Inches	Solis El	<u>ncountered</u>	Inches		Soils Encountered	
0-6 6-28 28-48 48-68 68-84 84-92	7.5YR 3/4 7.5YR 4/4 Fi 7.5YR 4/4 Fine, 5YR 4/4 Loan 7.5YR 4/4 Loan Silt Loan	/3 Loamy Sand 4 Loamy Sand ne/Medium Sand With amellae Bands ny Sand & Gravel my Fine Sand and 1 Layers With 5/2 Mottles				·
84" [Penth To End Of Bo	ring Or Mottled Soils		200	th To End Of D	
			í			oring Or Mottled Soils
		Relative To System				Relative To System
	Depth To Bottom Of	System		Dept	th To Bottom O	of System
=48" (Of Separation			<u> Jf S</u>	eparation	
	End Of Boring At:	92"		End	Of Boring At:	
	d Soil Present At:	84"			oil Present At:	
	Water Present At:	None			er Present At:	
		140116	Standing	wal	er rieselli AL:	

Bottom Of Distribution Medium At: _	36 Inche	25
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9 of 11

DATE 7-9-9/

BOREHOLE DIAMETER 4"- 32'- 24 MAND FURER

EPTH EET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
+	TOP SOIL	TOP SOIL	_ Top so:	TOP SOIL	- -	<u> </u>
	ROWN, FINE			-BROWN, UERN -	-	
$+$ $^{\prime\prime}$	PAD WITH	BROWN, FINE TO MEDIUM	BROWN, UERY SANDY LORM	SAMEN LOAM -		
+ 4	1647 LOAM _	SAND	-			
2 +	\exists		- 	BROWN, FINE -		
'	7		- BROWN, FINE -		- -	 - -
3 🛨			SAND - 1" ROCKS		- -	
+			<u> </u>		<u> </u>	<u> </u>
	ROWN, COARSE	_				 -
<u> </u>	AND WITH		<u> </u>	_	_	+
i — 20	AM LAYERS	BROWN, MEDIUM		_		-
Ŧ	-	SANE T	- BROWN, MEDIUM-		- -	-
5 —	-7	OBSTRUCTION	- SAND WITH - - BARK BROWN -	BROWN, COARSE -	- -	_
+		_ S70P	LAYERS		- -	_
1 - 20	ROWN, SILTY -		- -	-		_
	SHT SAND -			SILTY SAND	_ 	<u> </u>
FA	INT MOTTLE		_	ST0P	- -	<u> </u>
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+	7	-				 -

DISCLAIMER

Brian L. Humpal, Inc. dba. Midwest Sewer Services, 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

Midwest Sewer Services

License # L2896

License Expires: 12/22/2020

Issued: 11/26/2019

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert # Na

Name

Certification Expires:

C5342

Brian L Humpal

10/15/2023

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

C9852 4

Christopher R Uebe

3/4/2021

Designer, Inspector



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

Nick Haig, Supervisor Certification and Training Unit