Midwest Sewer Services

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

MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Date: July 21, 2020 **Time:** 2:00 PM Owner: Dave & Melissa Mandel

Inspection Address: 9450 Neal Ave N, Stillwater Twp, MN 55082

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Melissa Mandel, 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 a mound.

It should be noted that the septic tanks are currently due for maintenance pumping and should be pumped as soon as possible.

Predicated on my inspection of the system, my review of the history of the system with the owner, and my review of the original design/permit records, it is my opinion that this system presently meets 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

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Property address: 9450 Neal Ave N, Stillwater Twp, MN 55082

Inspector initials/Date: __7/21/2020 **B#**

1.	Impact on Public Healt	h – Compliance component #	‡1 of 5
	Compliance criteria: System discharge sewage to the ground surface. System discharge sewage to dror surface waters. System cause sewage backup in dwelling or establishment. Any "yes" answer above in an Imminent Threat to Public Comments/Explanation: None of the above found.	ain tile ☐ Yes ☒ No nto ☐ Yes ☒ No ndicates the system is	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 – Complia	nce component #2 of 5	
3.	Lift pump and alarm were operalt should be noted that the septipossible.	it. Pay be ce. The Yes No	on. ntenance pumping and should be pumped as soon as
	a. Maintenance hole covers are b. Other issues (electrical hazards *System is an imminent the Explain:	damaged, cracked, unsecured, or s, etc.) to immediately and adverse eat to public health and safety	r appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown ly impact public health or safety. ☐ Yes* ☒ No ☐ Unknown

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Inspector initials/Date: 7/21/2020 24 () Property address: 9450 Neal Ave N, Stillwater Twp, MN 55082 **Soil Separation** – Compliance component #4 of 5 Date of installation: 2015 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 design and permit records. systems located in Shoreland or Wellhead Protection Areas or serving a food, 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. Compliance criteria a. Operating Permit number: ☐ Yes ☐ No Have the Operating Permit requirements been met? ☐ Yes ☐ No b. Is the required nitrogen BMP in place and properly functioning?

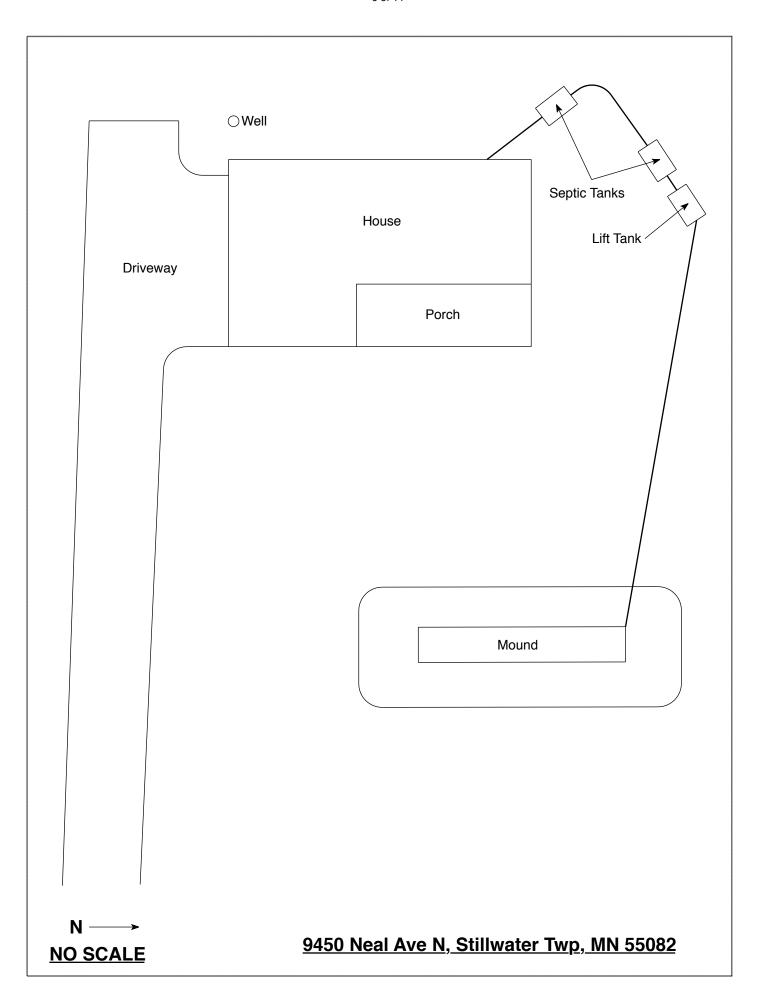
Any "no" answer indicates Noncompliance.

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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Midwest Sewer Testing Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting an MPCA Compliance Inspection.

This information will be used for the purp	pose of conducting an MPCA	A Compliance Inspection.
Date of Inspection: July 21, 2020		Time: 2:00 PM
Property Address: 9450 Neal Ave N, Stilly		Zip: 55082
Property Owner: Dave & Melissa Mandel		Phone: 651-336-5916
Tank(s) Tank(s)Material Septic 2 Fiberglass Aerobic Plastic Lift Metal Holding Concrete Other: Block Other At-g Are the tank maintenance covers accessible:		Other Alternative system Experimental system Cesspool system Other system
performed through the maintenance holes. I		
the ground surface to facilitate access and pr	roper maintenance of	
		Tank size (gals.): 1-1250, 1-1000
How long has seller owned the property? 20		esidents in home? 3-4
	all floors drained by g	
Garbage disposal? N	Whirlpool bath	? N
More than one system (laundry, etc.)? N		
Does this property have any footing drain til		
Are any buildings on this property such as g	arages or out-buildin	gs connected to this system? N
Are there any additional systems on this pro	perty serving other b	uildings? N
Location of septic system on lot? Tanks - No		
Location of water well on lot? West Side		e well a deep well? Y
Have you ever experienced any problems w surfacing of sewage onto the ground, septic to the system? N If yes, explain:		
When was the system last pumped? 2015	Name of pur	mper:
How often pumped in previous years? New		n on a monitoring plan? N
Have you received notices from any government		ing this system? N
Is your property located in a shoreland mana		
Do you have any additional information that	t should be given to the	ne new owner? N
I hereby certify that the above information is correct to considered "non-compliant/failing" per MPCA rules, t local government unit within 15 days of the date of in this report, that I/we are ultimately responsible for pay by Inspect Minnesota and Midwest Soil Testing	that the inspector must by aspection completion. I a	law submit a copy of this report to the lso agree that unless otherwise noted in
Owner/Occupant:		Date:



Onsite Sewage Treatment Program Soil Observation Log OF MINNESOTA UNIVERSITY



Extremely Firm Extremely Firm Rigid Extremely Firm Rigid Extremely Firm Extremely Firm Consistence Extremely Firm (Date) Loose Friable Friable Loose Friable sood Glabb Loose Friable Loose Firm Loose Rigid Firm Rigid Rigid Firm Rigid 2021 (License #) Structure Moderate Weak Moderate Strong Moderate Moderate Grade Moderate Weak Maderate Strong Loose Strong Loose Strong Loose Strong Strong Loose Weak Loose Weak Loose O Structure Massive
Granular
Platy
Blocky
Prismatic
Single Grain
Massive
Granular
Platy
Blocky Prismatic Single Grain Massive Blocky Prismatic Single Grain Prismatic Single Grain Date: Slope Shape: Platy Slocky Prismatic Single Grain Shape Single Grain Platy Prismatic Massive Granular Platy Blocky Massive Granular Slope (%): Massive Granular Elevation: Platy Bedrock Saturated Soil Indicator(s) (see back) Ores Taint Observation #/Location/Method: Super 3" Argen Organic Matter (Signature) 453 - Harres Concentrations Depletions Gleyed **Toe Slope** Concentrations Concentrations Concentrations Concentrations Concentrations Kind(s) Depletions Depletions Depletions Depletions Depletions Gleyed Gleyed Gleyed Gleyed Gleyed Loess Foot Slope Legal Description/GPS: Color(s) Mottle Soil Survey Map Unit(s): Alluvium Back/Side Slope H/5 01 Matrix Color(s) Lacustrine (Designer) Frag % work in accordance with all applicable ordinances, rules and laws. Rock Certified Statement: I hereby certify that I have completed this Outwash Weather conditions/Time of Day: 1000 gyes west Are Shoulder 0 Texture land 4 Landscape Position: Summit Soil Parent Material(s): Till (circle all that apply) 274 (circle one) Client/ Address: Vegetation: Comments: 0-16 Depth (in) ્યું : જે: ે

UNIVERSITY OF MINNESOTA

OSTP Soil Observation Log

Pit Consistence (Date) 9450 Neal Ave. N, Stillwater, MN Organic Matter linear/linear I------ Structure------08/25/15 □ Probe v 12.04.25 M Auger Grade Elevation: ☐ Bedrock Date ☐ Toe Slope Slope shape Observation Type: (License #) Shape Blocky Blocky Blocky 0.6 ☐ Alluvium Slope% Legal Description/ GPS: Project ID: Indicator(s) hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws. V Till Redox Kind(s) ☐ Summit ☑ Shoulder ☐ Back/Side Slope ☐ Foot Slope □ Loess 453C sunny 11:12 AM ☐ Lacustrine Mottle Color(s) (Signature) 7.5yr 5/2 Soil survey map units BH1 U Outwash Rosell Matrix Color(s) 7.5yr 4/2 7.5yr 4/1 7.5yr 5/3 Soil parent material(s): (Check all that apply) Frag. % Rock Weather Conditions/Time of Day: Landscape Position: (check one) Client/ Address: Very Fine Sandy Loam Observation #/Location: Texture Sandy Loam Sandy Loam Very Fine Very Fine Comments Mottles 36" (Designer) Vegetation Depth (in) 18-36 36-54 0-18

Additional Soil Observation Logs

ONSITE SEWAGE
TREATMENT
PROGRAM

Project ID:

	ctient/ Address:					Legal D	Legal Description / GDS.	96.		
Soil parent	Soil parent material(s): (Check all that apply)	Check all t	hat apply)	Outwork	California I					
andscape	Position: (cho	Tono A	(fidding)	=	Lacustrine	Loess	VIII O	☐ Alluvium ☐ Bedrock		Organic Matter
rainascabe	Carrascape rosition: (cneck one)	ck one)	Summi Shoulder		☐ Back/Side Slope	☐ Foot Slope	□ Toe	Slope shape		linear/linear
Vegetation	L	lawn		Soil survey map units	ap units	453C	%edolS	6.9	Elevation:	
Weather Co	Weather Conditions/Time of Day:	of Day:			sunny 11:43 AM	W		Date		08/25/15
Observati	Observation #/Location:			BI	BH2		0	Observation Type.		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	olor(s)	Mottle Color(s)	Redox Kind(s)	Indicato	add upper	Structure	☐ Probe ☐ Pit
0-18	Very Fine	_	7.5yr 4/1	4/1			-		Grade	Consistence
18.76	Very Fine							Blocky		
07-01	Sandy Loam		10yr 5/3	5/3				Blocky		
26-36	Sandy Loam		10yr 5/4	5/4	10yr 5/2			Blocky		
36-60	Sandy Loam		10yr 5/4	5/4	10yr 5/2			Blocky		
Comments	Comments Mottles 26"									
Deservatio	Observation #/Location:			BH3	3		ops	Observation Type:		Aliger
Depth (in)		Rock Frag. %	Matrix Color(s)		Mottle Color(s)	Redox Kind(s)	Indicator(s)		I Structure	
0-14	Very Fine Sandy Loam		7.5yr 4/1	1					Grade	Consistence
14-27	Loamy Fine		7.5yr 5/3	/3				Blocky		
27-60	Sandy Loam							Single grain		
3	Janua Foalli		3yr 5/3	m	5yr 5/2			Blocky		
mments	Comments Mottles 27"									
	THE REAL PROPERTY AND PERSONS ASSESSMENT OF THE PERSONS ASSESSMENT OF	AND DESCRIPTION OF PERSONS ASSESSMENT	-							

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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