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: September 17, 2020 **Time:** 10:30 AM **Owner:** Tom McKay

Inspection Address: 11152 14th St 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 two previous compliance inspections from 2009 and 2014, which were on file at Washington County. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and a gravelless trench drainfield.

Although not a compliance criteria, it should be noted that gravelless pipe is no longer approved for installation in the State of Minnesota and we have had experience with this product having significantly reduced performance and/or life expectancy. We cannot guarantee the performance of this system beyond the compliance date (9/17/2020).

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):9/17/2020	
	npliant – Notice of Noncompliance rade 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 threat threat to Tank Integrity (Compliance Component #2) – Failing to protect groundwate Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwate Soil Separation (Compliance Component #4) – Failing to protect groundwate Operating permit/monitoring plan requirements (Compliance Component #4)	eat to public health and safety er otect groundwater ater
Property Information Parcel ID# or Sec/Twp/Rang	ge:
46	or inspection: Property Transfer
Property owner: Tom McKay Owner's	phone: 651-503-9006
or	
· · · · · · · · · · · · · · · · · · ·	itative phone:
· · · · · · · · · · · · · · · · · · ·	ry authority phone: 651-430-6655
Brief system description: Two pre-cast septic tank, a pre-cast lift tank, and a gravelled	ess trench drainfield.
Comments or recommendations: Although not a compliance criteria, it should be noted that gravelless pipe is no longer Minnesota and we have had experience with this product having significantly reduced parameters cannot guarantee the performance of this system beyond the compliance date (9/17/20).	performance and/or life expectancy. We
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 Certification	on number:C5342/C9852
Business name: Midwest Sewer Services Licer	se number: L2896
Inspector signature: Brian Humpal Man Man Pho	ne number: 651-492-7550
Necessary or Locally Required Attachments	
oximes Soil boring logs $oximes$ System/As-built drawing $oximes$ Forms per	local ordinance
☑ Other information (list): Report Summary, Property Information, Disclaimer, Lic	ense

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Property address: 11152 14th St N, Lake Elmo, MN 55042

Inspector initials/Date: 9/17/2020 **BA**

1.	Impact on Public Health – Co	ompliance componen	nt #1 of 5
	Compliance criteria:		Verification method(s):
	System discharge sewage to the ground surface.	☐ Yes ⊠ No	 ✓ Searched for surface outlet ✓ Searched for seeping in yard/backup in home
	System discharge sewage to drain tile or surface waters.	☐ Yes ⊠ No	Excessive ponding in soil system/D-boxesHomeowner testimony (See Comments/Explanation)
	System cause sewage backup into dwelling or establishment.	☐ Yes ⊠ No	 "Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test
	Any "yes" answer above indicate an Imminent Threat to Public Hea		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)
2		e with this product havinis system beyond the	velless pipe is no longer approved for installation in the State of ng significantly reduced performance and/or life expectancy. We compliance date (9/17/2020).
2.	Compliance criteria:	imponent #2 of 5	Verification method(s):
	System consists of a seepage pit, cesspool, drywell, or leaching pit.	☐ Yes ⊠ No	 ✓ Probed tank(s) bottom ✓ Examined construction records
	Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		Examined Tank Integrity Form (Attach)Observed liquid level below operating depth
	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 indic system is Failing to Protect G		 ☐ Unable to verify (See Comments/Explanation) ☑ Other methods not listed (See Comments/Explanation)
3.	Comments/Explanation: Lowered underwater camera into tanks Lift pump and alarm were operational a	t 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 *System is an imminent threat to p		sely impact public health or safety. Yes* No Unknown
	Explain:		
	c. System is non-protective of ground w *System is failing to protect groun Explain:		s as determined by inspector ☐ Yes* ☒ No

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Pro	perty address: <u>11152 14th St N, Lake Elmo, M</u>	N 55042		Inspector initials/Date:	9/17/2020 BA (M	
4.	Soil Separation – Compliance compor	nent #4 of 5				
	Date of installation: 2003 Shoreland/Wellhead protection/Food Beverage	· <u>-</u> · · · _	-	, ,		
	Lodging? Compliance criteria:	Unknown Verification method(s):				
	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 separation distance from periodically saturated soil or bedrock. 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:		No Co	quirements differ. Conducted soil observation(Two previous verifications (Not applicable (Holding tank(s)) Unable to verify (See Comme) Other (See Comments/Explanation: eviewed previous compliance	(s) (Attach boring logs) Attach boring logs) s), no drainfield) ents/Explanation) ation) inspection from 2014. inspection from 2009.	
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*				oras.	
	"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)	ype IV 7080.			See Attached	
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.		C.	System separation		
	Any "no" answer above indicates the system is Failing to Protect Groundwater.			*May be reduced up to 15 percent if allowed by Local		
5.	Operating Permit and Nitrogen B	MP* – Com	pliance comp	ponent #5 of 5 🛮 🗵 Not a	applicable	
	Is the system operated under an Operating Per	mit?] Yes 🔲 No	If "yes", A below is requir	red	
	Is the system required to employ a Nitrogen BM	IP?	Yes 🗌 No	If "yes", B below is requir	red	
	BMP=Best Management Practice(s) specifi	ied in the sys	tem design			
	If the answer to both questions is "no",	this section	n does not n	need to be completed.		
	Compliance criteria					
	Operating Permit number: Have the Operating Permit requirements be	peen met?		☐ Yes ☐ No		
	b. Is the required nitrogen BMP in place and	properly fund	tioning?	☐ 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, 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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<u>Midwest & ewer Testing</u> <u>Subsurface Sewage Treatment System Owner/Property Information</u>

This info	rmation will be used for	the purpose of conducting an MPCA	Compliance Inspection.
Date of Inspection:	September 17, 202	20	Time: 10:30 AM
Property Address:	11152 14 th St N, L	Lake Elmo, MN	Zip: 55042
Property Owner:	Tom McKay		Phone: 651-503-9006
Tank(s) Septic 2 Aerobic Lift Holding Other:	Tank(s)Material Fiberglass Plastic Metal Concrete Block Other	Soil Treatment System Rock trench Gravelless trench Chamber trench Seepage bed Mound At-grade	Other Alternative system Experimental system Cesspool system Other system
performed through	the maintenance ho		no, proper maintenance must be ers should be made accessible to the system.
Year house built: 20			Tank size (gals.): 2-1000
How long has seller			esidents in home?
Number of bedroom		Are all floors drained by g	
Garbage disposal?		Whirlpool bath?	2 Y
More than one syste			
		rain tiles connected to the se	
, C	1 1 2		gs connected to this system?
Are there any additi	onal systems on th	nis property serving other bu	illdings?
Location of septic s			
Location of water w			e well a deep well? Y
			: tree roots, sewage back-ups,
to the system?	_	septic tank overflowing, etc.	; or have any repairs been made
XX /1	10.00	017	D: 1 1 G G '
When was the syste	<u> </u>	-	nper: Pinky's Sewer Service
How often pumped			n on a monitoring plan?
		overnment agency concerni	ng this system?
		d management area? N	0
Do you have any ac	ditional information	on that should be given to the	e new owner?
considered "non-complian local government unit wi	nt/failing" per MPCA thin 15 days of the da ultimately responsible	rules, that the inspector must by ite of inspection completion. I all for payment of all fees for all wo	e. I also understand that if the system is law submit a copy of this report to the lso agree that unless otherwise noted in ork performed relative to this inspection

Date:

Owner/Occupant:

Soil Observations Log

LUCA	ion of Project:	11152 14th St N, L	ake Eln	no. MN	55042	
		Midwest Sewer Ser		-,	Date:	9/17/2020
Classification System: USDA						
So	il Observation:	ST-1		Soil C	bservation:	
Surface Elevation of Observation Same ground surface as last drainfield trench				face tion of vation	,	
Depth In Inches Rock %	Soils E	ncountered	Depth In Inches	Rock %	Soils	Encountered
0-4 4-30 30-46 46-61 61-70 10YR 4/2 Loamy Sand 10YR 3/4 Loamy Sand 10YR 4/4 Sandy Loam 10YR 4/4 Medium To Fine Sand 10YR 4/4 Fine Sand With Iron Nodules & 7.5YR 5/8 Redox						
61" Depth	To End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
		n Relative To System				tion Relative To System
	To Bottom Of Dis	stribution Media				Distribution Media
=31" Of Sep	aration			Of Sepa	II a LI OI I	
End Of Soil	Observation At:	70"	End Of	Soil Ob	servation At:	
Re	dox Present At:	61"			x Present At:	
Standing W	ater Present At:	None	Standi	ng Wate	r Present At:	

Bottom Of Dist	Bottom Of Distribution Medium At: 30 Inches			
Signature:	Offer the			

Log Of Soil Borings

Locati	ion of Project:	11152 14th St N, Lak	ce Elmo, M	N 55042	
		Inspect Minnesota		Date:	10/6/14
Auger Used: Hand/Bucket		Hand/Bucket	Class	ification System:	USDA
Bo	ring Number:	1		Boring Number:	
Surface Elevation of Boring		and surface as last ofield trench	Surface Elevation Boring		
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	countered
10					
64" De	pth To End Of B	oring Or Redox		Depth To End Of B	oring Or Redox
		g Relative To System			Relative To System
	pth To Bottom (Separation	Of Distribution Media		Depth To Bottom C Of Separation	of Distribution Media
En	d Of Boring At:	64"		End Of Boring At:	
	dox Present At:	None		Redox Present At:	
	ater Present At:	None	Standing	Water Present At:	

Bottom Of Distribution Medium At: 30 Inches

Log Of Soil Borings

Locat	ion of Project:	11152 14th Street N, L	ake Elmo, M	N	
Bor		Inspect Minnesota		Date:	6/27/09
	Auger Used:	Hand/Bucket	Classif	fication System:	USDA
В	oring Number:	1		Boring Number:	
Surface Elevation of		I surface at last drop espection pipe	Surface Elevation of Boring		
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	ncountered
0-14 14-36 36-72	10YR 4	/3 Silt Loam /4 Silt Loam ddy and Silty Loam			
72" De	pth To End Of E	Soring Or Mottled Soils		epth To End Of B	oring Or Mottled Soil
Same Ele	evation Of Borin	g Relative To System	Elevation Of Boring Relative To System		
-32" De ≥40" Of	epth To Bottom (Separation	Of System	C	Depth To Bottom C Of Separation	Of System
Er	nd Of Boring At:	72"		End Of Boring At:	
Mottled	Soil Present At:	None	Mottle	d Soil Present At:	
Standing Wa	ater Present At:	None	Standing \	Water Present At:	

Bottom Of Distribution Medium At: _____32 ____Inches

Pegge-8rodr19

	LOF 4 ESTEND OF INKE EL 4-14-97	กาย	BORING LOG New Test Site	В	OREHOLE DIAMETER 4"- :	3" HAND BUSER
DEPTH FEET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE ≬6
1 -	76P Soil -	TOP SOIL	TOP SOIL	TOP SOIL	TOP 501L	-
1 =	YELLOWISH BROWN .	YELLOWISH BADWA	YELLOWISH BROWN _	YELLOWISH BROWN	YELLOWISH BROWN	-
2 -	YELLOWISH BROWN, -	SANDY LOAM	SAND LAYERS	YELLOWISH BROWN, _ SANDY LOAM	SAND LAYERS	-
_		‡ =	<u> </u>	_ =	Ε Ξ	-
3		BROWN, MEDIUM _	YELLOWISH BADWN, -	<u> </u>	<u> </u>	-
=		SAND WITH -	SANDY LOAM -	=	BROWN, SANDY	-
4 =	- BROWN, SANDY, -	LAYERS	-	F -	LIGHT SILT	-
5	SILTY LOAM -	‡ =	‡ :		├ ∃	-
Ξ	E E	Ξ =	-	MOTHED LAYERS -	+ +	-
6		£ 3	GRAY, SILTY	GARY, SILTY -	FRINT IRON	- - -
4	GRAY, SILTY	‡ =	MOTLED -	<u> </u>	GRAY, SILTY	-
7	Srop	JAON STAINING	+ °′°° -	MOTTLED SOIL -	MOTILED STOP	_
+		Ŧ <i>"" =</i>		F	£ ∃	-
* =	- Morrie -	OKAY 7' -	1 NOTLE -	LIGHT MOTILE	Monle	-
,	_ 6'4" _	Ξ Ξ	Ę :	4'/0"	- 44" =	-
1	- :	‡ :	‡ -	Ε Ξ	Ε Ξ	-
10-	-	=	<u>+</u> -	<u> </u>	‡ <i>=</i>	Ė
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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 only 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 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