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

Inspection Address: 13955 236th St N, Scandia, MN 55073

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Greg Boettner, and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1989) consists of a precast septic tanks, a pre-cast lift tank and, and a rock trench drainfield installed in sandy fill similar to a gravity mound. It should be noted that the average life expectancy of a septic system is approximately 30 years.

Although not a compliance criteria, it should be noted that the septic tank and lift tank manhole covers are buried. I recommend extending these covers to the ground surface to facilitate easier access and proper maintenance.

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

	results based on Minnesota Pollution Control d forms – additional local requirements may a	rigorioy (ivii ori)	tracking purposes:
Submit completed form within 15 days	to Local Unit of Government (LUG) and s	system owner	
System Status			
System status on	date (mm/dd/yyyy):9/14/2020		
(Valid for 3 year	- Certificate of Compliance rs from report date, unless shorter time in Local Ordinance.)	☐ Noncompliant – (See Upgrade Requi	Notice of Noncompliance rements on page 3)
☐ Impact on Pu☐ Other Compli☐ Tank Integrity☐ Other Compli☐ Soil Separatio	Incompliance (check all applicable) Iblic Health (Compliance Component #1) — I Iance Conditions (Compliance Component #2) If (Compliance Component #2) — Failing to I Iance Conditions (Compliance Component #3) Incompliance Component #4) — Failing to I Iance Compliance Component #4) — Failing to I Iance Component #4)	3) – Imminent threat to publi protect groundwater 3) – Failing to protect ground protect groundwater	c health and safety
Property Informat	ion Parcel ID#	or Sec/Twp/Range:	
•	55 236 th St N, Scandia, MN 55073	Reason for inspectio	n: Property Transfer
Property owner: Greg E		Owner's phone:	
or			
Owner's representative:		Representative phon	
Local regulatory authority			phone: 651-430-6655
Brief system description:	A pre-cast septic tank, a pre-cast lift tank gravity mound.	., and a rock trench drainneid	installed in sandy illi similar to a
Comments or recommend			
	e criteria, it should be noted that the septic to the ground surface to facilitate easier acce		vers are buried. I recommend
Certification			
determination of future sy	e necessary information has been gathered i stem performance has been nor can be ma stem, inadequate maintenance, or future wat	de due to unknown condition	
Inspector name: Brian	Humpal/Christopher Uebe	Certification number	C5342/C9852
Business name: Midwe	est Sewer Services	License number	L2896
Inspector signature:	Brian Humpal ffin Man	Phone number	651-492-7550
Necessary or Loca	Illy Required Attachments		
Soil boring logs	System/As-built drawing	☐ Forms per local ordina	nce
_	st): Report Summary Property Information	•	

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 1 of 3

Property address:13955 236th St N, Scandia, MN 55073			ia, MN 55073	Inspector initials/Date: 9/14/2020			
1. Impact on Public Health – Compliance component #1 of 5							
	C	ompliance criteria:		Verification method(s):			
		vstem discharge sewage to the bound surface.	☐ Yes ⊠ No	☑ Searched for surface outlet☑ Searched for seeping in yard/backup in home			
		stem discharge sewage to drain tile surface waters.	☐ Yes ⊠ No	 ☑ Excessive ponding in soil system/D-boxes ☑ Homeowner testimony (See Comments/Explanation) ☐ "Black soil" above soil dispersal system 			
		rstem cause sewage backup into relling or establishment.	☐ Yes ⊠ No	System requires "emergency" pumping Performed dye test			
		ny "yes" answer above indicates I Imminent Threat to Public Head		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
2.	No	omments/Explanation: one of the above found. ank Integrity — Compliance con	nponent #2 of 5				
	C	ompliance criteria:		Verification method(s):			
	Sy	vstem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes ⊠ No	☑ Probed tank(s) bottom☑ Examined construction records			
		epage pits meeting 7080.2550 may be mpliant if allowed in local ordinance.		Examined Tank Integrity Form (Attach)			
	Se	ewage tank(s) leak below their signed operating depth.	☐ Yes ⊠ No	☐ Observed liquid level below operating depth☐ Examined empty (pumped) tanks(s)			
	lf y	yes, which sewage tank(s) leaks:		☐ Probed outside tank(s) for "black soil"☐ Unable to verify (See Comments/Explanation)			
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			☐ Other methods not listed (See Comments/Explanation)			
3.	Comments/Explanation: Lowered underwater camera into tanks - baffles and tank walls OK. Lift pump and alarm were operational at the time of the inspection. Although not a compliance criteria, it should be noted that the septic tank and lift tank manhole covers are buried I recommend extending these covers to the ground surface to facilitate easier access and proper maintenance. 3. Other Compliance Conditions — Compliance component #3 of 5						
	a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown						
	b.	b. 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:						
	C.	*System is non-protective of ground wa *System is failing to protect ground Explain:		s as determined by inspector □ Yes* ⊠ No			

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 2 of 3

Prop	perty address: <u>13955 236th St N, Scandia, MN</u>	Inspector initials/Date: 9/14/2020 BHCU				
4. Soil Separation — Compliance component #4 of 5						
	Date of installation: 1989 Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria:	☐ Unknown☐ Yes ☒ No	Verification method(s): Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local requirements differ.			
	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.	⊠ Yes □ No	 ☐ Conducted soil observation(s) (Attach boring logs) ☐ Two previous verifications (Attach boring logs) ☐ Not applicable (Holding tank(s), no drainfield) ☐ 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	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" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)	☐ Yes ☐ No	A. Bottom of distribution media B. Periodically saturated soil/bedrock See Attached Boring Log(s)			
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.		C. System separation D. Required compliance separation*			
	Any "no" answer above indicates the system is Failing to Protect Groundwater.		*May be reduced up to 15 percent if allowed by Local Ordinance.			
5.	Operating Permit and Nitrogen B	MP* – Complianc	e component #5 of 5 Not applicable			
	Is the system operated under an Operating Permit?					
	a. Operating Permit number: Have the Operating Permit requirements by	peen met?	☐ Yes ☐ No			
	b. Is the required nitrogen BMP in place and		? Yes No			

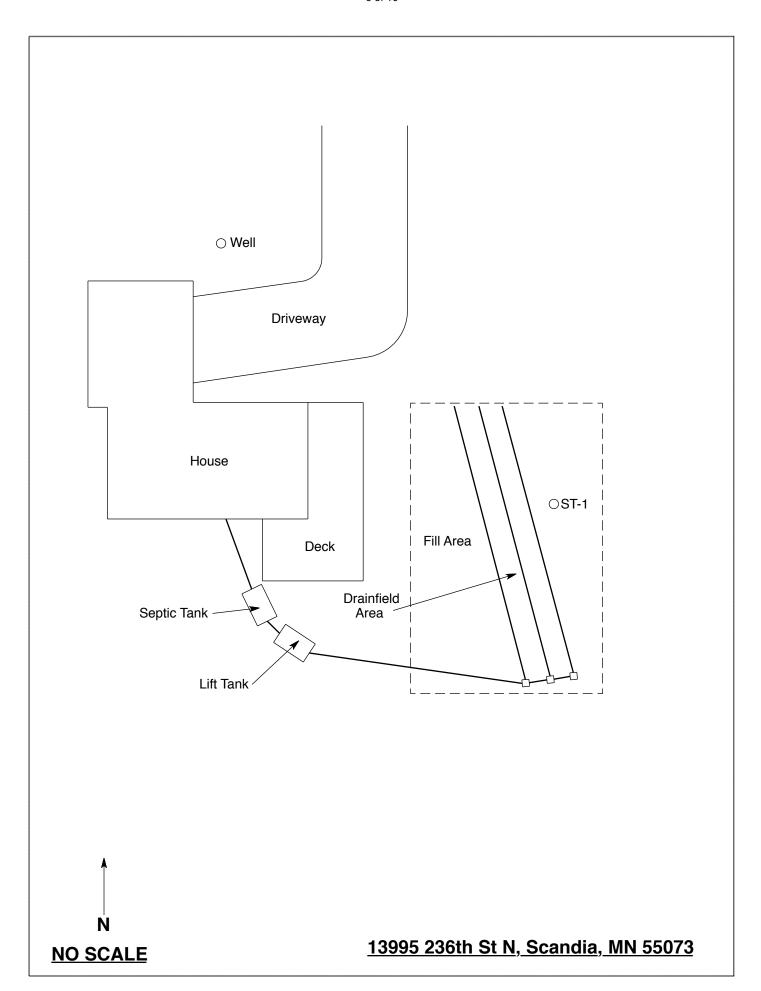
Any "no" answer indicates Noncompliance.

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.

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 3 of 3

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 purpose of conducting an MFC.	A Comphance inspection.				
Date of Inspection: September 14, 2020	Time: 12:45 PM				
Property Address: 13955 236 th St N, Scandia, MN	Zip: 55073				
Property Owner: Greg Boettner	Phone:				
Tank(s) Tank(s)Material Soil Treatment System Septic Fiberglass ⊠Rock trench (Fill) 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	no, proper maintenance must be				
performed through the maintenance holes. Maintenance hole cov	vers should be made accessible to				
the ground surface to facilitate access and proper maintenance of					
	Tank size (gals.): 1250				
	esidents in home? 2				
Number of bedrooms? 3 Are all floors drained by	gravity? Y				
Garbage disposal? N Whirlpool bath	? Y				
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the s	eptic system? N				
Are any buildings on this property such as garages or out-buildin					
Are there any additional systems on this property serving other buildings? N					
Location of septic system on lot? Tanks - South Side, Drainfield	- East Side				
Location of water well on lot? North Side Is the	e 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 to the system? Y If yes, explain: Replaced lift pump in 2018.					
	nper: Smilie's Sewer Service				
How often pumped in previous years? Every 3					
Have you received notices from any government agency concerning this system? N					
Is your property located in a shoreland management area? N					
Do you have any additional information that should be given to the new owner? N					
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:				



Soil Observations Log

Location of Project: 13955 236th St N, Scandia, MN 55073							
Observations Made By: Midwest Sewer Services					Date:	9/14/2020	
	Classific	sification System: USDA					
	Soi	Observation:	ST-1	Soil Observation:			
Surface Elevation of Observation		Same ground surface as last drainfield trench			face tion of vation		
Depth In Inches	Rock %	Soils E	ncountered	Depth In Rock %		Soils Encountered	
0-10 10-16 16-28 28-32 32-36 36-42 42-49 49-56 56-60		Fill Redox On To Me 10YR 3/4 Med Trace 10YR 4/4 Med Trace 10YR 2/2 Silt Le Dist Redox Less Transition 10YR 3/10YR 4/3 F 10YR 4/3 F 10YR 3/4	Fine Loam (Fill) e Inch In Transition edium Sand ium Sand (Fill) With e Of Gravel ium Sand (Fill) With e Of Gravel oam (Original Topsoil) urbed/Fill s Than One Inch To Medium Sand 8/3 Silt Loam Fine Loamy Sand Clay Loam With Silt Coatings /4 Clay Loam Clay Loam Clay Loam Clay Loam S/8 Redox				
56"	Denth 1	o End Of Soil O	hservation Or Redox		Denth T	o End Of Soil	Observation Or Redox
56" Depth To End Of Soil Observation Or Redox Same Elevation Of Observation Relative To System					ion Relative To System		
1					•		
-31" Depth To Bottom Of Distribution Media =25" Of Separation		Depth To Bottom Of Distribution Media Of Separation					
End Of Soil Observation At: 60"			End Of		servation At:		
Redox Present At: 56"			Redox Present At:				
Star	Standing Water Present At: None			Standi	ng Wate	r Present At:	

Bottom Of Distribution Medium At: 31 Inches					
Signature:	Offer 1/2				

Location or Project Lot 5 Block 4 STANDIA RANKHER WASH CO.					
Borings made by Steve Feloquis Date 5-24-89					
Classification System: AASHO; USDA-SCS; Unified; other					
	d (check two): Hand or Powe				
Depth,	Boring number/	Depth,	Boring number 2		
in	Surface elevation	in feet	Surface elevation		
feet		reet			
0 — 1	Black Fire Sand Loam	0 -	Black Fine Sandy Loam		
1 —	Brown Fine Sandy LOAM	1 -	Brown Fine Sandy Learn		
2 —	Brown LOAM	2 —	Brown Loam		
3 — -	Brown LOAM rommon, lourse	3 —	Brown Loam Common Course		
4 — 🗼		4	Mot. TAN Sill lorm Promovef a		
5 —	Grayish - Lt yellowish Brown Silf LOAM fromonent	5 —	" SIN LOWIN Promeret &		
6 —	1101.	6			
7 —		7 —			
8 —		8 —			
End of bo	oring at <u>5.5</u> feet.	End of	boring at 5 feet.		
Standing	warer table:	Standing water table:			
Present at feet of depth,		Present at feet of depth,			
hours after boring.			hours after boring.		
Not present in boring hole		Not pre	esent in boring hole		
Mottled s		I	i soil:		
Observed	at feet of depth.	Observe	Observed at feet of depth.		
Not prese	ent in boring hole	Not present in boring hole			
Observations and comments:		Observations and comments:			

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