#### **Midwest Sewer Services**

P.O. Box 10853 White Bea	Brian Humpal				
651-492-7550/Brian@Midy	MPCA Licensed Advanced Inspector				
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT					
Date: July 27, 2020Time: 9:30 AMOwner: Derrick Metz					
Inspection Address: 2580 Imperial Ave N, Lake Elmo, MN 55042					

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Derrick Metz, and have reviewed the original design/permit records, along with a previous compliance inspection from 2002, which were on file at the City of Lake Elmo. This older system (installed in 1995) consists of a pre-cast septic tank and a rock trench drainfield. This house is presently vacant.

Predicated on my inspection of the system, my review of the history of the system with the owner, 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

Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, MN 55155-4194 Control Agency Existing Subst

# **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): 7/27/2020

#### Compliant – Certificate of Compliance

(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

#### ] Noncompliant – Notice of Noncompliance

(See Upgrade Requirements on page 3)

#### Reason(s) for noncompliance (check all applicable)

Impact on Public Health (Compliance Component #1) – Imminent threat to public health and safety

Other Compliance Conditions (Compliance Component #3) – Imminent threat to public health and safety

Tank Integrity (Compliance Component #2) – Failing to protect groundwater

Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwater

Soil Separation (Compliance Component #4) – Failing to protect groundwater

Operating permit/monitoring plan requirements (Compliance Component #5) – Noncompliant

#### **Property Information**

Parcel ID# or Sec/Twp/Range:

Property address:	2580 Imperial Ave N, Lake Elmo, MN 55042	Reason for inspection: Property Transfer
Property owner:	Derrick Metz	Owner's phone: 612-747-9131
or		
Owner's represent	tative:	Representative phone:
Local regulatory authority: Washington County		Regulatory authority phone: _541-430-6655
Brief system desc	ription: <u>A pre-cast septic tank and a rock trenc</u>	h drainfield.
Commonto or room	mmondational	

Comments or recommendations:

#### Certification

I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.

Inspector name:	Brian Humpal/Christopher Uebe	Certification number:	C5342/C9852
Business name:	Midwest Sewer Services	License number:	L2896
Inspector signature	e: Brian Humpal After Uh	Phone number:	651-492-7550
Necessary or	Locally Required Attachments		
🛛 Soil boring lo	gs 🛛 System/As-built drawing	] Forms per local ordinan	се
I Other information	ation (list):	sclaimer, License	

2 of 10

#### 1. Impact on Public Health – Compliance component #1 of 5

# Compliance criteria: System discharge sewage to the ground surface. System discharge sewage to drain tile or surface waters. System cause sewage backup into dwelling or establishment.

Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.

Comments/Explanation:

#### 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 – Compliance component #2 of 5

Compliance criteria:		Verification method(s):	
System consists of a seepage pit,	🗌 Yes 🖾 No	Probed tank(s) bottom	
cesspool, drywell, or leaching pit.		Examined construction records	
Seepage pits meeting 7080.2550 may be		Examined Tank Integrity Form (Attach)	
compliant if allowed in local ordinance.		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"	
	atao tha	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)	

Comments/Explanation:

Lowered underwater camera into tanks - baffles and tank walls OK.

#### 3. Other Compliance Conditions - Compliance component #3 of 5

a.	Maintenance hole covers an	e damaged, cracked	, unsecured, or	r appear to structurally	unsound.	□ Yes*	🛛 No	Unknown

b. Other issues (*electrical hazards, etc.*) to immediately and adversely impact public health or safety.  $\Box$  Yes\*  $\boxtimes$  No  $\Box$  Unknown \*System is an imminent threat to public health and safety

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector Yes\* No \*System is failing to protect groundwater

Explain:

#### **4. Soil Separation** – Compliance component #4 of 5

Date of installation: <u>1995</u> Shoreland/Wellhead protection/Food Beverage	Unkn	iown No	Verification method(s):		
Lodging?			Soil observation does not expire. Pre observations by two independent pa		
Compliance criteria:			unless site conditions have been altered or loc		
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	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (A</li> <li>Two previous verifications (Attac</li> <li>Not applicable (Holding tank(s), not</li> <li>Unable to verify (See Comments/E</li> <li>Other (See Comments/Explanation)</li> </ul>	h boring logs) drainfield) 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: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	⊠ Yes	□ No	<i>Comments/Explanation:</i> Reviewed previous compliance insp Revewed deisgn and permit records Wellhead protection area.		
"Experimental", "Other", or "Performance"	🗌 Yes	🗌 No	Indicate depths of elevations	hs 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) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.			A. Bottom of distribution media	See Attached Boring Log(s)	
			<ul> <li>B. Periodically saturated soil/bedrock</li> <li>C. System separation</li> </ul>		
			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 Lo Ordinance.		

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?	
b.	Is the required nitrogen BMP in place and properly functioning?	🗌 Yes 🗌 No

#### Any "no" answer indicates Noncompliance.

Is the system required to employ a Nitrogen BMP?

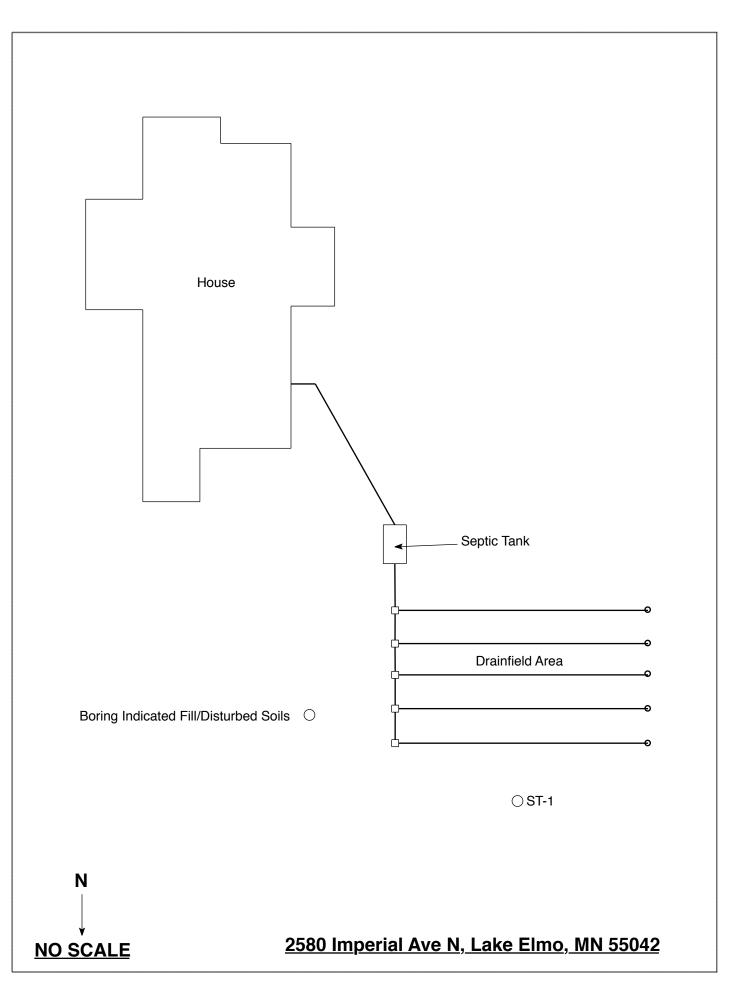
**Upgrade Requirements** (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground 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, 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.

#### <u>Midwest Śéwer Testing</u> Subsurface Sewage Treatment System Owner/Property Information

Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting an MPCA Compliance Inspection. Date of Inspection: July 27, 2020 Time: 9:30 AM Property Address: 2580 Imperial Ave N, Lake Elmo, MN Zip: 55042 Phone: 612-747-9131 Property Owner: Darrick Metz Tank(s) Tank(s)Material Soil Treatment System Other Septic 1 Fiberglass Rock trench Alternative system Aerobic Plastic Gravelless trench Experimental system Metal Chamber trench Lift Cesspool system Concrete Seepage bed Holding Other system Other: Block Mound Other At-grade Are the tank maintenance covers accessible?  $\boxtimes$  Yes  $\square$  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: 1995 Year septic installed: 1995 Tank size (gals.): 1500 How long has seller owned the property? 2020 Number of residents in home? 2 Number of bedrooms? 5 Are all floors drained by gravity? Lower Pumped Garbage disposal? N Whirlpool bath? N More than one system (laundry, etc.)? N Does this property have any footing drain tiles connected to the septic system? N Are any buildings on this property such as garages or out-buildings connected to this system? N Are there any additional systems on this property serving other buildings? N Location of septic system on lot? Northwest Side Is the well a deep well? N/A Location of water well on lot? City Water 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? 7/28/2020 Name of pumper: Smilie's Sewer Service How often pumped in previous years? Every 3 Is system on a monitoring plan? N 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:



#### Soil Observations Log

	Location of Project: 2580 Imperial Ave N, Lake Elmo, MN 55042								
Ob						7/27/2020			
C	lassific	ation System:	USDA						
	Soil	Observation:	ST-1		Soil C	bservation:			
Surf Elevat Obser	ion of	-	nd surface as last field trench	Surface Elevation of Observation					
Depth In Inches	Rock %	<u>Soils E</u>	ncountered	Depth In Inches			Soils Encountered		
0-12 12-39 39-54	≈10 ≈10	7.5YR 3/4 San	.5/2 Silt Loam dy Loam With Gravel dy Loam With Gravel						
54"	Depth T	o End Of Soil O	bservation Or Redox		Depth T	o End Of Soil C	Observation Or Redox		
Same	Elevatio	on Of Observatio	n Relative To System				on Relative To System		
-21"	Depth T	o Bottom Of Dis	stribution Media		Depth T	o Bottom Of Di	istribution Media		
	Of Sepa				Of Sepa				
<u> </u>			<b>_</b>						
End		Observation At:	54"	End Of		servation At:			
		dox Present At:	None			x Present At:			
Stan	ding Wa	ater Present At:	None	Standi	ng Wate	r Present At:			

Bottom Of Distribution Medium At: 21 Inches

Signature:

Afren Va

Logs of Soil Borings 8-31 Inperial ave N' Location or Project -4-3-02 Borings made by Classification System: AASHO \_\_\_\_; USDA-SCS \_\_\_; Unified \_\_\_\_; othey Auger used (check two): Hand N; or Power \_\_; Flight \_\_, or Bucket X: other Boring number 8-2 Depth, Boring number Depth, Surface elevation Samt an .in ín Surface elevation Dane of feet feet T.o. a. C d - He T.O. 4. Cd-Va 0 -0 -0-1411 0 -72" 10TRS14 YL.BRN; 10YR 4/3 BRN 1 ----1 . SANDY CL. LOAM SANDY CL. LOAM 2 -2 -24-60" 101R4/3 BRN' 3 -3 -SANDY LUAM 60"-72" 10 YR 4/3 6 ---SOME GRAY SILT VENGES-7 -7 -SPRAYED OUT 8 -0 0 End of boring at feet. End of boring at feet. Standing water table: Standing water table: Present at feet of deptr. Present at \_\_\_\_\_ feet of depth, hours after boring. hours after boring. Not present in boring hole Not present in boring hole \_\_\_\_ Mottled soil: Moccled soil: Observed at \_\_\_\_\_ feet of degin Observed at \_\_\_\_\_ feet of depth. Not present in boring hole Not present in boring hole \_ Observations and comments: Observations and comments: TOP OF DRAINFIELD AT FEET OR **INCHES** FEET OR < 32 BOTTOM OF DRAINFIELD AT **INCHES** REMARKS 0 hr - 20" Am used spray bottle on manuf, sun was out,

### **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 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 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 #	Name	Certification Expires:		
C5342	Brian L Humpal 10/15/2023			
	Installer, Maintainer, Serv Prov,	Adv Designer, Adv Inspector		
C9852 ·	Christopher R Uebe	3/4/2021		
	Designer, Inspector			

#### MINNESOTA POLLUTION CONTROL AGENCY

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

Haig

Nick Haig, Supervisor Certification and Training Unit