#### **Inspect Minnesota & Midwest Soil Testing**

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:** 11020 Mayfield 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, Lawrence Trom, and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1977) consists of a pre-cast septic tank and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(E) because of the lack of the required two foot separation between the bottom of the drainfield and seasonally saturated soils.

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact the Washington County Department of Public Health & Environment (651-430-6655) to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

Christopher Uebe

Brian Humpal

Brian Humpal



## **Compliance Inspection Form**

# Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

<b>Instructions:</b> Inspection results based on Minnesota Pollution Control Agency requirements and attached forms – additional local requirements may also apply	
Submit completed form to Local Unit of Government (LUG) and system of within 15 days	wner
System Status	
System status on date (mm/dd/yyyy):10/3/2019	
— · — · —	Ioncompliant – Notice of Noncompliance See Upgrade Requirements on page 3)
Reason(s) for noncompliance (check all applicable)  ☐ Impact on Public Health (Compliance Component #1) – Imminent ☐ Other Compliance Conditions (Compliance Component #3) – Immi ☐ Tank Integrity (Compliance Component #2) – Failing to protect gr ☐ Other Compliance Conditions (Compliance Component #3) – Failing ☐ Soil Separation (Compliance Component #4) – Failing to protect gr ☐ Operating permit/monitoring plan requirements (Compliance Comp	ninent threat to public health and safety coundwater ing to protect groundwater groundwater
Property Information Parcel ID# or Sec/T	Jun/Danger
raice 10# of Sec/1	wp/Range.
Property address: 11020 Mayfield Ave N, Stillwater Twp, MN 55082	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425
Property address: 11020 Mayfield Ave N, Stillwater Twp, MN 55082  Property owner: Lawrence Trom  or	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425
Property address: 11020 Mayfield Ave N, Stillwater Twp, MN 55082  Property owner: Lawrence Trom  or  Owner's representative: F	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425  Representative phone: 651-430-6655
Property address:11020 Mayfield Ave N, Stillwater Twp, MN 55082 F Property owner:Lawrence Trom	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425  Representative phone: 651-430-6655
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Property address:	Reason for inspection: Property Transfer Dwner's phone: 651-983-7425  Representative phone: 651-430-6655  Regulatory authority phone: 651-430-6655  Dinie the compliance status of this system. No a unknown conditions during system construction,
Property address:	Reason for inspection: Property Transfer Dwner's phone: 651-983-7425  Representative phone: 651-430-6655  Regulatory authority phone: 651-430-6655  Dinie the compliance status of this system. No a unknown conditions during system construction,
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Property address:	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425  Representative phone: 651-430-6655  Regulatory authority phone: 651-430-6655  Dinne the compliance status of this system. No aunknown conditions during system construction, conditions during system construction, conditions number: C5342/C9852
Property address:	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425  Representative phone: 651-430-6655  Regulatory authority phone: 651-430-6655  Dinne the compliance status of this system. No a unknown conditions during system construction, conditions during system construction, conditions number: C5342/C9852  License number: L2896
Property address: 11020 Mayfield Ave N, Stillwater Twp, MN 55082  Property owner: Lawrence Trom  Or  Owner's representative: Washington County  Brief system description: A pre-cast septic tank and a rock trench drainfield Comments or recommendations:  Certification  I hereby certify that all the necessary information has been gathered to determ determination of future system performance has been nor can be made due to possible abuse of the system, inadequate maintenance, or future water usage Inspector name: Brian Humpal/Christopher Uebe  Business name: Inspect Minnesota, Midwest Soil Testing  Necessary or Locally Required Attachments	Reason for inspection: Property Transfer  Dwner's phone: 651-983-7425  Representative phone: 651-430-6655  Regulatory authority phone: 651-430-6655  Dinne the compliance status of this system. No a unknown conditions during system construction, conditions during system construction, conditions number: C5342/C9852  License number: L2896

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Property address: 11020 Mayfield Ave N, Stillwater Twp, MN 55082

Inspector initials/Date: 10/3/2019 **24** 

1.	Impact on Public Health – Compliance component #1 of 5					
	Sy gro Sy or Sy dw	estem discharge sewage to the bund surface.  Its tem discharge sewage to drain tile surface waters.  Its tem cause sewage backup into velling or establishment.  In y "yes" answer above indicates in Imminent Threat to Public Heal of the above found.	the sys	⊠ No  ⊠ No  item is		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.	Sy ce	compliance criteria:  Instem consists of a seepage pit, sspool, drywell, or leaching pit.  Instem consists of a seepage pit, sepage pits meeting 7080.2550 may be	nponent #		$\boxtimes$	rification method(s): Probed tank(s) bottom Examined construction records Examined Tank Integrity Form (Attach)
	Se de If y	ewage tank(s) leak below their signed operating depth.  yes, which sewage tank(s) leaks:  ny "yes" answer above indicates the signed operating to Protect Ground the signed operating to Protect Ground the signed operation of the signed operation operation of the signed operation operation of the signed operation of the signed operation opera			<ul> <li>□ Observed liquid level below operating depth</li> <li>□ Examined empty (pumped) tanks(s)</li> <li>□ Probed outside tank(s) for "black soil"</li> <li>□ Unable to verify (See Comments/Explanation)</li> <li>□ Other methods not listed (See Comments/Explanation)</li> </ul>	Examined empty (pumped) tanks(s) Probed outside tank(s) for "black soil"
3.	Lo	wered underwater camera into tanks -			nt #3	of 5
	<ul> <li>a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes* ☐ No ☐ Unknown</li> <li>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</li> <li>Explain:</li> </ul>					
	C.	System is non-protective of ground war *System is failing to protect ground Explain:		er conditions as det	ermin	ned by inspector ☐ Yes* ☒ No

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Property address: <u>11020 Mayfield Ave N, Stillwate</u>	r Twp, MN 55082	Inspector initials/Date:10/s	3/2019 <b>8#</b> (M			
. Soil Separation — Compliance component #4 of 5						
Date of installation: 1977  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				
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	requirements differ.  Conducted soil observation(s) (A  Two previous verifications (Attac  Not applicable (Holding tank(s), not  Unable to verify (See Comments/E  Other (See Comments/Explanation)	ttach boring logs) 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:	☐ Yes ☐ No	Comments/Explanation:				
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  See Attached Boring Log(s)				
Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.		B. Periodically saturated soil/bedrock     C. System separation				
Any "no" answer above indicates the Failing to Protect Groundwater.  5. Operating Permit and Nitrogen Bi	<u> </u>	D. Required compliance separation*  *May be reduced up to 15 percent if Ordinance.  omponent #5 of 5  Not appl	·			
Is the system operated under an Operating Permit?  Yes No If "yes", A below is required  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.						
a. Operating Permit number: Have the Operating Permit requirements b b. Is the required nitrogen BMP in place and  Any "no" answer indicates Noncomp	properly functioning?	☐ Yes ☐ No				

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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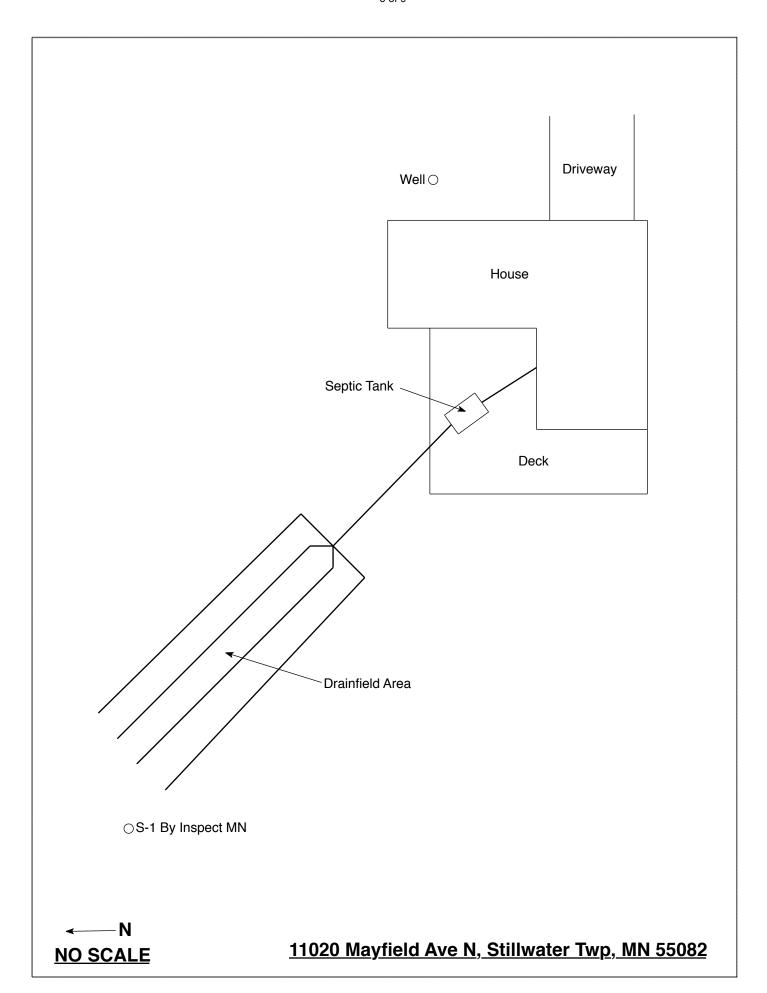
# Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: October 3, 2019	Time: 9:00 AM					
Property Address: 11020 Mayfield Ave N, Stillwater Twp, MN	Zip: 55082					
Property Owner: Lawrence Trom	Phone: 651-983-7425					
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade     Are the tank maintenance covers accessible?  Yes No *If no incomplete the properties of the properti	Other  Alternative system Experimental system Cesspool system Other system o, proper maintenance must be					
performed through the maintenance holes. Maintenance hole cove the ground surface to facilitate access and proper maintenance of the	rs should be made accessible to					
	ie system.					
1	ank size (gals.): 1200					
	idents in home? 2-5					
Number of bedrooms? 3 Are all floors drained by gr						
Garbage disposal? Y Whirlpool bath?	N					
More than one system (laundry, etc.)? N						
Does this property have any footing drain tiles connected to the sep	otic system? N					
Are any buildings on this property such as garages or out-buildings	connected to this system?					
Garage floor drain - discharge unknown.						
Are there any additional systems on this property serving other buildings? N						
Location of septic system on lot? North Side						
	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? N If yes, explain:						
When was the system last pumped? 2016 Name of pump	er: Pinky'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: Lawrence Trom's Signature On File Date: 10/3/2019



#### **Soil Observations Log**

Observations Made By: Inspect Minnesota Classification System: USDA Soil Observation: 1 Surface Elevation of Observation	Location of Project: 11020 Mayfield Ave N, Stillwater Twp, MN 55082						
Classification System: Soil Observation:  Surface Elevation of Observation  Depth In Inches  1			,				
Surface Elevation of Observation  Depth In Inches  O-13  13-18  10/YR 4/3 Clay Loam 10/YR 5/8 & 10/YR 6/2 Redox 10/YR 3/4 Very Medium Coarse Sand 10/YR 3/4 Sandy Loam 7.5YR 3/4 Sandy Loam 7.5YR 3/4 Sandy Loam 7.5YR 3/4 Sandy Loam 7.5YR 5/8 & 10/YR 6/2 Redox  10/YR 3/4 Sandy Loam 7.5YR 3/4 Sandy Loam 7.5YR 3/4 Sandy Loam 7.5YR 5/8 & 10/YR 6/2 Redox  Depth To End Of Soil Observation Or Redox Same Elevation of Observation Or Redox Depth To End Of Soil Observation Or Redox Elevation of Observation Or Redox Same Elevation of Observation Relative To System  -36" Depth To Bottom Of Distribution Media =0" Of Separation  Of Separation			•			•	, ,
Elevation of Observation    Same ground surface as last drainfield trench   Same ground surface as last drainfield trench   Soils Encountered   Depth In Inches   Soils Encountered   Depth In Inches   Soils Encountered	· · · · · · · · · · · · · · · · · · ·			Soil C	bservation:		
Inches   Rock %   Solis Encountered   John   John   Rock %   Solis Encountered   John   John   Rock %   Solis Encountered   John   John	Surface Elevation of Same ground surface as last			Elevat	ion of		
13-18 10YR 4/3 Clay Loam With 7.5YR 5/8 & 10YR 6/2 Redox 10YR 3/4 Very Medium Coarse Sand 10YR 4/4 Medium Sand 7.5YR 3/4 Sandy Loam With 7.5YR 3/4 Sandy Loam With 7.5YR 5/8 & 10YR 6/2 Redox  13" Depth To End Of Soil Observation Or Redox Same Elevation Of Observation Relative To System -36" Depth To Bottom Of Distribution Media =0" Of Separation  10YR 4/3 Clay Loam With 7.5YR 5/8 & 10YR 6/2 Redox  Depth To End Of Soil Observation Or Redox Elevation Of Observation Relative To System Elevation Of Observation Relative To System Of Separation  Depth To Bottom Of Distribution Media Of Separation	י ו אַרערע ייַ	Soils E	ncountered		Rock %	Soils	Encountered
Same Elevation Of Observation Relative To System  -36" Depth To Bottom Of Distribution Media =0" Of Separation  Elevation Of Observation Relative To System  Depth To Bottom Of Distribution Media Of Separation  Of Separation	13-18 18-30 30-38 38-44	10YR 4/3 7.5YR 5/8 8 10YR 3/4 Very 10YR 4/4 7.5YR 3/4 9	Clay Loam With 10YR 6/2 Redox Medium Coarse Sand Medium Sand 4 Sandy Loam With	Inches			
-36" Depth To Bottom Of Distribution Media Depth To Bottom Of Distribution Media Of Separation  Of Separation	13" Depth To End Of Soil Observation Or Redox			Depth T	o End Of Soil	Observation Or Redox	
=0" Of Separation Of Separation	Same Elevation Of Observation Relative To System			Elevatio	n Of Observat	tion Relative To System	
						Distribution Media	
End Of Soil Observation At: 60" End Of Soil Observation At:	=0"  Of Separation			or Sepa	Iration		
<b>-</b>	End Of Soil Observation At: 60"			End Of	Soil Ob	servation At:	
Redox Present At: 13" Redox Present At:	Redox Present At: 13"						
Standing Water Present At: None Standing Water Present At:				Standi	ng Wate	r Present At:	

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

#### **DISCLAIMER**

# Brian L. Humpal, Inc. dba. 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

# Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2019

Issued: 11/20/2018

### Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

## **Designated Certified Individual(s):**

Cert #	Name	Certification Expires:
C9633	Anthony P Scully	3/5/2020
	Installer, Designer (Apprentice)	, v , v
C5342	Brian L Humpal	10/15/2023
	Installer, Maintainer, Serv Prov, Adv	Designer, Adv Inspector
C9852	Christopher R Uebe	3/4/2021
	Designer, Inspector	



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

Nick Haig, Supervisor Certification and Training Unit