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: 4210 Penfield Ave S, Afton, MN 55001

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2016, which were on file at Washington County. This system consists of a pre-cast two-compartment septic tank, a pre-cast lift tank, and a mound. This house is presently vacant.

It should be noted that there is a valve located in the lift tank, which would allow effluent to be pumped into an old drainfield. All of the effluent is currently being pumped into the 2002 mound. The 1988 drainfield is noncompliant and needs to be permanently disconnecting for this system to be in compliance.

Although not a compliance inspection requirement, it should be noted that the system was designed and installed for a four bedroom house. This house currently has six bedrooms.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the 1988 drainfield lacking the required three foot separation between the bottom of the drainfield and bedrock/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			
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): 2/18/2019				
	mpliant – Notice of Noncompliance grade 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 the Tank Integrity (Compliance Component #2) – Failing to protect groundward Other Compliance Conditions (Compliance Component #3) – Failing to protect groundward Soil Separation (Compliance Component #4) – Failing to protect groundward Operating permit/monitoring plan requirements (Compliance Component	reat to public health and safety iter otect groundwater vater			
Property Information Parcel ID# or Sec/Twp/Rar				
· · ·	Reason for inspection: Property Transfer			
Property owner: Real Estate Owned Owner's	phone:			
Owner's representative: Mike Olsen - Keller Williams Represe	ntative phone: 651 200 0150			
•	Representative phone: 651-209-0159 Regulatory authority phone: 651-430-6655			
Brief system description: A pre-cast two-compartment septic tank, a pre-cast lift tal				
Comments or recommendations:	,			
It should be noted that there is a valve located in the lift tank, which would allow efflue the effluent is currently being pumped into the 2002 mound. The 1988 drainfield is no disconnecting for this system to be in compliance.				
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 Certifica	tion number: <u>C5342/C9852</u>			
Business name: Inspect Minnesota, Midwest Soil Testing Lice	nse number: <u>L2896</u>			
Inspector signature: Brian Humpal for the Ph	one number: 651-492-7550			
Negoggamy on Legally Degree d Attaches and				
Necessary or Locally Required Attachments	de est entire e			
	local ordinance			
	COLISC			

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: 4210 Penfield Ave S, Afton, MN 55001

Inspector initials/Date: 2/18/2019 BH

		ompliance criteria: stem discharge sewage to the	☐ Yes ☒ No	Verification method(s): ☑ Searched for surface outlet			
		ound surface.		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) 			
		stem cause sewage backup into relling or establishment.	☐ Yes ⊠ No	 "Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test 			
•		ny "yes" answer above indicates Imminent Threat to Public Heal		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
		omments/Explanation: one of the above found.					
2.	Ta	ank Integrity – Compliance con	nponent #2 of 5				
	Co	ompliance criteria:		Verification method(s):			
		stem 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)Observed liquid level below operating depth			
_		wage tank(s) leak below their signed operating depth.	nk(s) leak below their				
	lf y	ves, which sewage tank(s) leaks:		☐ Unable to verify (See Comments/Explanation)			
Any "yes" answer above indicates the system is Failing to Protect Groundw			☐ Other methods not listed (See Comments/Explanation)				
•	Со	omments/Explanation:					
Lowered underwater camera into tanks - baffles and tank walls OK.							
	Lif	t pump and alarm were operational at	the time of the inspect	tion.			
3.	Ot	ther Compliance Conditions	6 – Compliance com	ponent #3 of 5			
	a.	Maintenance hole covers are damage	d, cracked, unsecured,	or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown			
	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		as determined by inspector ⊠ Yes* □ No			
		Explain:					
		It also used has maked that the one is a such.	a located in the lift ton	k, which would allow effluent to be pumped into an old			

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	Property address: 4210 Penfield Ave S, Afton, MN 55001				Insp	ector initials/	Date: _	2/18/2	019 84 (U	
4.	4. Soil Separation — Compliance component #4 of 5									
	Date of installation: 1988/2002 Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria: 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: Drainfield has a three-foot vertical separation distance from periodically	☐ Unkno	wn ⊠ No □ No	Scool ob un rec	servation less site of quiremen Conduc Two pre Not app Unable Other (S	conditions had to differ. ted soil observious verificationalicable (Holdin to verify (See See Comments) Explanation:	t expire pender ve beer vertion (ations (Ang tank(s) Comme /Explana	nt partie n altere s) (Attack Attach bo s), no dra ents/Expl ation)	es are sufficient d or local ch boring logs) oring logs) ainfield)	,
	"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) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes [□ No	А. В. С.	Bottom of Periodica	epths of eld distribution meduly saturated so eparation compliance se	edia oil/bedro	ck	See Attached Boring Log(s)	
5.	Any "no" answer above indicates to Failing to Protect Groundwater. Operating Permit and Nitrogen B.			*M O	ay be rec	luced up to 1	5 perce		owed by Local	
	Is the system operated under an Operating Period Is the system required to employ a Nitrogen BM BMP=Best Management Practice(s) specific If the answer to both questions is "no", Compliance criteria	mit? IP? ied in the sy	☐ Yes ☐ Yes	☐ No ☐ No Sign	If "yes'	', A below is ', B below is	requir requir	ed		
	 a. Operating Permit number: Have the Operating Permit requirements to b. Is the required nitrogen BMP in place and Any "no" answer indicates Noncomp	properly fu	nctioning	?	☐ Yes	□ No				
	Any no answer mulcales noncom	onance.								

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.

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

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

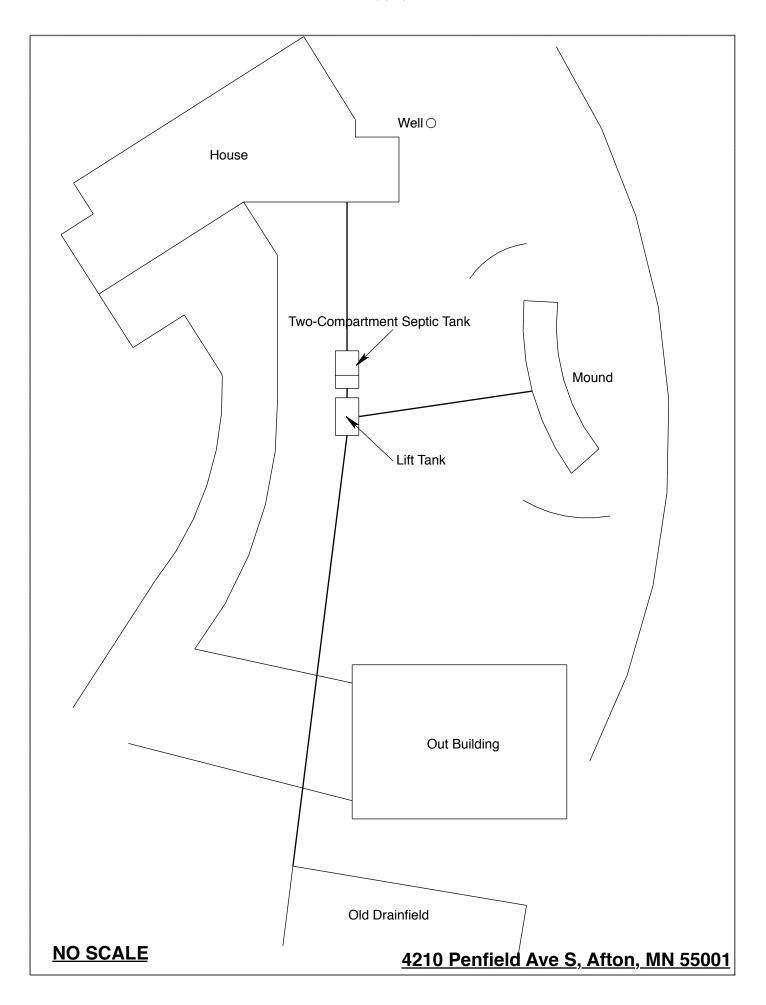
This information will be used for the purpose of conducting an MPCA Compliance Inspection

This information will be used for the purpose of conducting an MFCA	A Compilance inspection.					
Date of Inspection: February 18, 2019	Time: 9:30 AM					
Property Address: 4210 Penfield Ave S, Afton, MN	Zip: 55001					
Property Owner: Real Estate Owned	Phone:					
Tank(s) Tank(s)Material Soil Treatment System Septic 2 Comp Fiberglass Rock trench 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 the ground surface to facilitate access and proper maintenance of	ers should be made accessible to					
Year house built: 1988 Year septic installed: 1988/2002	Tank size (gals.): 2000 2-Comp					
	esidents in home?					
Number of bedrooms? 6 Are all floors drained by g	ravity? Y					
Garbage disposal? Y Whirlpool bath?	? Y					
More than one system (laundry, etc.)? N						
Does this property have any footing drain tiles connected to the se	eptic 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 bu drainfield still connect to the house via the lift tank.	aildings? There is a noncompliant					
Location of septic system on lot? East Side						
Location of water well on lot? North Side	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? If yes, explain:						
When was the system last pumped? Due Name of pum	nper:					
How often pumped in previous years? Due Is system on a monitoring plan?						
Have you received notices from any government agency concerning this system?						
Is your property located in a shoreland management area? N						
Do you have any additional information that should be given to the	ne new owner?					
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						

Owner/Occupant: Date:

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.



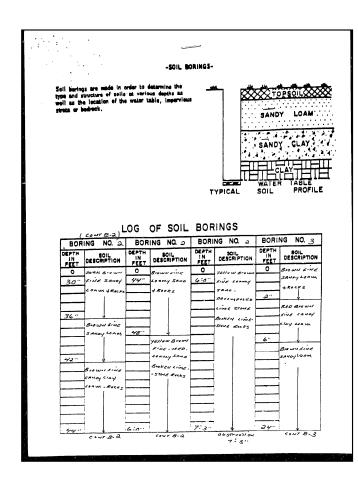
Log Of Soil Borings

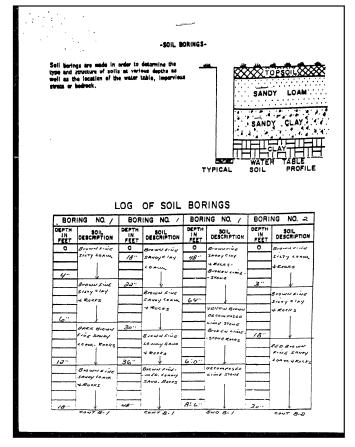
Location of Project: 4210 Penfield Ave S, Afton, MN 55001					
Boi	Borings Made By: Inspect Minnesota			Date:	2/8/16 & 2/15/16
	Auger Used: Hand/Bucket		Class	ification System:	USDA
В	Boring Number: 1			Boring Number:	
Surface Elevation of Boring		top of mound on inal contour	Surface Elevation of Boring		
Depth In Inches		ncountered	Depth In Inches	Soils Er	countered
0-21 21-30 30-46	10YR 3	//2 Silt Loam //2 Silt Loam R 4/3 Silt			
46" D	epth To End Of B	oring Or Redox		Depth To End Of B	oring Or Redox
		g Below Top Of Mound			Relative To System
-30" De =62" Of	epth To Bottom (f Separation	Of Distribution Media		Depth To Bottom C Of Separation	f Distribution Media
E	nd Of Boring At:	46"		End Of Boring At:	
	edox Present At:	None		Redox Present At:	
	ater Present At:	None	Standing	Water Present At:	

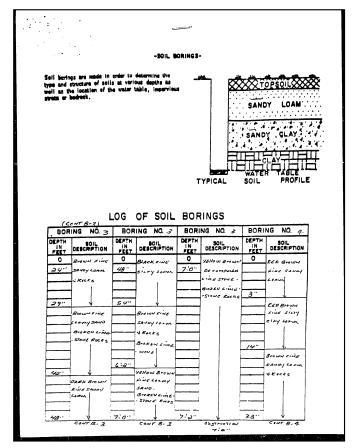
Bottom Of Distribution Medium At: 30 Inches

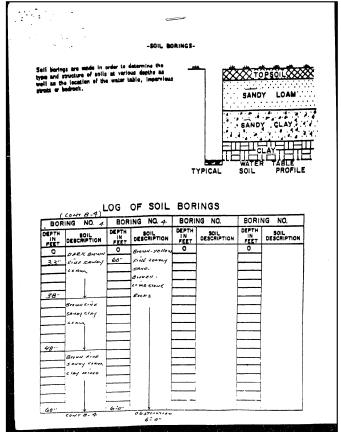
7 of 0

4210	PENFIELD AVE		BORING LOG			
ATE	4-26-02			В	OREHOLE DIAMETER	F HAND AUGER
EPTH FEET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	SOIL CLASSIFICATION
, =	TOP SOIL- LEAM- SANDY YELLOWISH BROWN CLAY	TOP SOIL - LOAM - SANDY H YELLOWISH CROWN LOAM - LOAM -	DARK BROWN	TOP SOIL- LOAM- SANDY DARK BROWN - LOAM	TOP SOIL - LOAM - SANDY SANDY SELDWISH BROWN LOAM -	TOP SOIL- BROWN LOAM ZSYR 4/4 ZELLOWISH BROWN LOAM 107R 78
3	LOAM - FRACTURED LIMESTONE	<u> </u>	-	YEHOWISH BROWN LORM -	Morried Soil	DARK BROWN LOAM 7.5YR 34
٦		± alex	TELLOWISH BROWN	FAINT MOTTLE	-S70P	YELLOWISH BROWN CLAY 10YR STR
,	FRACTURED LIMESTONE	± 370P =	MORTED SOIL .	= =	=	
1	-	MOTTLE 14"	Мопть 48"	STOP _	Marrie 18"	
6	=	END OF			=	
7	Ξ.	丰 =	-			-
* 🖥	_	<u> </u>				<u> </u>
,	- - -	-			<u>-</u> -	<u>-</u> -
10 -	-	÷ =	<u> </u>			_









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 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

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)	
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 Mich Haig

Nick Haig, Supervisor Certification and Training Unit