Midwest Sewer Services

P.O. Box 10853 White Bear Lake, MN 55110 651-492-7550/Brian@Midwestsoiltesting.com

Brian Humpal

MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Date: March 9, 2020 **Time:** 9:00 AM **Owner:** Jeff Thomsen

Inspection Address: 6277 190th St N, Forest Lake, MN 55025

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Jeff Thomsen, and have reviewed the original design/permit records on file at Washington County. This oldersystem consists of two pre-cast septic tanks (1st tank installed in 1974), a pre-cast lift tank and a mound.

Olson's Sewer Service pumped the septic tanks and lift tank on March 5, 2020.

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

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):3/9/2020					
— · · — · —	npliant – Notice of Noncompliance rade Requirements on page 3)				
Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminent threat to 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	ge:				
th	or inspection: Property Transfer				
Property owner: Jeff Thomsen Owner's or	phone: 651-464-0032				
Owner's representative: Represer	ntative phone:				
Local regulatory authority: Washington County Regulato	ry authority phone: 651-430-6655				
Brief system description:	d.				
Comments or recommendations:					
Certification					
I hereby certify that all the necessary information has been gathered to determine the of 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 Certificat	ion number: <u>C5342/C9852</u>				
Business name: Midwest Sewer Services Licer	se number: _L2896				
Inspector signature: Brian Humpal for the Pho	ne number: 651-492-7550				
Necessary or Locally Required Attachments					
	local ordinance				
☐ Other information (list): Report Summary, Property Information, Disclaimer, Lice					

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Property address: 6277 190th St N, Forest Lake, MN 55025

Inspector initials/Date: 3/9/2020

Impact on Public Health – Compliance component #1 of 5 Compliance criteria: Verification method(s): Searched for surface outlet ☐ Yes ☐ No System discharge sewage to the Searched for seeping in yard/backup in home ground surface. System discharge sewage to drain tile ☐ Yes ☐ No ☐ Homeowner testimony (See Comments/Explanation) or surface waters. ☐ "Black soil" above soil dispersal system ☐ Yes ☐ No System cause sewage backup into ☐ System requires "emergency" pumping dwelling or establishment. ☐ Performed dye test Any "yes" answer above indicates the system is Unable to verify (See Comments/Explanation) an Imminent Threat to Public Health and Safety. Other methods not listed (See Comments/Explanation) Comments/Explanation: None of the above found. 2. Tank Integrity – Compliance component #2 of 5 Verification method(s): Compliance criteria: Probed tank(s) bottom System consists of a seepage pit, ☐ Yes ☐ No cesspool, drywell, or leaching pit. Seepage pits meeting 7080.2550 may be ☐ Examined Tank Integrity Form (Attach) compliant if allowed in local ordinance. ☐ Observed liquid level below operating depth ☐ Yes ☒ No Sewage tank(s) leak below their designed operating depth. ☐ Probed outside tank(s) for "black soil" If yes, which sewage tank(s) leaks: ☐ Unable to verify (See Comments/Explanation) Any "ves" answer above indicates the ☐ Other methods not listed (See Comments/Explanation) system is Failing to Protect Groundwater. Comments/Explanation: Lowered underwater camera into tanks - baffles and tank walls OK. Lift pump and alarm were operational at the time of the inspection. 3. Other Compliance Conditions – Compliance component #3 of 5 Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes* ⊠ No ☐ Unknown a. 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: System is non-protective of ground water for other conditions as determined by inspector ☑ No *System is failing to protect groundwater Explain:

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Inspector initials/Date: 3/9/2020 8#/ Property address: 6277 190th St N, Forest Lake, MN 55025 **Soil Separation** – Compliance component #4 of 5 Date of installation: 1974/1995 Unknown Verification method(s): Shoreland/Wellhead protection/Food Beverage ☐ Yes ⊠ No Soil observation does not expire. Previous soil Lodging? observations by two independent parties are sufficient, unless site conditions have been altered or local Compliance criteria: requirements differ. For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead ☐ Conducted soil observation(s) (Attach boring logs) Protection Area or not serving a food. ☐ Two previous verifications (Attach boring logs) beverage or lodging establishment: ☐ Not applicable (Holding tank(s), no drainfield) Drainfield has at least a two-foot vertical ☐ Unable to verify (See Comments/Explanation) separation distance from periodically ○ Other (See Comments/Explanation) saturated soil or bedrock. ☐ Yes ☐ No Non-performance systems built April 1, Comments/Explanation: 1996, or later or for non-performance Reviewed design and permit records. 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.* "Experimental", "Other", or "Performance" ☐ Yes ☐ No Indicate depths of elevations systems built under pre-2008 Rules; Type IV See Attached or V systems built under 2008 Rules (7080. Boring Log(s) A. Bottom of distribution media 2350 or 7080.2400 (Advanced Inspector License required) B. Periodically saturated soil/bedrock Drainfield meets the designed vertical separation distance from periodically C. System separation saturated soil or bedrock. D. Required compliance separation* Any "no" answer above indicates the system is *May be reduced up to 15 percent if allowed by Local Failing to Protect Groundwater. Ordinance. 5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 Not applicable ☐ Yes ☐ No If "yes", A below is required Is the system operated under an Operating Permit? 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. Compliance criteria a. Operating Permit number: ☐ Yes ☐ No Have the Operating Permit requirements been met?

Any "no" answer indicates Noncompliance.

b. Is the required nitrogen BMP in place and properly functioning?

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.

☐ Yes ☐ No

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Pro	perty address: (277 - 1907)	of No. 7ru	Inspector initials/Date: 5# 103/05/2020 (mm/dd/yyyy)		
1.	Impact on Public Health - 0	Compliance comp	ponent #1 of 5		
	Compliance criteria:		Verification method(s):		
	System discharges sewage to the ground surface.	☐ Yes ☐ No	☐ Searched for surface outlet☐ Searched for seeping in yard/backup in home		
	System discharges sewage to drain tile or surface waters.	☐ Yes ☐ No	☐ Excessive ponding in soil system/D-boxes		
	System causes sewage backup into dwelling or establishment.	☐ Yes ☐ No	☐ Homeowner testimony (See Comments/Explanation) ☐ "Black soil" above soil dispersal system		
,	Any "yes" answer above indicates the system is an imminent threat to public health and safety.		☐ 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, cesspool, drywell, or leaching pit.	☐ Yes 📈 No	☐ Probed tank(s) bottom ☐ Examined construction records		
	Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		☐ Examined Tank Integrity Form (Attach)		
	Sewage tank(s) leak below their designed operating depth.	☐ Yes ☑No	☐ Observed liquid level below operating depth ☑ Examined empty (pumped) tanks(s)		
	If yes, which sewage tank(s) leaks:		☐ Probed outside tank(s) for "black soil"		
	Any "yes" answer above indicates the system is failing to protect groundwater.		 ☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation) 		
-	Comments/Explanation:		(Control of the cont		
	Other Compliance Conditions				
			red, or appear to be 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.				
ı	c. System is non-protective of ground water for other conditions as determined by inspector . Yes* No *System is failing to protect groundwater.				
	Explain:				

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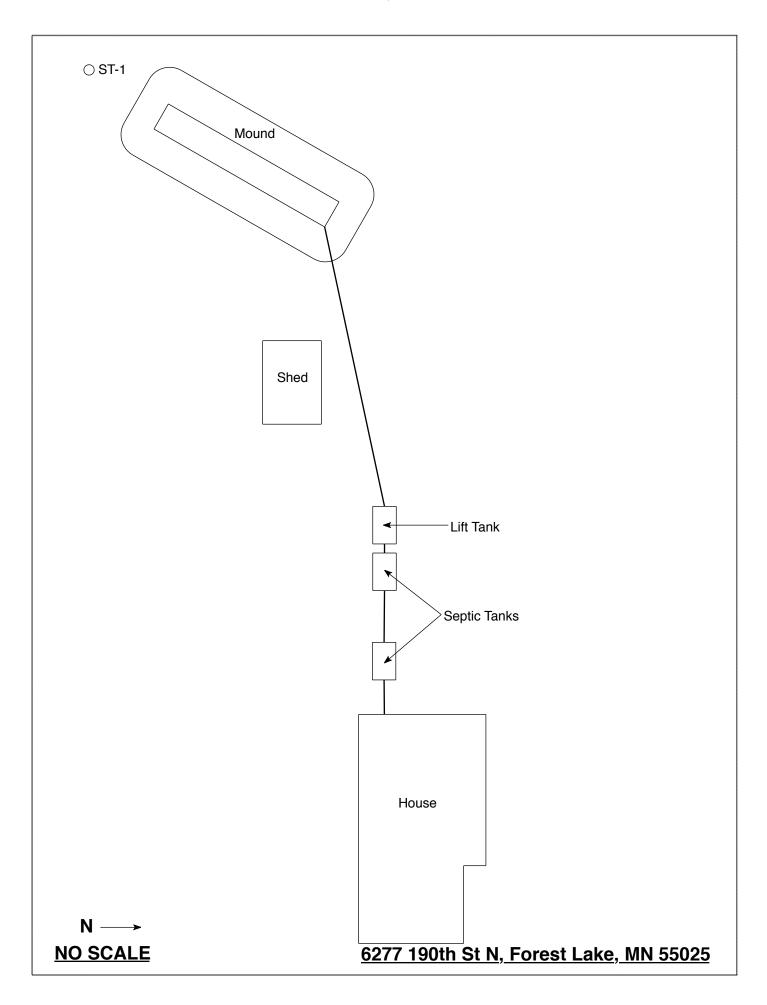
<u>Midwest Sewer Testing</u> Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: March 9, 2020	Time: 9:00 AM		
Property Address: 6277 100th St N. Forest Leke MN	7in: 55025		
Property Address: 6277 190 th St N, Forest Lake, MN	Zip: 55025		
Property Owner: Jeff Thomsen	Phone: 651-464-0032		
Tank(s) Tank(s)Material Soil Treatment System Septic 2 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 i			
performed through the maintenance holes. Maintenance hole cover			
the ground surface to facilitate access and proper maintenance of t	he system.		
Year house built: 1974 Year septic installed: 1974/1995	Γank size (gals.): 1200, 1000		
	sidents in home? 2		
Number of bedrooms? 2 Are all floors drained by gr	ravity? Y		
Garbage disposal? N Whirlpool bath?	N		
More than one system (laundry, etc.)? N			
Does this property have any footing drain tiles connected to the se	ptic 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	ildings? N		
Location of septic system on lot? West 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? Y If yes, explain: Replaced lift pump in approximately 2016.			
When was the system last pumped? 3/5/2020 Name of pum	per: Olson's Sewer Service		
How often pumped in previous years? Every 2			
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	e 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: Jeff Thomsen's Signature On File Date: 3/9/2020



Soil Observations Log

Loc	Location of Project: 6277 190th St N, Forest Lake, MN 55025					
Observations Made By: Midwest Sewer Servi					Date:	3/9/2020
Classi	fication System:	USDA				
S	Soil Observation:	ST-1		Soil O	bservation:	
Surface Elevation o Observation	'	as upslope mound ock bed	Lievai	face tion of vation	e of	
Depth In Inches Rock	% Soils E	ncountered	Depth In Inches	Rock %	Soils	Encountered
0-10 10-20	10YR 6/2 (Deplete	Loam Fine Sand 2 Sandy Loam d Matrix) With R 5/8 Redox				
0-44 44-46		nd Sand/Fill inal Topsoil				
		m of Rock Bed) = 22" Below Rock Bed				
10" Dept	<u>h To End Of Soil O</u>	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
+22" Amo	unt of Sand Below	Rock Bed		Elevatio	n Of Observat	tion Relative To System
=32" Of Se	eparation			Depth T Of Sepa	o Bottom Of Internation	Distribution Media
End Of So	oil Observation At:	20"	End Of	Soil Oh	servation At:	
	Redox Present At:	10"	Redox Present At:			
Standing Water Present At: None			Standi		r Present At:	

Bottom Of Distribution Medium At: 22 inches			
Signature:	Offer 1/h		

Logs of Soil Borings

Location of Project	Jeff Thomsen prop.,	acres, Sec. 33, For	est La	ke Twp.,Wash.Co	
Borings made by	Chris Zierke		_Date	4/14/95	
Hand bucket augar u	sed for borings: USDA - SC	S Soil Classification used			

Hand bucket auger used for borings; USDA - SCS	Soil Classification used.	
Depth, in feet O6" Dark-brown sandy loam 1 — Brown loam Olive-gray clay loam, iron-st mottled, wet Brown sandy loam, iron-stain 3 — mottled, wet 4 — 5 — 6 — 7 — 8 —	Depth, in feet 0 8" Dark-brown sandy loam 116" Brown loam, iron-st. & mottled by 2 2 30" iron-stained, mottled, wet 3—4—5—6—7—8—	elow 12
End of boring at3feet. Standing water table: Present atfeet of depth,2 hours after boring. Standing water not present in hole Mottled Soil: Observed at1 feet of depth. Mottled soil not present in bore hole Comments:	End of boring at2\frac{1}{2\frac{1}{2}}	
Boring Number 3 One of the lates of the lat	Boring Number 4 1— 2—	
End of boring at feet. Standing water table: Present at feet of depth, 22_ hours after boring. Standing water not present in hole Mottled Soil: Observed at 1 feet of depth. Mottled soil not present in bore hole Comments:	End of boring at feet. Standing water table: Present at feet of depth, hours after boring. Standing water not present in hole Mottled Soil: Observed at feet of depth. Mottled soil not present in bore hole 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 <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

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