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

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Advanced Inspector

#### SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

**Date:** March 30, 2017 **Time:** 11:00 AM **Owner:** David Pung & Raenette Manderfe

Inspection Address: 14801 Afton Blvd Ct 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 2009, which were on file at Washington County. The 2009 compliance inspection included a verification of soils with Washington County Environment Specialist, Chris LeClair. This system consists of two pre-cast septic tanks and a rock trench drainfield.

Predicated on my inspection of the system and my review of the records, it is my opinion that this system <u>presently meets</u> MPCA minimum compliance inspection requirements.

Inspect Minnesota and Midwest Soil Testing 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. Inspect Minnesota and Midwest Soil Testing 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.

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 (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):3/30/2017	
<u> </u>	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 Other Compliance Conditions (Compliance Component #3) – Imminent the Tank Integrity (Compliance Component #2) – Failing to protect groundwa Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwa Soil Separation (Compliance Component #4) – Failing to protect groundwa Operating permit/monitoring plan requirements (Compliance Component	reat to public health and safety ter otect groundwater vater
Property Information Parcel ID# or Sec/Twp/Range	ae:
• •	or inspection: VBWD
Property owner: David Pung & Raenette Manderfe Owner's	phone: 651-998-9181
or	
•	ntative phone: ry authority phone: 651-430-4052
Local regulatory authority: Washington County Regulato  Brief system description: Two pre-cast septic tanks and a rock trench drainfield.	17 authority priorie. 031-430-4032
Comments or recommendations:	
The 2009 compliance inspection included a verification of soils with Washington Count	y Environment Specialist, Chris LeClair.
Cantification	
<b>Certification</b> 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 possible abuse of the system, inadequate maintenance, or future water usage.	
Inspector name: Brian Humpal Certificat	ion number: L5342
	nse number: L2896
Inspector signature: Brian Humpal Pho	one 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: 14801 Afton Blvd Ct S, Afton, MN 55001

Inspector initials/Date: 3/30/2017

1.	lmp	<b>act on Public Health</b> – Cor	npliance com	ponent #1 of 5	
	Syste groun Syste dwell Any an II Com None A soi	em discharge sewage to the nd surface.  em discharge sewage to drain tile urface waters.  em cause sewage backup into ling or establishment.  ""yes" answer above indicates mminent Threat to Public Heal ments/Explanation:  e of the above found.  il boring over the drainfield indicated	th and Safety	No 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)  y soils.
<u>2.</u>	Com	npliance criteria:	□ Yes ⊠ N	Ve	rification method(s): Probed tank(s) bottom
	cess	em consists of a seepage pit, pool, drywell, or leaching pit.  age pits meeting 7080.2550 may be bliant if allowed in local ordinance.	∐ Yes ⊠ N		Examined construction records  Examined Tank Integrity Form (Attach)  Observed liquid level below operating depth
	desig	age tank(s) leak below their gned operating depth. s, which sewage tank(s) leaks:	☐ Yes ⊠ N	No 🗆	Examined empty (pumped) tanks(s) Probed outside tank(s) for "black soil"
	Any	"yes" answer above indicated tem is Failing to Protect Gre			Unable to verify (See Comments/Explanation) Other methods not listed (See Comments/Explanation)
3.	Lowe	ments/Explanation: ered underwater camera into tanks - ered compliance Conditions			of 5
	a. N	Maintenance hole covers are damaged	d, cracked, unse	ecured, or appear to	o structurally unsound.   Yes*   No   Unknown
		Other issues (electrical hazards, etc.) to in System is an imminent threat to pu	-	•	public health or safety. ☐ Yes* ☒ No ☐ Unknown
	E	xplain:			
	*(	System is non-protective of ground wa System is failing to protect ground explain:		nditions as determir	ned by inspector ☐ Yes* ☑ No

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Property address: 14801 Afton Blvd Ct S, Afton, MN 55001

Inspector initials/Date: 3/30/2017

4.	Soil Separation – Compliance compor	nent #4 o	f 5			
	Date of installation: 2003	Unkn	own	V	/erification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?	⊠ Yes	□No	S	oil observation does not expire. P	
	Compliance criteria:			u	bservations by two independent pa nless site conditions have been al	
	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:	☐ Yes	□ No	_	equirements differ.  Conducted soil observation(s) (and the conducted soil observation(s) (and the conducted soil observations (Attail observations)  Not applicable (Holding tank(s), n	ch boring logs)
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.				Unable to verify (See Comments/ Other (See Comments/Explanation	
	Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:	⊠ Yes	□ No	R	comments/Explanation: leviewed previous compliance inspleviewed design and permit record	
	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	☐ Yes	□No	_ _Ir	ndicate depths of elevations	
	or V systems built under pre-2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)			_A.	Bottom of distribution media	See Attached Boring Log(s)
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.			C	Periodically saturated soil/bedrock  System separation  Pequired compliance separation*	
	Any "no" answer above indicates to Failing to Protect Groundwater.	he syste	em is	*	<ul> <li>Required compliance separation*</li> <li>May be reduced up to 15 percent in Drain Dra</li></ul>	f allowed by Local
5.	Operating Permit and Nitrogen B	<b>MP*</b> – C	ompliand			licable
	Is the system operated under an Operating Per	mit?	☐ Yes	⊠ No	If "yes", A below is required	
	Is the system required to employ a Nitrogen BM	IP?	☐ Yes	⊠ No	If "yes", B below is required	
	BMP=Best Management Practice(s) specif	ied in the s	system de	esign		
	If the answer to both questions is "no",	this sec	tion doe	s not i	need to be completed.	
	Compliance criteria					
	Operating Permit number:     Have the Operating Permit requirements I	been met?	<u> </u>		☐ Yes ☐ No	
	b. Is the required nitrogen BMP in place and	properly f	unctioning	g?	☐ Yes ☐ No	
	Any "no" answer indicates Noncom	pliance.				

Upgrade Requirements (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.

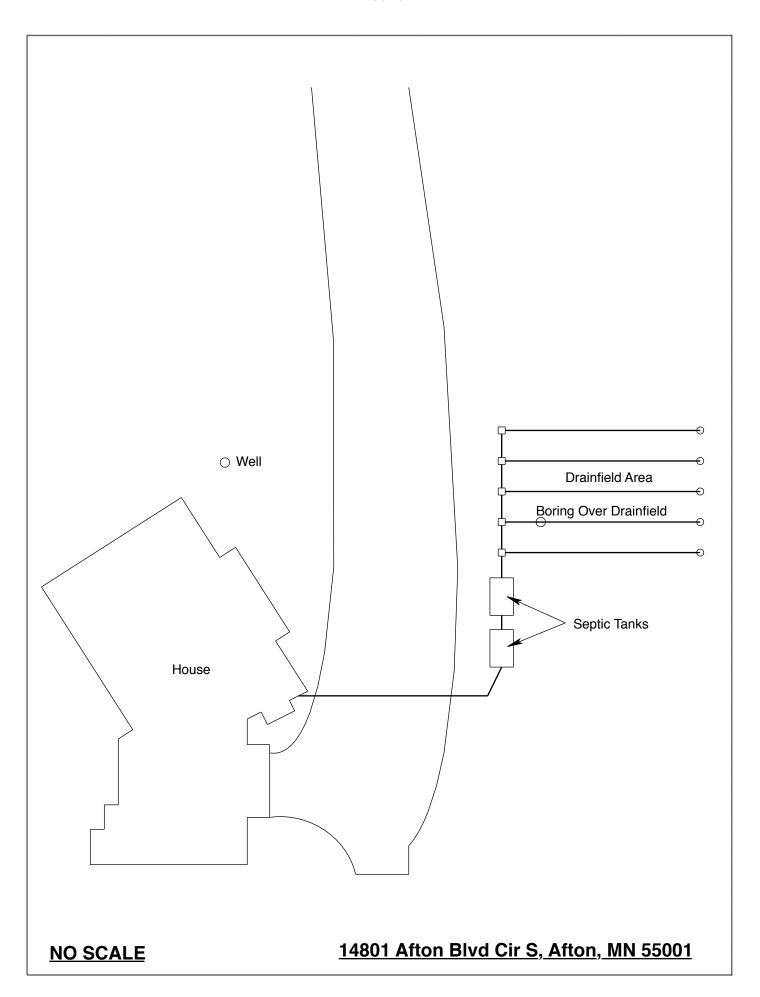
www.pca.state.mn.us • 651-296-6300 • 800-657-3864 TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 3 of 3

# 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.

	1					
Date of Inspection: March 30, 2017	Time: 11:00 AM					
Property Address: 14801 Afton Blvd Ct S, Afton, MN	Zip: 55001					
Property Owner: David Pung & Raenette Manderfe	Phone: 651-998-9181					
Tank(s)       Tank(s)Material       Soil Treatment System            □ Septic 2         □ Fiberglass         □ Aerobic         □ Plastic         □ Plastic         □ Chamber trench         □ Holding         □ Concrete         □ Other:         □ Block         □ Mound         □ Other □ At-grade         □ 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 covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system.						
	Γank size (gals.): 2-1000					
	sidents in home?					
Number of bedrooms? 4 Are all floors drained by gr						
Garbage disposal? N Whirlpool bath?	N					
More than one system (laundry, etc.)?						
Does this property have any footing drain tiles connected to the septic system?  Are any buildings on this property such as garages or out-buildings connected to this system?						
Are there any additional systems on this property serving other but	ildings?					
Location of septic system on lot? East 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?  If yes, explain:						
When was the system last pumped? 2016 Name of pum	per:					
How often pumped in previous years?  Is system						
Have you received notices from any government agency concerning	ng this system?					
Is your property located in a shoreland management area? Y						
Do you have any additional information that should be given to the	e new owner?					
I hereby certify that the above information is correct to the best of my knowledge considered "non-compliant/failing" per MPCA rules, that the inspector must by local government unit within 15 days of the date of inspection completion. I all this report, that I/we are ultimately responsible for payment of all fees for all wo	law submit a copy of this report to the so agree that unless otherwise noted in					

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.



## **Log Of Soil Borings**

Loc	Location of Project: 14801 Afton Blvd Court, Afton, MN 55001				
Borings Made By: Inspect Minnesota				Date:	7/29/09
Auger Used:   Hand/Bucket		Class	ification System:	USDA	
	Boring Number:	2		Boring Number:	
Surface Elevation Boring	of 6 inches belo	w ground surface at de of drainfield	Surface Elevation Boring		
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	ncountered
0-12 12-26 26-46 46-74	7.5YR 4, 7.5YR 4/0 10YR Loa 7.5YR 3/4 Sand This Boring Washington County	7/4 Silt Loam 7/4 Clay Loam 6 Sandy Loam my Sand With dy Clay Loam Layers was verified with 7 Inspector, Chris LeClair y, 29, 2009			
74"	Depth To End Of B	oring Or Redox		Depth To End Of B	oring Or Redox
+6"	Elevation Of Boring	g Relative To System		Elevation Of Boring	g Relative To System
-31"		Of Distribution Media			Of Distribution Media
≥49"	Of Separation			Of Separation	
	End Of Boring At:	74"		End Of Boring At:	
	Redox Present At:	None		Redox Present At:	
Standing	Water Present At:	None	Standing	Water Present At:	
Starianing	Tracer i reserie Ac.	NOTIC	Stariding	Tracer i reserie Att	l

Bottom Of Distribution Medium At: 31 Inches

## **Log Of Soil Borings**

	Location of Project: 14801 Afton Blvd Court, Afton, MN 55001				
Borings Made By: Inspect Minnesota				Date:	7/28/09
Auger Used: Hand/Bucket		Classi	ification System:	USDA	
	Boring Number:	1		Boring Number:	
Surface Elevation Boring	of Same ground	surface as last drop	Surface Elevation Boring	of	
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	ncountered
0-18 18-46 46-64 64-67 67-74	7.5YR 4, 7.5YR 4/4 Clay Lo 7.5YR 4/4 Fine 7 7.5YR 7.5YR 4/4 Silt Lo	R 3/4 Loam /4 Clay Loam /5 Clay Loam /5 Clay Loam /6 Medium Sand With /6 S/8 Redox /6 Clay Moist) With /6 SYR 5/8 Redox			
64"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same	Elevation Of Boring	g Relative To System		Elevation Of Boring	Relative To System
-31" =33"	Depth To Bottom ( Of Separation	Of Distribution Media		Depth To Bottom C Of Separation	of Distribution Media
	End Of Boring At:	74"		End Of Boring At:	
	Redox Present At:	67"		Redox Present At:	
Standing	Water Present At:	None		Water Present At:	

Bottom Of Distribution Medium At: 31 Inches	

•		•		
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#### **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: 12/22/2017

Issued: 11/29/2016

## Specialty Area(s):

Installer Maintainer Service Provider **Advanced Designer Advanced Inspector** 

## Designated Certified Individual(s):

Cert #

Name

**Certification Expires:** 

C5342

**Brian L Humpal** 

10/15/2017

Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector

C9852

Christopher R Uebe

3/4/2018

Designer, Inspector



St. Paul. Minnesota 55155-4194

Prevention and Solid Waste Management Section