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

P.O. Box 10853 White Bear Lake, MN 55110		Brian Humpal
651-492-7550/Brian@Midwestsoiltesting.com		MPCA Licensed Advanced Inspector
SUBSURFACE SEWAG	GE TREATMENT SY	STEM COMPLIANCE REPORT
Date:         May 2, 2018         Time: 2:45 PM         Owner:         Sue & Bob Kasowa		
<b>Inspection Address:</b> 15617 A	Afton Blvd S, Afton, MN 5	5001

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the history of the system with the owner, Sue Kasowan. I have contacted Washington County and the City of Afton and was advised that there are no records for this system. This very old system consists of two cesspools and a rock trench drainfield.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(E) because of cesspools and 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 Washington County Environmental Specialist, Mr. Joe Sanders (651-430-6679), to verify the County's position.

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

Brian Humpal

Brian Humpal

St. Paul, MN 55155-4194

Minnesota Pollution

Control Agency

520 Lafayette Road North

Instructions: Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms - additional local requirements may also apply.

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

#### System Status

System status on date (mm/dd/yyyy): 5/2/2018

## Compliant – Certificate of Compliance

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

## 🖄 Noncompliant – Notice of Noncompliance

(See Upgrade Requirements on page 3)

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

- □ Impact on Public Health (Compliance Component #1) Imminent threat to public health and safety
- Other Compliance Conditions (Compliance Component #3) Imminent threat to public health and safety
- Tank Integrity (Compliance Component #2) Failing to protect groundwater
- Other Compliance Conditions (Compliance Component #3) Failing to protect groundwater
- Soil Separation (Compliance Component #4) Failing to protect groundwater
- Operating permit/monitoring plan requirements (Compliance Component #5) Noncompliant

### **Property Information**

Parcel ID# or Sec/Twp/Range:

Property address:	15617	Afton Blvd S, Afton, MN 55001	Re	ason for inspection: Property Transfer
Property owner:	Property owner: Sue & Bob Kasowan		Ov	vner's phone: 651-295-7393
or				
Owner's represent	tative:		Re	presentative phone:
Local regulatory a	uthority:	Washington County	Re	gulatory authority phone:651-430-6679
Brief system desc	ription:	n: A rock trench drainfield with two or more cesspool(s).		
Comments or reco	ommenda	tions:		

mments of recommendations.

### Certification

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

Inspector name:	Brian Humpal	Certification number:	L5342
Business name:	Inspect Minnesota, Midwest Soil Testing	License number:	L2896
Inspector signatur	: Brian Humpal	Phone number:	651-492-7550

#### Necessary or Locally Required Attachments

Soil boring logs System/As-built drawing Forms per local ordinance Other information (list): Report Summary, Property Information, Disclaimer, License

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For local tracking purposes:

Doc Type: Compliance and Enforcement

(SSTS)

**Compliance Inspection Form** 

**Existing Subsurface Sewage Treatment Systems** 

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

Compliance criteria:		
System discharge sewage to the ground surface.	🗌 Yes 🖾 No	
System discharge sewage to drain tile or surface waters.	🗌 Yes 🛛 No	
System cause sewage backup into dwelling or establishment.	🗌 Yes 🖾 No	
Any "yes" answer shows indicates the system is		

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

Comments/Explanation:

None of the above found.

#### Verification method(s):

- Searched for surface outlet
- Searched for seeping in yard/backup in home
- Excessive ponding in soil system/D-boxes
- Homeowner testimony (See Comments/Explanation)
- "Black soil" above soil dispersal system
- System requires "emergency" pumping
- Performed dye test
- Unable to verify (See Comments/Explanation)
- Other methods not listed (See Comments/Explanation)

#### 2. Tank Integrity – Compliance component #2 of 5

Com	nliance	criteria:
COIII	pliance	CITETIA.

System consists of a seepage pit, cesspool, drywell, or leaching pit.	🖾 Yes 🗌 No	
Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		
Sewage tank(s) leak below their designed operating depth.	🗌 Yes 🗌 No	
If yes, which sewage tank(s) leaks:	All Tanks	
A way (free all an arrow a barra in all a stars that		

## Any "yes" answer above indicates the system is Failing to Protect Groundwater.

#### Comments/Explanation:

Lowered underwater camera into tanks - tanks of block construction.

#### Verification method(s):

Probed tank(s) bottom
 Examined construction records
 Examined Tank Integrity Form (Attach)
 Observed liquid level below operating depth
 Examined empty (pumped) tanks(s)
 Probed outside tank(s) for "black soil"
 Unable to verify (See Comments/Explanation)
 Other methods not listed (See Comments/Explanation)

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

a.	Maintenance hole covers are damaged, 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.  $\Box$  Yes\*  $\boxtimes$  No  $\Box$  Unknown \*System is an imminent threat to public health and safety

Explain:

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

Explain:

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

Date of installation:	🛛 Unknov	wn V	/erification method(s):	
Shoreland/Wellhead protection/Food Beverage Lodging?	🗌 Yes 🛛		oil observation does not expire. P	
Compliance criteria:		u	bservations by two independent p nless site conditions have been a	
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	☐ Yes [	_ No	<ul> <li>equirements differ.</li> <li>Conducted soil observation(s)</li> <li>Two previous verifications (Atta</li> <li>Not applicable (Holding tank(s), r</li> </ul>	ach boring logs) no drainfield)
separation distance from periodically saturated soil or bedrock.			Unable to verify (See Comments Other (See Comments/Explanatio	
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 C	Comments/Explanation:	
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*				
"Experimental", "Other", or "Performance"	□ Yes □	No Ir	ndicate depths of elevations	
systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)		_ <u>A</u> .	. Bottom of distribution media	See Attached Boring Log(s)
Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.			Periodically saturated soil/bedrock     System separation	
			. Required compliance separation*	
Any "no" answer above indicates the Failing to Protect Groundwater.	he systen		May be reduced up to 15 percent Ordinance.	if allowed by Local
Operating Permit and Nitrogen B	<b>MP*</b> – Cor	mpliance com	ponent #5 of 5 🛛 🖂 Not app	blicable
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		🗌 Yes 🛛 No	If "yes", B below is required	
BMP=Best Management Practice(s) specif	ied in the sy	stem design		
If the answer to both questions is "no",	this sectio	on does not i	need to be completed.	
Compliance criteria				
a Onerating Remait suggestion				
			🗌 Yes 🔲 No	

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

Have the Operating Permit requirements been met?

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, 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

## Inspect Minnesota & Midwest Soil Testing

#### Subsurface Sewage Treatment System Owner/Property Information

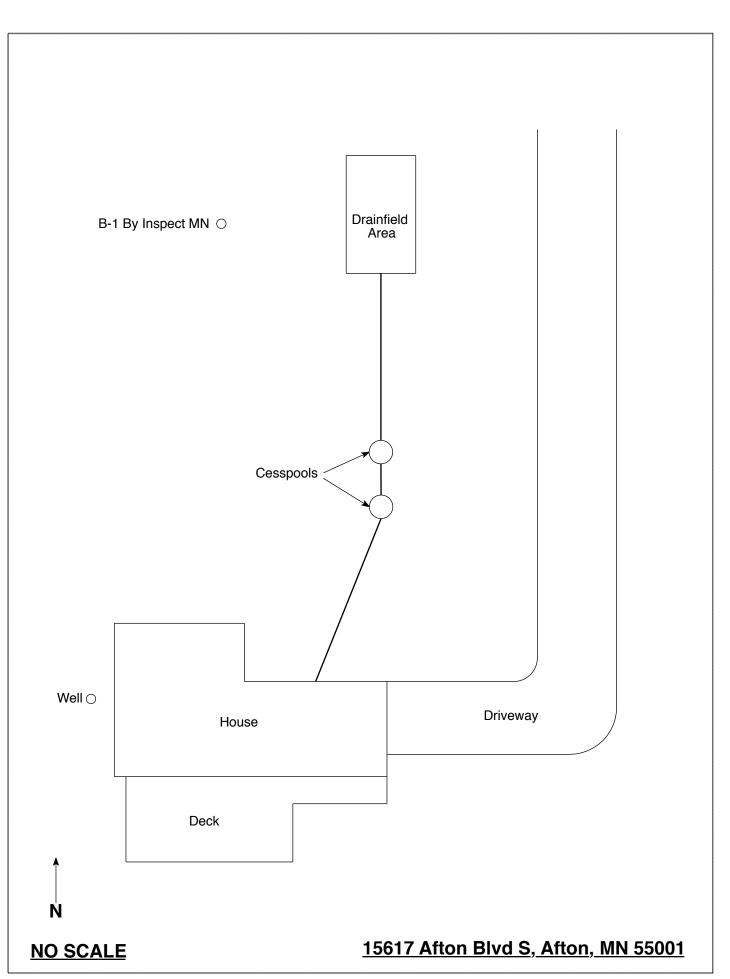
This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: May 2, 2018	Time: 2:45 PM			
Deserver Addresse 15(17 After Divid S After MD	7im: 55001			
Property Address: 15617 Afton Blvd S, Afton, MN	Zip: 55001			
Property Owner: Sue & Bob Kasowan	Phone: 651-295-7393			
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Other Alternative system			
Aerobic Plastic Gravelless trench	Experimental system			
Lift Metal Chamber trench	$\boxtimes$ Cesspool system <u>2 or more</u>			
Holding Concrete Seepage bed	Other system			
Other: Block Mound				
Other At-grade				
Are the tank maintenance covers accessible? $\Box$ Yes $\boxtimes$ No *I				
performed through the maintenance holes. Maintenance hole co				
the ground surface to facilitate access and proper maintenance of	f the system.			
Year house built: 1958 Year septic installed: Unknown				
	residents in home? 2			
Number of bedrooms? 4 Are all floors drained by	gravity? Y			
Garbage disposal? N Whirlpool bath	n? N			
More than one system (laundry, etc.)? N				
Does this property have any footing drain tiles connected to the	septic system? N			
Are any buildings on this property such as garages or out-building	ngs connected to this system? N			
Are there any additional systems on this property serving other buildings? N				
Are there any additional systems on this property serving other oundings? IN				
Location of septic system on lot? North Side				
	ne well a deep well? Y			
Have you ever experienced any problems with the system such a	s: tree roots, sewage back-ups,			
surfacing of sewage onto the ground, septic tank overflowing, et	c.; or have any repairs been made			
to the system? N If yes, explain:				
When was the system last pumped? 2017 Name of pu	mper: Pinky's Sewer Service			
	m on a monitoring plan? N			
Have you received notices from any government agency concern	ning this system? N			
Is your property located in a shoreland management area? N				
Do you have any additional information that should be given to	he 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: Susan Kasowan's Signature On File

Date: 5/2/2018



## Log Of Soil Borings

Location of Project: 15617 Afton Blvd S, Afton, MN 55001					
	Borings Made By: Inspect Minnesota		Date:		5/2/18
		Hand/Bucket	Classif	Classification System:	
Вс	oring Number:	1		Boring Number:	
Surface Elevation of Boring	-	und surface as last nfield trench	Surface Elevation o Boring	of	
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches	Soils Er	ncountered
0-34	Soils Encountered 10YR 3/3 Loamy Sand 10YR 2/2 Silt Loam (Saturated) With Faint Redox				
34" De	epth To End Of B	oring Or Redox	C	Depth To End Of Bo	oring Or Redox
Same Ele	evation Of Borin	g Relative To System	E	Elevation Of Boring	Relative To System
	epth To Bottom ( Separation	Of Distribution Media		Depth To Bottom O Df Separation	of Distribution Media
Er	nd Of Boring At:	65"		End Of Boring At:	
	Redox Present At: 34"			Redox Present At:	
Standing Water Present At: None			Standing \	Water Present At:	

Bottom Of Distribution Medium At: 32 Inches

#### 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: 12/22/2018

Issued: 10/10/2017

# Specialty Area(s):

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

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

Name	Certification Expires:
Anthony P Scully	7/28/2018
Installer, Designer (Conditiona	1)
Brian L Humpal	10/15/2020
Installer, Maintainer, Serv Prov	v, Adv Designer, Adv Inspector
Christopher R Uebe	3/4/2018
Designer, Inspector	
	Anthony P Scully Installer, Designer (Conditiona Brian L Humpal Installer, Maintainer, Serv Prov Christopher R Uebe

## MINNESOTA POLLUTION CONTROL AGENCY

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

Charles K Thompson, Supervisor Certification & Training Unit