#### **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

**Date:** June 27, 2017 **Time:** 9:30 AM **Owner:** Nicolette Gropel

**Inspection Address:** 10910 Quarry 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, Nicolette Gropel, and have reviewed a previous compliance inspection from 2012, which was on file at Washington County. This older system (installed in 1990) consists of a pre-cast septic tank and a rock trench drainfield.

Predicated on my inspection of the system, my review of the history of the system with the owner, 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): 6/27/2017   |  |  |  |
| <del>_</del> ·  | ompliant – Notice of Noncompliance pgrade Requirements on page 3)            |  |  |
| Reason(s) for noncompliance (check all applicable)  Impact on Public Health (Compliance Component #1) – Imminent threat Other Compliance Conditions (Compliance Component #3) – Imminent is Tank Integrity (Compliance Component #2) – Failing to protect grounds Other Compliance Conditions (Compliance Component #3) – Failing to protect ground Soil Separation (Compliance Component #4) – Failing to protect ground Operating permit/monitoring plan requirements (Compliance Component | threat to public health and safety<br>vater<br>protect groundwater<br>dwater |  |  |
|   |  |  |  |
| Property Information Parcel ID# or Sec/Twp/Ra   | ange:  |  |  |
| Property address: 10910 Quarry Ave N, Stillwater Twp, MN 55082 Reason   | n for inspection: Property Transfer s phone: 612-306-1808                    |  |  |
| or Owner's representative: Repres   | sentative phone:   |  |  |
| •   | Regulatory authority phone: 651-430-4052                                     |  |  |
| Brief system description: 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 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 Certific   | ation number: L5342  |  |  |
|   | ense number: _L2896  |  |  |
| Inspector signature: Buan Humpal P  | hone number: 651-492-7550  |  |  |
| Necessary or Locally Required Attachments   |  |  |  |
|   | er local ordinance   |  |  |
| ☐ Other information (list): Report Summary, Property Information, Disclaimer, I   | License  |  |  |
|   |  |  |  |

Property address: 10910 Quarry Ave N, Stillwater Twp, MN 55082

Inspector initials/Date: 6/27/2017

| 1. | ln  | Impact on Public Health — Compliance component #1 of 5                                       |                              |  |  |  |
|----|---|--|------------------------------|--|--|--|
|    | Co  | ompliance criteria:  |                              | Verification method(s):  |  |  |
|    |   | stem discharge sewage to the bund surface.   | ☐ Yes ☒ No                   | <ul> <li>✓ Searched for surface outlet</li> <li>✓ Searched for seeping in yard/backup in home</li> </ul>   |  |  |
|    | -   | stem discharge sewage to drain tile surface waters.  | ☐ Yes ⊠ No                   | <ul> <li>☑ Excessive ponding in soil system/D-boxes</li> <li>☑ Homeowner testimony (See Comments/Explanation)</li> <li>☑ "Black soil" above soil dispersal system</li> </ul> |  |  |
|    |   | stem cause sewage backup into<br>velling or establishment.                                   | ☐ Yes ⊠ No                   | System requires "emergency" pumping  Performed dye test  |  |  |
|    |   | ny "yes" answer above indicates<br>I Imminent Threat to Public Heal                          |                              | <ul> <li>☐ Unable to verify (See Comments/Explanation)</li> <li>☑ Other methods not listed (See Comments/Explanation)</li> </ul>   |  |  |
|    | No  | omments/Explanation:<br>one of the above found.<br>soil boring over the drainfield indicated | I no sign of ponding or blac | ck/grey soils.   |  |  |
| 2. | Ta  | ank Integrity — Compliance com   | nponent #2 of 5              |  |  |  |
|    | Co  | ompliance criteria:  |                              | Verification method(s):  |  |  |
|    |   | stem consists of a seepage pit, sspool, drywell, or leaching pit.                            | ☐ Yes ⊠ No                   | <ul><li>☑ Probed tank(s) bottom</li><li>☑ Examined construction records</li></ul>  |  |  |
|    |   | epage pits meeting 7080.2550 may be mpliant if allowed in local ordinance.                   |                              | <ul><li>Examined Tank Integrity Form (Attach)</li><li>Observed liquid level below operating depth</li></ul>  |  |  |
|    |   | ewage tank(s) leak below their signed operating depth.                                       | ☐ Yes ⊠ No                   | ☐ Examined empty (pumped) tanks(s) ☐ Probed outside tank(s) for "black soil"   |  |  |
|    | If y  | es, which sewage tank(s) leaks:  |                              | Unable to verify (See Comments/Explanation)  |  |  |
|    |   | ny "yes" answer above indica<br>⁄stem is Failing to Protect Gro                              |                              | ☐ Other methods not listed (See Comments/Explanation)  |  |  |
| 3. | Lo  | omments/Explanation:<br>wered underwater camera into tank - b<br>ther Compliance Conditions  |                              | ent #3 of 5  |  |  |
|    | a.  | Maintenance hole covers are damaged  | d, cracked, unsecured, or a  | opear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown   |  |  |
|    | b.  | Other issues (electrical hazards, etc.) to in *System is an imminent threat to put           |                              | mpact public health or safety. ☐ Yes* ☒ No ☐ Unknown   |  |  |
|    |   | Explain:   |                              |  |  |  |
|    | <ul> <li>c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☐ No *System is failing to protect groundwater</li> <li>Explain:</li> </ul> |  |                              | etermined by inspector ☐ Yes* ☒ No   |  |  |
|    |   |  |                              |  |  |  |

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Property address: 10910 Quarry Ave N, Stillwater Twp, MN 55082

Inspector initials/Date: 6/27/2017

| Date of installation: 1990  | ☐ Unkr         | nown                                | Verification method(s):   |                               |  |
|---|----------------|-------------------------------------|---|-------------------------------|--|
| Shoreland/Wellhead protection/Food Beverage Lodging?  | ☐ Yes          | ⊠ No                                | Soil observation does not expire. Previou   |                               |  |
| Compliance criteria:  |                | unless site conditions have been al | 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:  | ⊠ Yes          | □ No                                | requirements differ.  Conducted soil observation(s) (Attach boring log)  Two previous verifications (Attach boring logs)  Not applicable (Holding tank(s), no drainfield) | 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   | (Explanation)                 |  |
| Non-performance systems built April 1,<br>1996, or later or for non-performance<br>systems located in Shoreland or Wellhead<br>Protection Areas or serving a food,<br>beverage, or lodging establishment: | ☐ Yes          | □ No                                | Comments/Explanation: Reviewed previous compliance ins  | pection from 2012.            |  |
| Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*  |                |                                     |   |                               |  |
| "Experimental", "Other", or "Performance"<br>systems built under pre-2008 Rules; Type IV  | ☐ Yes          | □No                                 | Indicate depths of elevations   |                               |  |
| or V systems built under 2008 Rules (7080.<br>2350 or 7080.2400 (Advanced Inspector<br>License required)  |                |                                     | A. Bottom of distribution media   | See Attached<br>Boring Log(s) |  |
| Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.   |                |                                     | B. Periodically saturated soil/bedrock     C. System separation   |                               |  |
|   |                |                                     | D. Required compliance separation*  |                               |  |
| Any "no" answer above indicates the system is Failing to Protect Groundwater.   |                |                                     | *May be reduced up to 15 percent if allowed by Local Ordinance.   |                               |  |
|   |                |                                     |   |                               |  |
| Operating Permit and Nitrogen B   | <b>MP*</b> – C | Compliance                          | component #5 of 5 🔀 <b>Not app</b>  | 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 BMP?  |                |                                     |   |                               |  |
| BMP=Best Management Practice(s) specific  | ied in the     | system des                          | ign   |                               |  |
| If the answer to both questions is "no",  |                |                                     |   |                               |  |
| Compliance criteria   |                |                                     |   |                               |  |
| a Operating Permit number:  |                |                                     |   |                               |  |
| Have the Operating Permit requirements to   | peen met       |                                     | ☐ 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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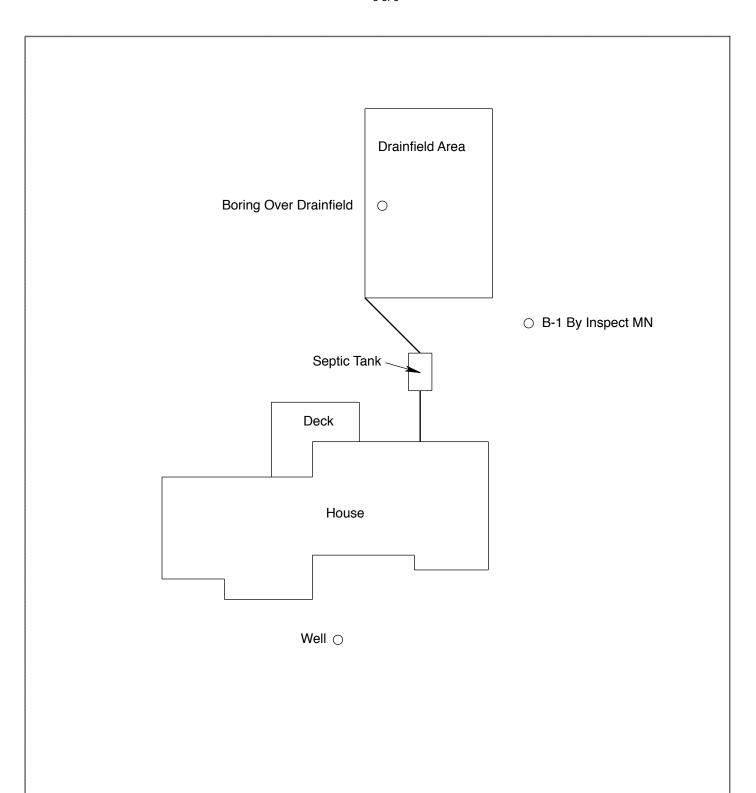
## Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

| Date of Inspection: June 27, 2017   | Time: 9:30 AM  |  |  |  |
|---|--|--|--|--|
| Property Address: 10910 Quarry Ave N, Stillwater Twp, MN Zip: 55082   |  |  |  |  |
| Property Owner: Nicolette Gropel  | Phone: 612-306-1808  |  |  |  |
| Tank(s)       Tank(s)Material       Soil Treatment System   | Other  Alternative system Experimental system Cesspool system Other system |  |  |  |
| Are the tank maintenance covers accessible? $\square$ Yes $\boxtimes$ 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.): 1200  |  |  |  |
|   | sidents in home? 2   |  |  |  |
| Number of bedrooms? 5 Are all floors drained by g   |  |  |  |  |
| 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 buildings? 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? N If yes, explain:  |  |  |  |  |
| When was the system last pumped? 2015 Name of pum   | per: Rowe  |  |  |  |
| How often pumped in previous years? Every 3  Is system on a monitoring plan? N  |  |  |  |  |
| 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: Nicolette Gropel's Signature On File Date: 6/27/2017



#### **Log Of Soil Borings**

| Location of Project: 10910 Quarry Ave N, Stillwater Twp, M |  |  | Twp, MN 55082                  |                   |                   |
|--|--|--|--------------------------------|-------------------|-------------------|
| Bor  |  | Inspect Minnesota                      |                                | Date:             | 6/27/17           |
|  | Auger Used:                                      | Hand/Bucket                            | Classi                         | ification System: | USDA              |
| В  | oring Number:                                    | 1                                      |                                | Boring Number:    |                   |
| Surface<br>Elevation of<br>Boring                          | Same ground surface as last<br>drainfield trench |  | Surface<br>Elevation<br>Boring |                   |                   |
| Depth In<br>Inches   | Soils E  | ncountered                             | Depth In Inches                | Soils Er          | <u>icountered</u> |
|  |  |  |                                |                   |                   |
| 80" Depth To End Of Boring Or Redox                        |  | Depth To End Of Boring Or Redox        |                                | oring Or Redox    |                   |
| Same Elevation Of Boring Relative To System                |  | Elevation Of Boring Relative To System |                                |                   |                   |
| -54" Depth To Bottom Of Distribution Media                 |  | Depth To Bottom Of Distribution Media  |                                |                   |                   |
| ≥26" Of Separation   |  | Of Separation                          |                                |                   |                   |
| End Of Paring Atri   |  |  | End Of Daving At-              |                   |                   |
|  | nd Of Boring At:                                 | 80"                                    | End Of Boring At:              |                   |                   |
| Redox Present At: None                                     |  |  |                                | Redox Present At: |                   |
| Standing Water Present At: None                            |  |  | Standing                       | Water Present At: |                   |

| Bottom Of Distribution Medium At: | 54 Inches |
|-----------------------------------|-----------|
|                                   |           |

#### **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

Steven Giddings, Manager

Prevention and Solid Waste Management Section