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: May 7, 2019 **Time:** 12:45 PM **Owner:** Gabriel Timp

Inspection Address: 10861 Kingsborough Trl S, Cottage Grove, MN 55016

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 2015, which were on file at Washington County. This older system (installed in 1993) consists of two pre-cast septic tanks and a gravelless trench drainfield.

Although not a compliance criteria, it should be noted that gravelless pipe is no longer approved for installation in the State of Minnesota and we have had experience with this product having significantly reduced performance and/or life expectancy. We cannot guarantee the performance of this system beyond the compliance date (5/7/2019).

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.

Christopher Uebe

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):5/7/2019 | |
| • | mpliant – Notice of Noncompliance grade Requirements on page 3) |
| Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminent threat a Other Compliance Conditions (Compliance Component #3) – Imminent the Tank Integrity (Compliance Component #2) – Failing to protect groundwer Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwer Soil Separation (Compliance Component #4) – Failing to protect groundwer Operating permit/monitoring plan requirements (Compliance Component | reat to public health and safety ter otect groundwater vater |
| | |
| Property Information Parcel ID# or Sec/Twp/Rar | ge: |
| • • | for inspection: Property Transfer |
| · · · · · · · · · · · · · · · · · · · | phone: 651-260-2500 |
| or | |
| | ntative phone: |
| | ory authority phone: <u>651-430-6655</u> |
| Brief system description:Two pre-cast septic tanks and a gravelless trench drainfie Comments or recommendations: | eiu. |
| Although not a compliance criteria, it should be noted that gravelless pipe is no longer Minnesota and we have had experience with this product having significantly reduced cannot guarantee the performance of this system beyond the compliance date (5/7/20 | performance and/or life expectancy. We |
| Certification | |
| I hereby certify that all the necessary information has been gathered to determine the determination of future system performance has been nor can be made due to unknown possible abuse of the system, inadequate maintenance, or future water usage. | |
| Inspector name: Brian Humpal/Christopher Uebe Certifica | tion number: <u>C5342/C9852</u> |
| Business name: Inspect Minnesota, Midwest Soil Testing Lice | nse number: _L2896 |
| Inspector signature: Phempal for the Ph | one number: 651-492-7550 |
| Necessary or Legally Postered Attachments | |
| Necessary or Locally Required Attachments | la ad andinana |
| | local ordinance |
| ☐ Other information (list): Report Summary, Property Information, Disclaimer, Li | CELISE |

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

Property address: 10861 Kingsborough Trl S, Cottage Grove, MN

Inspector initials/Date: 5/7/2019 8# ()

Impact on Public Health – Compliance component #1 of 5 Compliance criteria: Verification method(s): Searched for surface outlet System discharge sewage to the ☐ Yes ☐ No 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 ☐ Examined empty (pumped) tanks(s) 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. 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: 5/7/2019 84(1) Property address: 10861 Kingsborough Trl S, Cottage Grove, MN **Soil Separation** – Compliance component #4 of 5 Date of installation: 1993 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 previous compliance inspection from 2015. systems located in Shoreland or Wellhead Protection Areas or serving a food, Reviewed design and permit records. 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? ☐ Yes ☐ No b. Is the required nitrogen BMP in place and properly functioning?

Any "no" answer indicates Noncompliance.

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.

| This information will be used for the purpose of conducting all will Civic | miphanee mispection. | | | |
|---|---|--|--|--|
| Date of Inspection: May 7, 2019 | Time: 12:45 PM | | | |
| Property Address: 10861 Kingsborough Trl S, Cottage Grove, MN | Zip: 55016 | | | |
| Property Owner: Gabriel Timp | Phone: 651-260-2500 | | | |
| Tank(s) Tank(s)Material Soil Treatment System Septic 2 Fiberglass Rock trench Aerobic Plastic Gravelless trench Lift Metal Chamber trench | Other Alternative system Experimental system Cesspool system Other system | | | |
| Are the tank maintenance covers accessible? Yes No *If no performed through the maintenance holes. Maintenance hole covers the ground surface to facilitate access and proper maintenance of the | should be made accessible to | | | |
| I | nk size (gals.): 1-1500, 1-1000 | | | |
| How long has seller owned the property? Number of resid | | | | |
| Number of bedrooms? 4 Are all floors drained by grav | rity? Y | | | |
| Garbage disposal? Whirlpool bath? | | | | |
| More than one system (laundry, etc.)? | | | | |
| Does this property have any footing drain tiles connected to the septi | c system? | | | |
| Are any buildings on this property such as garages or out-buildings of | | | | |
| Are there any additional systems on this property serving other build | ings? | | | |
| Location of septic system on lot? South Side | | | | |
| Location of water well on lot? East Side | ell 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: | | | | |
| | r: Pinky's Sewer Service | | | |
| | n a monitoring plan? | | | |
| Have you received notices from any government agency concerning this system? | | | | |
| Is your property located in a shoreland management area? N | | | | |
| Do you have any additional information that should be given to the new owner? | | | | |
| I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection completion. I also agree that unless otherwise noted in this report, that I/we are ultimately responsible for payment of all fees for all work performed relative to this inspection | | | | |

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.

Log Of Soil Borings

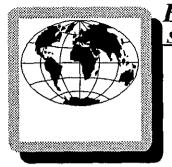
| Location of Project: 10861 Kingsborough Trl S, Cottage Grove, MN 55016 | | | | | |
|--|---------------------|---|---------------------------------------|---------------------|----------------------|
| Borings Made By: Inspect Minnesota | | | Date: | 5/7/19 | |
| | Auger Used: | Hand/Bucket | Classi | ification System: | USDA |
| | Boring Number: | 1 | | Boring Number: | |
| Surface Elevation Boring | of Same grou | and surface as last | Surface Elevation Boring | of | |
| Depth In Inches | Soils E | ncountered | Depth In Inches | Soils Er | countered |
| 0-36 36-44 44-54 | 10YR 4, | oamy Fine Sand /3 Fine Sand Sand Loam (Moist) | | | |
| 54" | 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 |
| -18" | | Of Distribution Media | Depth To Bottom Of Distribution Media | | f Distribution Media |
| ≥36" | Of Separation | | | Of Separation | |
| | End Of Boring At: | 54" | | End Of Boring At: | |
| | Redox Present At: | None | | Redox Present At: | |
| Standing | Water Present At: | None | | Water Present At: | |
| Starianing | acci i i cociic Aci | HOIIC | Starianing | acci i resent Ati | |

| Bottom Of Distribution | Medium At: | 18 Inches | |
|------------------------|------------|-----------|--|
| | | | |

Log Of Soil Borings

| Location of Project: 10861 Kingsborough Trail, Cottage Grove, MN 55016 | | | | | |
|--|-------------------------------------|--|--------------------------------|---------------------|--------------------|
| Borings Made By: Inspect Minnesota | | Date: | | 5/5/15 | |
| Auger Used: Hand/Bucket | | Classification System: USDA | | USDA | |
| | Boring Number: 1 | | | Boring Number: | |
| Surface Elevation Boring | of Same ground | surface as inspection last drainfield trench | Surface Elevation Boring | | |
| Depth In Inches | Soils E | ncountered | Depth In Inches | Soils Er | ncountered |
| 0-33 33-46 46-56 56-78 | 10YR 3, 10YR 3/6 L | oamy Fine Sand /4 Fine Sand oamy Fine Sand oamy Fine sand | | | |
| 78" | 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 |
| -18" | Depth To Bottom C | Of System | Depth To Bottom Of System | | of System |
| ≥60" | Of Separation | | | Of Separation | |
| | End Of Boring At | 78" | | End Of Boring At: | |
| | End Of Boring At: Redox Present At: | _ | | Redox Present At: | |
| Standing | Water Present At: | None | Standing | Water Present At: | |
| Standing | water Fresent At. | None | Standing | vvater Fresent At. | |

| Bottom Of Distribution Medium At: 18 Inches | |
|---|--|
| | |



EARTH SCIENCE TESTINGTM SOILS INFORMATION COMPANY:

SOIL BORINGS

BORING NO.1

0"- 16" DRK. BRN. FINE LOAMY SAND

16" - 38" BLK. FINE SILTY SAND

38" - 62" LT. BRN. FINE LOAMY SAND

62" - 7' - 3" LT. BRN. FINE LOAMY SAND & GRAVEL

BORING NO.2

0" - 40" DRK. BRN. FINE LOAMY SAND

40" - 50" BRN. FINE LOAMY SAND

50" - 6' - 5" LT. TAN MED. LOAMY SAND

6' - 5" - 8' - 0" LT. TAN YELLOW FINE LOAMY SAND

BORING NO.3

0" - 24" DRK. BRN. FINE LOAMY SAND

24" - 32" BRN. FINE LOAMY SAND

32" - 55" BRN. FINE SILTY SAND (FILM)

55" - 8' - 0" LT. TAN FINE LOAMY SAND

BORING NO.4

0" - 16" DRK. BRN. FINE LOAMY SAND

16" - 42" BRN. FINE LOAMY SAND

42" - 8' - 0"

SATURATED SOIL ZONE - IMPERVIOUS LAYER

| BORING NO. 1 | (NONE |) |
|--------------|-------|---|
| BORING NO. 2 | (NONE | |
| BORING NO. 3 | (NONE | |
| BORING NO. 4 | (NONE |) |
| BORING NO. 5 | () | |

DISCLAIMER

Brian L. Humpal, Inc. dba. Inspect Minnesota, Midwest Soil Testing Relative to Subsurface Sewage Treatment System (SSTS) Compliance Inspections

- 1. This inspection/report is being performed for only the seller/owner of the property on which the SSTS is located. In such case that another party is paying for the inspection, the contract is between only said party and Brian L. Humpal, Inc.; there is no contract between Brian L. Humpal, Inc. and any other party unless otherwise noted.
- 3. Brian L. Humpal, Inc. has not been retained to warranty, guarantee, or certify the proper functioning of the SSTS for any period of time beyond the date of inspection or into the future. Because of the numerous factors (usage, maintenance, soil characteristics, previous failures, etc.) which may affect the proper operation of an SSTS, as well as the inability of Brian L. Humpal, Inc. to supervise or monitor the use or maintenance of the SSTS, the report shall not be construed as a warranty by Brian L. Humpal, Inc. that the SSTS will function properly for any particular party for any period of time.
- 4. Brian L. Humpal, Inc. is unable to verify the frequency and/or, quality of prior or future maintenance of the SSTS. Maintenance of the tank(s) must be performed through the tanks maintenance hole. The removal of solids from any location other than the maintenance hole is not a compliant method of maintenance. It is strongly recommended that maintenance covers be made accessible to the ground surface to facilitate proper maintenance.
- 5. Minimum Compliance Inspection requirements relative to this inspection and this report include <u>only</u> verification that the SSTS has tank(s) (septic tanks, lift tanks, dosing tanks, stilling tanks, etc.) which are watertight below the designed operating depth, the required separation between the bottom of the subsurface soil distribution medium and seasonally saturated soils, no back-ups of sewage into the dwelling, no discharge of sewage/effluent to the ground surface or surface waters, and no imminent safety hazards. Brian L. Humpal, Inc. does not inspect plumbing or pumps prior to the first SSTS component as these are plumbing components. The performance of exterior pumps and associated components are not inspected as they are considered to be maintenance items. Additionally, no indications relative to compliance with electrical code requirements have been made. It is recommended that any other applicable plumbing, electrical, housing, etc. inspections be performed by a qualified inspection business. Sewage back-up verification is limited to observing the floor drain area and/or the information supplied by the last occupants of the building prior to inspection. Brian L. Humpal, Inc. cannot guarantee that the information given to them by the last occupants of the building prior to inspection relative to back-ups is accurate.
- 4. Certification of this SSTS does not warranty future use beyond the date of the inspection. Any SSTS, old or new, can become hydraulically overloaded or discharge sewage/effluent to the ground surface as a result of more people moving into the house than were previously occupying the house, improper maintenance, heavy usage, leaking plumbing fixtures, groundwater infiltration, tree roots, freezing conditions, surface drainage problems, poor initial design, poor construction practices, or unsuitable materials used in constructing the system; the system can also simply stop working because of its age. An SSTS that has been properly designed and installed, properly maintained, and used in the manner for which the system was designed can be expected to provide service for twenty to twenty-five years on average. Some parts of the SSTS such as alarms, switches, pumps, filters, etc. will most likely have to be repaired or replaced over the lifetime of the system.
- 5. A Compliance Inspection is not meant to be a test or inspection for longevity of the system; a Compliance Inspection is strictly for the purpose of determining if the SSTS is protective of public health and safety, as well as the groundwater at the date and time the inspection was performed. This inspection is not intended to determine if the SSTS was originally designed or installed to past or present MPCA or other Local Government Unit code requirements. This inspection is not intended to determine if the SSTS was designed and/or installed to support the anticipated flow from the building as the use of the building may have changed since the design and construction of the SSTS due to the addition of bedrooms, occupants, etc. In addition, this inspection is not intended to determine the quality of the original SSTS design, the quality of the construction practices used while installing the SSTS, or the quality of the materials used in constructing the SSTS.
- 6. Brian L. Humpal, Inc. cannot guarantee the performance of SSTS products/components such as: gravelless pipe, chamber trenches, effluent filters, tanks, sewage pre-treatment components, piping, etc. Products such as gravelless pipe are no longer approved for installation in the State of Minnesota and may have a significantly reduced performance and/or life expectancy.
- 7. WINTER WORK: By accepting this report, it is understood that inspections conducted during winter months (approximately November 1st through April 1st) are more difficult to perform because of possible snow cover and/or ground frost. SSTS components such as tanks, maintenance covers, tank inspection pipes, subsurface distribution medium inspection pipes, and soil treatment areas are more difficult or impossible to locate due to snow cover and/or ground frost. In addition, soil borings are more difficult to perform due to snow cover and/or ground frost. Brian L. Humpal, Inc. will attempt to use the same level of standards when performing work during winter periods as when performing work during non-winter periods. However, the recipient of this report understands that because of the aforementioned considerations, the same level of standards may not be possible.
- 8. By accepting this report, the client understands that Brian L. Humpal, Inc. will not be responsible for any monetary damages exceeding the fee for the services provided.

Subsurface Sewage Treatment Systems

Non-transferable

Business License

Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2019

Issued: 11/20/2018

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

| Cert # | Name | Certification Expires: |
|--------|---------------------------------------|-------------------------|
| C9633 | Anthony P Scully | 3/5/2020 |
| | Installer, Designer (Apprentice) | , v . |
| C5342 | Brian L Humpal | 10/15/2023 |
| | Installer, Maintainer, Serv Prov, Adv | Designer, Adv Inspector |
| C9852 | Christopher R Uebe | 3/4/2021 |
| | Designer, Inspector | |



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

Nick Haig, Supervisor Certification and Training Unit