Midwest Sewer Services

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

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Inspection Address: 11048 11th St N, Lake Elmo, MN 55042

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at Washington County. This system consists of a very old pre-cast septic tank (installed in 1989) and a plastic septic tank, a plastic lift tank, and a seepage bed (installed in 2016). Meyer Sewer Service pumped the septic tank on September 29, 2022. It should be noted that the average life expectancy of a septic component is approximately 30 years.

Although not a compliance criteria, it should be noted that the second septic tank and lift tank manhole covers are buried. I recommend extending these covers to the ground surface to facilitate easier access and proper maintenance of the lift pump.

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

Midwest Sewer Services have been hired to perform a compliance inspection of this SSTS for compliance with local ordinances pursuant to Minn. Stat. § 115.55 (2013). This compliance inspection covers only the criteria required by Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011). A compliance inspection is an indication of the current compliance status of the system and does not guarantee the performance or longevity of this system beyond the date of inspection, as it is impossible to determine the future performance of any system. Midwest Sewer Services disclaim any use of this compliance inspection beyond determining SSTS compliance pursuant to Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011).

Please contact me should you have any questions.

Christopher Uebe

Brian Humpal

Brian Humpal



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

Compliance inspection report form

Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance. Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf.

| Property information | Local tracking | number: |
|--|--|---|
| Parcel ID# or Sec/Twp/Range: | Reason for Inspection | Property Transfer |
| Local regulatory authority info: Washington County | <u> </u> | |
| Property address: 11048 11 th St N, Lake Elmo, MN 55042 | | |
| Owner/representative: Jake & Ally Fernholz | | Owner's phone: 651-398-3743 |
| Brief system description: A pre-cast septic tank, a plastic septic | tank, a plastic lift tank, and a | a seepage bed. |
| | | |
| System status | | |
| System status on date (mm/dd/yyyy): 9/29/2022 | | |
| □ Compliant – Certificate of compliance* | ☐ Noncompliant – Notice | ce of noncompliance |
| (Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and | | ound water must be upgraded, replaced, or ime required by local ordinance. |
| abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in Local Ordinance.) *Note: Compliance indicates conformance with Minn. | upgraded, replaced, or its us | health and safety (ITPHS) must be se discontinued within ten months of receipt |
| R. 7080.1500 as of system status date above and does not guarantee future performance. | of this notice or within a shorter period if required by local ordinance or under section 145A.04 subdivision 8. | |
| Reason(s) for noncompliance (check all applicate | ole) | |
| ☐ Impact on public health (Compliance component #1) – Immi | nent threat to public health a | and safety |
| Tank integrity (Compliance component #2) – Failing to prote | = | |
| Other Compliance Conditions (Compliance component #3) - | • | - |
| Other Compliance Conditions (Compliance component #3) - | | |
| System not abandoned according to Minn. R. 7080.2500 (Co | | Failing to protect groundwater |
| Soil separation (Compliance component #5) – Failing to prot | • | |
| Operating permit/monitoring plan requirements (Compliance | component #4) – Noncomp | liant - local ordinance applies |
| Comments or recommendations | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Certification | | |
| I hereby certify that all the necessary information has been gathered future system performance has been nor can be made due to unknown inches unto maintanance or future water upage. | | |
| inadequate maintenance, or future water usage. By typing my name below, I certify the above statements to be true used for the purpose of processing this form. | and correct, to the best of my | knowledge, and that this information can be |
| Business name: Midwest Sewer Services | | Certification number: 5342/9852 |
| Inspector signature: Brian Humpal Home | <u></u> | License number: L2896 |
| (This document has been electronically sign | ned) | Phone: 651-492-7550 |
| Necessary or locally required supporting do | cumentation (must b | pe attached) |
| ☐ Soil observation logs ☐ System/As-Built ☐ Locally red | quired forms 🛮 Tank Integr | rity Assessment |
| Other information (list): Report Summary, Property Informa | tion, Disclaimer | |

https://www.pca.state.mn.us wq-wwists4-31b • 4/28/2021 651-296-6300

800-657-3864 • Use your preferred relay service

Available in alternative formats

| Compliance criteria: System discharges sewage to the ground surface System discharges sewage to drain the or surface waters. System causes sewage backup into | Ompliance comp ☐ Yes* ☒ No ☐ Yes* ☒ No | Oonent #1 of 5 Attached supporting documentar Other: Not applicable | tion: | |
|---|--|---|---|--|
| System discharges sewage to the ground surface System discharges sewage to drain the or surface waters. System causes sewage backup into | | Other: | tion: | |
| System discharges sewage to drain le or surface waters. System causes sewage backup into | | | | |
| le or surface waters. System causes sewage backup into | ☐ Yes* ☒ No | | | |
| · · | | | | |
| lwelling or establishment. | ☐ Yes* ☒ No | | | |
| Any "yes" answer above indicates mminent threat to public health an | | | | |
| Describe verification methods and | results: | | | |
| None of the above found. | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| nk integrity – Compliance | component #2 | of 5 | | |
| ik integrity – compliance | component #2 | <u> </u> | | |
| Compliance criteria: | | Attached supporting documentar | tion: | |
| | | _ | | |
| System consists of a seepage pit, | ☐ Yes* ☐ No | ☑ Empty tank(s) viewed by inspector | | |
| cesspool, drywell, leaching pit, | | | Meyer Sewe | |
| or other pit? | | Name of maintenance business: | Service | |
| | | | | |
| Sewage tank(s) leak below their | ☐ Yes* ⊠ No | License number of maintenance bus | siness: <u>L915</u> | |
| designed operating depth? | | Date of maintenance: | 9/29/2022 | |
| | | ☐ Existing tank integrity assessment (| Attach) | |
| If yes, which sewage tank(s) leaks: | | Date of maintenance (mm/dd/yyyy): (must be v | within three years) | |
| Any "yes" answer above indicates the system is failing to protect groundwater. | | (See form instructions to ensure ass Minn. R. 7082.0700 subp. 4 B (1)) | sessment complies | |
| is iaiiiilu lu biulett uiuuliuwali | is failing to protect groundwater. | | ☐ Tank is Noncompliant (pumping not necessary – explain bel | |
| is raining to protect groundwate | | | ecessary – explain be | |
| is raining to protect groundwat | | Other: | | |
| is raining to protect groundwat | | Other: | | |
| | | Other: | | |
| Describe verification methods and | i results: | Other: | | |
| | ıl results: | Other: | | |
| | i results: | Other: | | |
| | i results: | Other: | | |

| Pro | operty Address: _11048 11 th St N, Lake Elmo, MN 55042 | |
|-----|---|---------------------------------|
| | siness Name: Midwest Sewer Services | Date: 9/29/2022 |
| | | |
| 3. | Other compliance conditions – Compliance component #3 of 5 | |
| | 3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or u | insecured? |
| | ☐ Yes* ☒ No ☐ Unknown | |
| | 3b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or sa | afety? ☐ Yes* ☒ No ☐ Unknown |
| | *Yes to 3a or 3b - System is an imminent threat to public health and safety. | |
| | 3c. System is non-protective of ground water for other conditions as determined by inspector? | ☐ Yes* ☐ No |
| | 3d. System not abandoned in accordance with Minn. R. 7080.2500? | ☐ Yes* ☒ No |
| | *Yes to 3c or 3d - System is failing to protect groundwater. | |
| | Describe verification methods and results: | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | Address of a company of the company | |
| | Attached supporting documentation: Not applicable | |
| 4. | Operating permit and nitrogen BMP* – Compliance component #4 | 4 of 5 ⊠ Not applicable |
| | | |
| | Is the system operated under an Operating Permit? | o If "yes", A below is required |
| | BMP = Best Management Practice(s) specified in the system design | o ii yes , b below is required |
| | If the answer to both questions is "no", this section does not need to be complete. | eted |
| | Compliance criteria: | |
| | a. Have the operating permit requirements been met? ☐ Yes ☐ No | |
| | b. Is the required nitrogen BMP in place and properly functioning? Yes No | |
| | Any "no" answer indicates noncompliance. | |
| | Describe verification methods and results: | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | Attached supporting documentation: Operating permit (Attach) | |

https://www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • Use your preferred relay service • Available in alternative formats wq-wwists4-31b • 4/28/2021 Page 3 of 4

| Soil separation – Complian | ce component | #5 of | f 5 | | |
|---|-----------------------------------|-----------|--|-------------------------------|--|
| Date of installation 2016 (mm/dd/yyyy) | Unknow | /n | | | |
| Shoreland/Wellhead protection/Footbeverage lodging? | d ⊠ Yes □ |] No | Attached supporting documentation | ı: | |
| beverage louging? | | | ☐ Soil observation logs completed for the report | | |
| Compliance criteria (select one): | | | ☐ Two previous verifications of require | ed vertical separati | |
| 5a. For systems built prior to April 1, 19 | |] No* | ☐ Not applicable (No soil treatment ar | ea) | |
| not located in Shoreland or Wellhea Protection Area or not serving a foo | od, | | □ Reviewed design and permit record | is. | |
| beverage or lodging establishment. | | | Wellhead protection area. | | |
| Drainfield has at least a two-foot ve separation distance from periodical saturated soil or bedrock. | | | | | |
| 5b. Non-performance systems built | ⊠ Yes □ | Yes □ No* | Indicate depths or elevations | | |
| April 1, 1996, or later or for non- performance systems located in Shoreland or Wellhead Protection Areas or serving a | | | A. Bottom of distribution media | See Attached Boring Log(s) | |
| food, beverage, or lodging establish | | | B. Periodically saturated soil/bedrock | | |
| Drainfield has a three-foot vertical separation distance from periodical | lv | | C. System separation | | |
| saturated soil or bedrock.* | ıy | | D. Required compliance separation* | | |
| | | | *May be reduced up to 15 percent if a Ordinance. | illowed by Local | |
| 5c. "Experimental", "Other", or "Perform systems built under pre-2008 Rules Type IV or V systems built under 20 Rules 7080. 2350 or 7080.2400 (Intermediate Inspector License red 2,500 gallons per day; Advanced Ir License required > 2,500 gallons per | s; 008 guired ≤ aspector |] No* | | | |
| Drainfield meets the designed verti- separation distance from periodical saturated soil or bedrock. | | | | | |

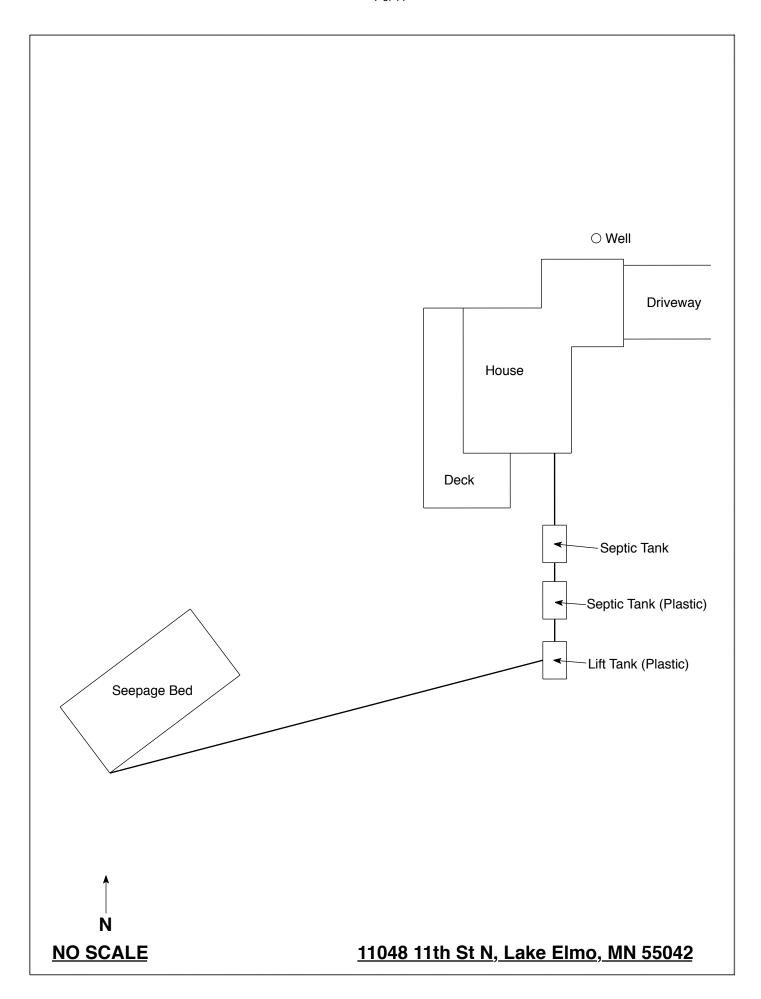
Upgrade requirements: (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, 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.

Use your preferred relay service

<u>Midwest & of 11</u> Subsurface Sewage Treatment System Owner/Property Information

| This information will be used for the purpose of conducting an MP | CA Compliance Inspection. | | | |
|---|--|--|--|--|
| Date of Inspection: September 29, 2022 | Time: 12:30 PM | | | |
| Property Address: 11048 11 th St N, Lake Elmo, MN | Zip: 55042 | | | |
| Property Owner: Jake & Ally Fernholz | Phone: 651-398-3743 | | | |
| Tank(s) Tank(s)Material Soil Treatment System Septic 2 Fiberglass Rock trench Aerobic Plastic(Septic & Lift) Gravelless trench Lift Metal Chamber trench Holding Concrete Seepage bed Other: Block Mound Other At-grade | Other Alternative system Experimental system Cesspool system Other system | | | |
| Are the tank maintenance covers accessible? Yes No * performed through the maintenance holes. Maintenance hole of the ground surface to facilitate access and proper maintenance of | overs should be made accessible to | | | |
| Year house built: 1989 Year septic installed: 2016 | Tank size (gals.): 1-1500, 1-1000 | | | |
| | residents in home? | | | |
| Number of bedrooms? 4 Are all floors drained by Garbage disposal? Whirlpool bat | <u> </u> | | | |
| More than one system (laundry, etc.)? | III! | | | |
| 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 buildings? | | | | |
| Location of septic system on lot? Tanks - South Side, Seepage | Bed - Southwest Side | | | |
| Location of water well on lot? North Side Is | the well a deep well? Y | | | |
| Have you ever experienced any problems with the system such surfacing of sewage onto the ground, septic tank overflowing, e to the system? If yes, explain: | | | | |
| | umper: Meyer Sewer Service | | | |
| How often pumped in previous years? Is syst | em on a monitoring plan? | | | |
| | | | | |
| Have you received notices from any government agency concer | rning this system? | | | |
| Have you received notices from any government agency concer Is your property located in a shoreland management area? N | | | | |
| Have you received notices from any government agency concer | | | | |

| by Inspect Minnesota and Midwest Soil Testing | x performed relative to this hispection |
|---|---|
| | |
| Owner/Occupant: | Date: |
| | |



8 of 11



Installation Permits Installation Permit Site Review UID # 8600 Installation Permit: Permit # 2017-0466

Status: Review Complete

Washington County Public Health & Environment 14949 - 62ND ST N, PO BOX 6, STILLWATER, MN 55082-0006 (651) 430-6655 FAX (651) 430-6730

Site Inspection

Date of the soil observation: 5/10/2017

Inspector: Chris LeClair

 GPS Latitude :
 44.96422751 Latitude

 GPS Longitude:
 -92.88265496 Longitude

Soil Parent Material Outwash

Select all that apply:

Parent Material: Superior Lobe Outwash

Landscape Position <u>Summit</u>

Please choose one:

Vegetation: Lawn

Soil Survey Map Unit(s) with

description:

49B-Antigo Silt Loam 2-6%

Soil Horizon Level 1

 Depth:
 0-10" Inches

 Texture:
 sit Ioan

 Matrix Color:
 10YR3/2

 Structure/Shape:
 Blocky

 Structure/Grade:
 Moderate

 Structure/Consistence:
 Friable

 Is this the Restrictive Layer?
 Mo

Soil Horizon Level 2

 Depth:
 10-19" Inches

 Texture:
 silt loam

 Matrix Color:
 10YR4/6

 Structure/Shape:
 Blocky

 Structure/Grade:
 Moderate

 Structure/Consistence:
 Friable

 Is this the Restrictive Layer?
 No

Soil Horizon Level 3

Depth: 19-36" Inches Texture: coarse sand Matrix Color: 7.5YR4/6 Rock Fragment %: 0-35% Structure/Shape: Single grain Weak Structure/Grade: Structure/Consistence: Loose Is this the Restrictive Layer? No

9 of 11

Soil Horizon Level 4

| Depth: | <u>36-72"</u> Inches |
|--------------------------------|----------------------|
| Texture: | sand |
| Matrix Color: | 7.5YR4/4 |
| Rock Fragment %: | 0-35% |
| Structure/Shape: | Single grain |
| Structure/Grade: | Weak |
| Structure/Consistence: | Loose |
| Is this the Restrictive Layer? | <u>Yes</u> |
| | |

Restricitve Layer Depth

Depth to Restriction: 72 Inches

Approvals

| Approval | Signature |
|--------------------------|---|
| #1 Site Review Performed | Christopher W. LeClair REHS - 05/10/2017 10:20 AM f91aeaa6b16eb4e135c45ea1751f8cc3 784c4c30ae29aa7026a89c1c0145c2a5 |

Public Notes

| Text: | |
|----------|--|
| File(s): | |

Internal Notes

| Text: | |
|----------|--|
| File(s): | |

LOGS OF SOIL BORINGS

Location of Project Rick Nasby, Tartan Meadows, Sec. 25, City of Lake Elmo, Washington Co. Borings Made by Ben Zierke Date: 11/14/16

Hand bucket auger used for borings; USDA – SCS Soil Classification used.

| Depth, In Feet | Boring Number 1 | Depth, In Feet | Boring Number 2 |
|----------------------|-------------------------------------|----------------------|------------------------------------|
| 0 0-8" | Dark-brown sandy loam(10YR-3/3) | 0 | Dark-brown sandy loam(3/3) |
| 8-32" | Yellowish-brown loam(10YR-5/4) | 10-15" | Yellowish-brown loam(5/4) |
| 32-72" | Dark yellowish-brown medium sand(10 | 15-66" | Dark y-brown medium to coarse-gr. |
| | YR-4/4), occasional pebbles | | Sand(10YR-4/4), occasional pebbles |
| | | | |
| | | | obstruction |
| End of horizon at | | End of horing at | |

End of boring at 6 feet.

Standing water table:

Present at feet of depth, Hours after boring Standing water not present in hole ⊠

Mottled Soil:

Observed at feet of depth

Mottled soil not present in bore hole \boxtimes

Comments

| Depth, | |
|--------|---------------------------------------|
| ln | Boring Number 3 |
| Feet | |
| 0 | |
| 0-12" | Dark-brown sandy loam(3/3) |
| 12-24" | Yellowish-brown loam(5/4) |
| 24-72" | Dark y-brown medium sand(4/4), occas- |
| | Ional pebbles |
| | |
| | obstruction |

| Depth, In Feet | Boring Number 4 |
|----------------------|--------------------------------|
| 0 | Mixed loamy fill soil |
| 16-28" | Yellowish-brown loam(5/4) |
| 18-84" | Dark y-brown medium sand(4/4), |
| | Occasional pebbles |
| | |
| | |

End of boring at 6 feet.

Standing water table:

Present at feet of depth, Hours after boring

Standing water not present in hole

Mottled Soil:

Mottled soil not present in bore hole

Comments:

End of boring at 7 feet.

Standing water table:

Present at feet of depth, Hours after boring Standing water not present in hole

Mottled Soil:

Observed at feet of depth

Mottled soil not present in bore hole

■

DISCLAIMER

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

- 1. This inspection/report is being performed for only the seller/owner of the property on which the SSTS is located. In such case that another party is paying for the inspection, the contract is between only said party and Brian L. Humpal, Inc.; there is no contract between Brian L. Humpal, Inc. and any other party unless otherwise noted.
- 3. Brian L. Humpal, Inc. has not been retained to warranty, guarantee, or certify the proper functioning of the SSTS for any period of time beyond the date of inspection or into the future. Because of the numerous factors (usage, maintenance, soil characteristics, previous failures, etc.) which may affect the proper operation of an SSTS, as well as the inability of Brian L. Humpal, Inc. to supervise or monitor the use or maintenance of the SSTS, the report shall not be construed as a warranty by Brian L. Humpal, Inc. that the SSTS will function properly for any particular party for any period of time.
- 4. Brian L. Humpal, Inc. is unable to verify the frequency and/or, quality of prior or future maintenance of the SSTS. Maintenance of the tank(s) must be performed through the tanks maintenance hole. The removal of solids from any location other than the maintenance hole is not a compliant method of maintenance. It is strongly recommended that maintenance covers be made accessible to the ground surface to facilitate proper maintenance.
- 5. Minimum Compliance Inspection requirements relative to this inspection and this report include only 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.