### **ZIERKE SOIL TESTING**

Jim Thurnbeck 16802 Furman St NE Forest Lake, MN 55025

May 10th 2023

Dear Jim Thurnbeck,

At your request, I have conducted a septic inspection to determine the compliance status of your outbuilding septic system pursuant to Minnesota Rules Chapter 7080.1500.

The compliance test set out in 7080.1500 has three main inquiries: 1). Is the system functioning hydraulically (disposing of effluent in a manner that prevents it from coming in contact with people)? 2). Are the septic tanks water tight? 3). Does the system have sufficient vertical separation between the bottom of the septic system and restrictive layers (bedrock, standing water, seasonally wet layers, etc) to provide full treatment of effluent?

Based off of these criteria, your system is <u>non-compliant</u> due to a lack of vertical separation between the bottom of your drain field and indicators of seasonally wet soil (redoximorphic features). Therefore, this system is considered "failing to protect groundwater" and <u>is not considered an imminent threat to public health</u>. I am required to provide copies of this report to you and to Washington County. You should contact them as to the next steps that will be required to bring the system into compliance.

Sincerely,

Benjamin Zierke

MPCA Lic 119, Cert 9594

Benjamin Zieske

ADDRESS: 28587 Jeffrey Ave Chisago City, MN 55013

PHONE 651-249-1346 EMAIL benzierke@gmail.com



# Compliance inspection report form

#### **Existing Subsurface Sewage Treatment System (SSTS)**

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

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 <a href="https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf">https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf</a>.

| Property information  | Local tracking number:   |  |  |
|---|--|--|--|
| Parcel ID# or Sec/Twp/Range: 0503221110006  | Reason for Inspection Sale   |  |  |
| Local regulatory authority info: Washington County  |  |  |  |
| Property address: 23790 Goodview Circle North Forest Lake,  | MN 55025   |  |  |
| Owner/representative: Jim Thurnbeck   | Owner's phone: <u>651-303-0651</u>   |  |  |
| Brief system description: 1250 gallon septic tank, 1000 gallon li   | ft tank, rock trench drainfield  |  |  |
|   |  |  |  |
| System status   |  |  |  |
| System status on date (mm/dd/yyyy): _5/10/2023  |  |  |  |
| ☐ Compliant – Certificate of compliance*  | ☐ Noncompliant – Notice of noncompliance   |  |  |
| (Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and  | Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time 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. R. 7080.1500 as of system status date above and does not guarantee future performance. | 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 or under section 145A.04 subdivision 8. |  |  |
| Reason(s) for noncompliance (check all applicate  | ole)   |  |  |
| ☐ Impact on public health (Compliance component #1  | •  |  |  |
| ☐ Tank integrity (Compliance component #2) – Failing  | to protect groundwater   |  |  |
| ☐ Other Compliance Conditions (Compliance components)   | ent #3) – Imminent threat to public health and safety  |  |  |
| ☐ Other Compliance Conditions (Compliance components)   | ent #3) – Failing to protect groundwater   |  |  |
| System not abandoned according to Minn. R. 7080.  | 2500 (Compliance component #3) – Failing to protect groundwater  |  |  |
| Soil separation (Compliance component #5) – Failing to protect groundwater  |  |  |  |
| ☐ Operating permit/monitoring plan requirements (Cor  | mpliance component #4) – Noncompliant - local ordinance applies  |  |  |
| Comments or recommendations   |  |  |  |
| Jim Thurnbeck mailing address - 16802 Furman St NE Fo   | orest Lake, MN 55025   |  |  |
| Certification   |  |  |  |
|   |  |  |  |
|   | to determine the compliance status of this system. No determination of wn conditions during system construction, possible abuse of the system,   |  |  |
| 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: Zierke Soil Testing  | Certification number: 9594   |  |  |
| Inspector signature: Benjamin Zierke  | License number: 119  |  |  |
| (This document has been electronically sig  | ned) Phone: 651-249-1346   |  |  |
| Necessary or locally required supporting do   | cumentation (must be attached)   |  |  |
| Soil observation logs   | equired forms  |  |  |
| Other information (list):   |  |  |  |
|   |  |  |  |

| ess Name: Zierke Soil Testing   |  | Date: <u>5/10/2023</u>   |
|---|--|--|
| pact on public health – Co  | ompliance com  | ponent #1 of 5   |
| Compliance criteria:  |  | Attached supporting documentation:   |
| System discharges sewage to the ground surface  | ☐ Yes* ⊠ No  | ☐ Other:  ☑ Not applicable   |
| System discharges sewage to drain tile or surface waters.   | ☐ Yes* ⊠ No  | -  |
| System causes sewage backup into dwelling or establishment.   | ☐ Yes* ⊠ No  | _  |
| Any "yes" answer above indicates<br>imminent threat to public health an   |  | _  |
| Describe verification methods and   | results:   |  |
| None of the above observed during s   | site visit 5/4/2023.                                   |  |
|   |  |  |
|   |  |  |
| <b>nk integrity</b> – Compliance  | component #2   |  |
| <b>nk integrity</b> – Compliance<br>Compliance criteria:  | component #2   | of 5  Attached supporting documentation:   |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit,  | component #2   | Attached supporting documentation:   Empty tank(s) viewed by inspector   |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  | ☐ Yes* ☑ No  | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:   |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit,  |  | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  Sewage tank(s) leak below their   | ☐ Yes* ☑ No  | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:   |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  Sewage tank(s) leak below their   | ☐ Yes* ☑ No  | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  Date of maintenance:  |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  Sewage tank(s) leak below their designed operating depth?  If yes, which sewage tank(s) leaks:  Any "yes" answer above indicates. | ☐ Yes* ☒ No ☐ Yes* ☒ No ☐ Yes* ☒ No                    | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  Date of maintenance:  Existing tank integrity assessment (Attach)  Date of maintenance  (mm/dd/yyyy):  8/1/2022 (must be within three years)  |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  Sewage tank(s) leak below their designed operating depth?  If yes, which sewage tank(s) leaks:                                    | ☐ Yes* ☒ No ☐ Yes* ☒ No ☐ Yes* ☒ No                    | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  Date of maintenance:  Existing tank integrity assessment (Attach)  Date of maintenance  (mm/dd/yyyy):  (See form instructions to ensure assessment complies we                                  |
| Compliance criteria:  System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  Sewage tank(s) leak below their designed operating depth?  If yes, which sewage tank(s) leaks:  Any "yes" answer above indicates. | ☐ Yes* ☑ No ☐ Yes* ☑ No ☐ Yes* ☑ No ates the systemer. | Attached supporting documentation:  Empty tank(s) viewed by inspector  Name of maintenance business:  License number of maintenance business:  Date of maintenance:  Existing tank integrity assessment (Attach)  Date of maintenance (mm/dd/yyyy):  (See form instructions to ensure assessment complies we Minn. R. 7082.0700 subp. 4 B (1)) |

| Ρ         | Property Address: 23790 Goodview Circle North Forest Lake, MN 55025  |   |
|-----------|--|---|
| В         | Business Name: Zierke Soil Testing   | Date: 5/10/2023   |
|           |  |   |
| 3.        | Other compliance conditions – Compliance component #3 of 5   |   |
|           | 3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unse  | ecured?   |
|           | 3b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safet   | v2 🗆 Ves* 🖾 No 🗀 Hinknown                                   |
|           | *Yes to 3a or 3b - System is an imminent threat to public health and safety.   | y:   103   140   Olikilowii                                 |
|           | 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:   |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           |  |   |
|           | Attached supporting documentation: ☐ Not applicable ☐  |   |
|           |  |   |
|           |  | 6   |
| 4.        | Operating permit and nitrogen BMP* – Compliance component #4 o   | of 5 ⊠ Not applicable                                       |
| 4.        | Operating permit and nitrogen BMP* – Compliance component #4 o   | _   |
| <u>4.</u> | Operating permit and nitrogen BMP* – Compliance component #4 or ls the system operated under an Operating Permit?  | If "yes", A below is required                               |
| <u>4.</u> | Operating permit and nitrogen BMP* – Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required                               |
| 4.        | Operating permit and nitrogen BMP* – Compliance component #4 or Is the system operated under an Operating Permit?  Is the system required to employ a Nitrogen BMP specified in the system design?   BMP = Best Management Practice(s) specified in the system design  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* – Compliance component #4 or Is the system operated under an Operating Permit?  Is the system operated under an Operating Permit?  Is the system required to employ a Nitrogen BMP specified in the system design?   When the system design is the system design in the system design.  If the answer to both questions is "no", this section does not need to be completed.  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  Is the system required to employ a Nitrogen BMP specified in the system design?   When the system design is the answer to both questions is "no", this section does not need to be completed Compliance criteria:   | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  Is the system required to employ a Nitrogen BMP specified in the system design?   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. Have the operating permit requirements been met?   | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* – Compliance component #4 or Is the system operated under an Operating Permit?   Yes   No Is the system required to employ a Nitrogen BMP specified in the system design?   Yes   No 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. Have the operating permit requirements been met?   Yes   No b. Is the required nitrogen BMP in place and properly functioning?   Yes   No | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* – Compliance component #4 or Is the system operated under an Operating Permit?   Yes   No Is the system required to employ a Nitrogen BMP specified in the system design?   Yes   No 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. Have the operating permit requirements been met?   Yes   No b. Is the required nitrogen BMP in place and properly functioning?   Yes   No | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |
| 4.        | Operating permit and nitrogen BMP* — Compliance component #4 or Is the system operated under an Operating Permit?  | If "yes", A below is required If "yes", B below is required |

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

| hed supporting documentation:  il observation logs completed for the report to previous verifications of required vertical t applicable (No soil treatment area)  ate depths or elevations ottom of distribution media |         |
|--|---------|
| il observation logs completed for the reporto previous verifications of required vertical tapplicable (No soil treatment area)  ate depths or elevations   |         |
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| t applicable (No soil treatment area)  ate depths or elevations  |         |
|  |         |
|  |         |
| ottom of distribution media 98.4'  |         |
|  |         |
| eriodically saturated soil/bedrock 98.5'   |         |
| ystem separation -0.1'   |         |
| equired compliance separation* 3.0'  |         |
| be reduced up to 15 percent if allowed by nance.   | / Local |
|  |         |
|  |         |

**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.



### **Logs of Soil Borings**

Location of Project: 23790 Goodview Cir N Forest Lake, MN 55025

Borings Made by Ben Zierke Date: 5/10/2023

Hand bucket auger used for borings;  $\ensuremath{\mathsf{USDA}}$  -  $\ensuremath{\mathsf{SCS}}$  Soil Classification used.

| Depth, in<br>Inches   | Boring Number 1  | Depth, in<br>Inches   | Boring Number 2  |
|---|--|---|--|
| 0   | 10YR 3/2 loamy fine sand   | 0   |  |
| 10-18"  | 10YR 4/4 loamy fine sand, damp   |   |  |
| 18-30"  | 10YR 5/4 loamy fine sand, 7.5YR 5/8 and 10YR 6/1 redox, standing water at 18" 5 minutes after boring |   |  |
|   |  |   |  |
| End of boring at Standing water table Present at Standing water not p Mottled Soil: Observed at Mottled soil not pres Comments: | 1.5 feet of depth Hours after boring  1.5 feet of depth Hours after boring                           | End of boring at Standing water tab Present at Standing water not p Mottled Soil: Observed at Mottled soil not pres Comments: | feet of depth Hours after boring bresent in hole feet of depth |
| Depth, in   | Boring Number 3  | Depth, in   | Boring Number 4  |
| Inches  |  | Inches  |  |
| Inches  O  End of boring at   | leet   | Inches 0 End of boring at   | feet   |

# MINNESOTA POLLUTION CONTROL AGENCY

## Sewage tank integrity assessment form

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

#### Subsurface Sewage Treatment Systems (SSTS) Program

Doc Type: Compliance and Enforcement

Purpose: This form may be used to certify the compliance status of the sewage tank components of the SSTS. This form is not a complete SSTS inspection report, only a tank integrity assessment, and may only certify sewage tank compliance status when entirely completed and signed by a qualified professional. SSTS compliance inspection report forms can be found at: <a href="https://www.pca.state.mn.us/water/inspections">https://www.pca.state.mn.us/water/inspections</a>.

Instructions: This form may be completed, and signed, by a Designated Certified Individual (DCI) of a licensed SSTS inspection, maintenance, installation, or service provider business who personally conducts the necessary procedures to assess the compliance status of each sewage tank in the system. Only a licensed maintenance business is authorized to pump the tank for assessment. A copy of this information should be submitted to the system owner and be maintained by the licensed SSTS business for a period of five (5) years from the assessment date.

When this form is signed by a qualified certified professional, it becomes necessary supporting documentation to an Existing System Compliance Inspection Report: Compliance Inspection form - Existing system (wg-wwists4-31b). This form can be found on the MPCA website at https://www.pca.state.mn.us/water/inspections.

The information and certified statement on this form is **required** when existing septic tank compliance status is determined by an individual other than the SSTS Inspector that submits an inspection report. This form represents a third party assessment of SSTS component compliance and is allowable under Minn. R. 7082.0700, subp. 4(B)(1). This form is valid for a period of three years beyond the signature date on this form unless a new evaluation is requested by the owner or owner's agent or is required according to local regulations. Additional Administrative Rule references for this activity can be found at Minn. R. 7082.0700, subp. 4(B),(C), and (D) and; Minn. R. 7083.0730(C).

| (=) and (million 10. 1000.0700(0).  |  |                           |
|---|--|---------------------------|
| Owner information   |  |                           |
| Owner/Representative Thur wheck   |  |                           |
| Property address: 23790 Goody eu Circ   | Le lingth Forest 101   | VP                        |
| Local Regulatory Authority: Washington  | Parcel ID  | 55005                     |
| System status   |  |                           |
| System status   |  |                           |
| System status on date (mm/dd/yyyy): 2   |  |                           |
| Certificate of sewage tank compliance   | ☐ Notice of sewage ta  | ank non-compliance        |
| Complia   | ınce criteria;   |                           |
| The SSTS has a seepage pit, cesspool, drywell, leaching pit, or<br>Groundwater."  | other pit - *Failure to Protect                                      | ☐ Yes* □ No               |
| The SSTS has a sewage tank that leaks below the designed op Groundwater."   | erating depth - "Fallure to Protect                                  | ☐ Yes* ☑ No               |
| The SSTS presents a threat to public safety by reason of structuor weak) maintenance hole cover(s) or lids or any other unsafe Public Health or Safety."                  | urally unsound (damaged, cracked,<br>condition - "Imminent Threat to | ☐ Yes* ☐ No               |
| Any "yes" answer above indic  | ates sewage tank non-compliand                                       | e.                        |
| Company information   | Designated Certified Individ   | ual (DCI) information     |
| Company name: Olson's Sewer Service, Inc.   | Print name:  |                           |
| Business license number:  | Certification number: 404  |                           |
| I personally conducted the work described above as a Designate maintenance, installation, or service provider Business. I person status of each sewage tank in this SSTS. | ed Certified Individual of a Minnesota-li                            | censed SSTS inspection    |
| By typing/signing my name below, I certify the above statements information can be used for the purpose of processing this for  | ons to be true and correct, to the best correct.                     | of my knowledge, and that |
| Designated Certified Individual's signature:  | Date (mm   | n/dd/yyyy): 8-1-23_       |
| ,   | agreed   |                           |