

# ZIERKE SOIL TESTING

Peter Ostrand  
20540 St Croix Trl N  
Scandia, MN 55073

April 10th, 2021

Dear Peter Ostrand,

At your request, I have conducted a septic inspection to determine the compliance status of your 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 non-compliant 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 is not considered an imminent threat to public health. 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

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)

Doc Type: Compliance and Enforcement

**Instructions:** Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached supporting documentation – additional local requirements may also apply. Further information can be found here: <https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf>.

**Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance.**

### Property information

Local tracking number: \_\_\_\_\_

Parcel ID# or Sec/Twp/Range: 1903219230006 Local regulatory authority: Washington County

Property address: 20540 St Croix Trl N Scandia, MN 55073

Owner/representative: Peter Ostrand Owner's phone: 651-485-2810

Brief system description: Pre-cast 1200 gallon septic tank, gravity rock trench drainfield

### System status

System status on date (mm/dd/yyyy): 4/10/2021

**Compliant – Certificate of compliance\***

*(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and 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.**

**Noncompliant – Notice of noncompliance**

*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.*

*Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.*

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

- Impact on public health (Compliance component #1) – *Imminent threat to public health and safety*
- Tank integrity (Compliance component #2) – *Failing to protect groundwater*
- Other Compliance Conditions (Compliance component #3) – *Imminent threat to public health and safety*
- Other Compliance Conditions (Compliance component #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 (Compliance component #4) – *Noncompliant - local ordinance applies*

#### Comments or recommendations

### Certification

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

**By typing my name below, I certify the above statements to be true and correct, to the best of my knowledge, and that this information can be used for the purpose of processing this form.**

Business name: Zierke Soil Testing

Certification number: 9594

Inspector signature: 

License number: 119

*(This document has been electronically signed)*

Phone: 651-249-1346

### Necessary or locally required supporting documentation (must be attached)

- Soil observation logs
- Locally required forms
- Tank Integrity Assessment
- Operating Permit
- Other information (list):  
Site sketch

## 1. Impact on public health – Compliance component #1 of 5

### Compliance criteria:

|   |  |
|---|--|
| System discharges sewage to the ground surface              | <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No |
| System discharges sewage to drain tile or surface waters.   | <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No |
| System causes sewage backup into dwelling or establishment. | <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No |

**Any "yes" answer above indicates the system is an imminent threat to public health and safety.**

### Describe verification methods and results:

No signs of system backup/ponding/seepage during site visit 4/8/2021.

### Attached supporting documentation:

Other: \_\_\_\_\_  
 Not applicable

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

### Compliance criteria:

|  |  |
|--|--|
| System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? | <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No |
| Sewage tank(s) leak below their designed operating depth?                        | <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No |
| If yes, which sewage tank(s) leaks:  |  |

**Any "yes" answer above indicates the system is failing to protect groundwater.**

### Describe verification methods and results:

Present for pumping by Olson's Sewer 4/8/2021. Tank watertight and baffles in place.

### Attached supporting documentation:

Pumped at time of inspection  
 Name of maintenance business: Olsons  
 License number of maintenance business: 216  
 Date of maintenance: 4/8/2021  
 Existing tank integrity assessment (Attach)  
 Date of maintenance (mm/dd/yyyy): \_\_\_\_\_ (must be within three years)  
 (See form instructions to ensure assessment complies with Minn. R. 7082.0700 subp. 4 B (1))  
 Tank is Noncompliant (pumping not necessary – explain below)  
 Other: \_\_\_\_\_

### 3. Other compliance conditions – Compliance component #3 of 5

3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unsecured?

Yes\*  No  Unknown

3b. Other issues (*electrical hazards, etc.*) to immediately and adversely impact public health or safety?  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:

Attached supporting documentation:  Not applicable  \_\_\_\_\_

### 4. Operating permit and nitrogen BMP\* – Compliance component #4 of 5 Not applicable

Is the system operated under an Operating Permit?

Yes  No **If “yes”, A below is required**

Is the system required to employ a Nitrogen BMP specified in the system design?  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. 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)  \_\_\_\_\_

## 5. Soil separation – Compliance component #5 of 5

Date of installation 5/14/1987  Unknown  
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging?  Yes  No

**Compliance criteria (select one):**

5a. 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\*

Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.

5b. Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:  Yes  No\*

Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.\*

5c. "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080.2350 or 7080.2400 (Advanced Inspector License required)  Yes  No\*

Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.

**Attached supporting documentation:**

- Soil observation logs completed for the report (Attach)
- Two previous verifications of required vertical separation (Attach)
- Not applicable (No soil treatment area)
- \_\_\_\_\_

**Indicate depths or elevations**

|  |       |
|--|-------|
| A. Bottom of distribution media        | 97.7' |
| B. Periodically saturated soil/bedrock | 98.5' |
| C. System separation                   | -0.8' |
| D. Required compliance separation*     | 2.0'  |

\*May be reduced up to 15 percent if allowed by Local Ordinance.

**\*Any "no" answer above indicates the system is failing to protect groundwater.**

Describe verification methods and results:

**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: 20540 St Croix Trl N Scandia, MN 55073

Borings Made by Ben Zierke

Date:

4/8/2021

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

| Depth, in<br>Inches | Boring Number 1  | Depth, in<br>Inches | Boring Number 2 |
|---------------------|--|---------------------|-----------------|
| 0-----              | -----  | 0-----              | -----           |
| 0-10"               | 10YR 3/2 silt loam   |                     |                 |
| 10-22"              | 10YR 4/4 silt loam, 7.5YR 5/6<br>concentrations present below 18"<br>saturated below 18" |                     |                 |
| 22-30"              | 7.5YR 4/6 silt loam  |                     |                 |

End of boring at 2.5 feet

**Standing water table:**

Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring

Standing water not present in hole

**Mottled Soil:**

Observed at 1.5 feet of depth

Mottled soil not present in bore hole

Comments:

End of boring at \_\_\_\_\_ 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

Comments:

| Depth, in<br>Inches | Boring Number 3 | Depth, in<br>Inches | Boring Number 4 |
|---------------------|-----------------|---------------------|-----------------|
| 0-----              | -----           | 0-----              | -----           |
|                     |                 |                     |                 |
|                     |                 |                     |                 |
|                     |                 |                     |                 |

End of boring at \_\_\_\_\_ 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

Comments:

End of boring at \_\_\_\_\_ feet

**Standing water table:**

Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring

Standing water not present in hole

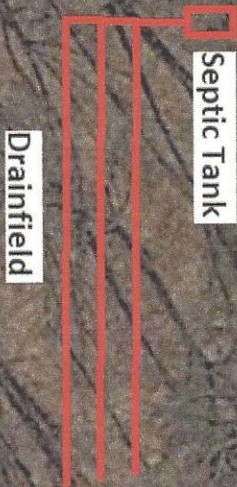
**Mottled Soil:**

Observed at \_\_\_\_\_ feet of depth

Mottled soil not present in bore hole

Comments:

20540 St Groix Trail N



Septic Tank

Drainfield

B1

Relative Elevations in Decimal Feet:  
B1: 100.0, redox 98.5  
Bottom of rock: 97.7  
B1 Separation: -0.8  
Benchmark: 108.6  
(cover on septic tank)

100 ft

