# **ZIERKE SOIL TESTING**

John and Judy Toensing 18255 Irvin Ave N Forest Lake, MN 55025

December 1st, 2022

Dear John and Judy Toensing,

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 <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</u> <u>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,

Benjanier Zieske

Benjamin Zierke MPCA Lic 119, Cert 9594

ADDRESS: 28587 Jeffrey Ave Chisago City, MN 55013

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



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: <u>3503221310001</u>	Reason for Inspection	Sale
Local regulatory authority info: <u>Washington County</u>		
Property address: <u>18255 Irvin Ave Forest Lake, MN 55025</u>		
Owner/representative: John and Judy Toensing		Owner's phone:
Brief system description: Pre-cast septic tank, pre-cast lift tank, dis	stribution box with gravity	rock trench drainfield

#### System status

System status on date (mm/dd/yyyy): 12/1/2022

#### 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

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

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 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

Inspection performed in winter conditions.

# 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: Benjamin Zierka	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	System/As-Built	Locally required forms	Tank Integrity Assessment	Operating Permit
Other information (list):				

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

Compliance criteria:	1	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 imminent threat to public health an	•	

#### Describe verification methods and results:

None of the above observed. Homeowners reported no past issues with the system.

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

Compliance criteria:		Attached supporting documentation:	
System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?	☐ Yes* ⊠ No	☑ Empty tank(s) viewed by inspector Name of maintenance business:	Smilies
Sewage tank(s) leak below their	🗌 Yes* 🛛 No	License number of maintenance business	s: 2428
designed operating depth?		Date of maintenance:	12/1/2022
		Existing tank integrity assessment (Attacl	h)
If yes, which sewage tank(s) leaks:		Date of maintenance (mm/dd/yyyy): (must be within	three years)
Any "yes" answer above indica is failing to protect groundwate		(See form instructions to ensure assessm Minn. R. 7082.0700 subp. 4 B (1))	nent complies with
		Tank is Noncompliant (pumping not necess	ary – explain below)
		Other:	
Describe verification methods and	recultor		

### Describe verification methods and results:

Present for pumping by Smilies Sewer 12/1/2022. Tanks watertight and baffles in place.

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

		Describe verification methods and results:		
		*Yes to 3c or 3d - System is failing to protect groundwater.		
3	d.	System not abandoned in accordance with Minn. R. 7080.2500?	🗌 Yes*	🖾 No
3	IC.	System is non-protective of ground water for other conditions as determined by inspector?	🗌 Yes*	🖾 No
		*Yes to 3a or 3b - System is an imminent threat to public health and safety.		
3	b.	Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety?	🗌 Yes*	🛛 No 🔲 Unknown
		□ Yes* 🛛 No 🔲 Unknown		
3	a.	Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unsecu	red?	

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	o be co	mplete	≥d.

☐ Yes ☐ No

#### Compliance criteria:

a.	Have the	operating	permit	requirements	s been m	et?
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b. Is the required nitrogen BMP in place and properly functioning?

#### 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 1985 (mm/dd/yyyy)	Unknown		
Shoreland/Wellhead protection/Food beverage lodging? Compliance criteria (select one):	🗌 Yes 🛛 No	Attached supporting documentation:	
5a. For systems built prior to April 1, 1996, an not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:	d 🗌 Yes 🖾 No*	<ul> <li>Not applicable (No soil treatment area</li> <li></li></ul>	•
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.			
<ul> <li>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:</li> <li>Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*</li> </ul>		Indicate depths or elevations         A. Bottom of distribution media         B. Periodically saturated soil/bedrock         C. System separation         D. Required compliance separation*         *May be reduced up to 15 percent if allow	96.9' 97.0' -0.1' 2.0' wwed by Local
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 (Intermediate Inspector License required s 2,500 gallons per day; Advanced Inspecto License required > 2,500 gallons per day) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.		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, 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.

Relative Elevations in Decimal Feet:

B1: 100.0 B1 Redox: 97.0 Bottom of rock: 96.9 B1 Separation: -0.1 Benchmark: 98.4 (cover on lift tank)

B1 🔿

Distribution box

Septic tank

Lift tank

Drainfield

# Logs of Soil Borings

Location of Project: 18255 Irvin Ave N Forest Lake, MN 55025 Borings Made by Ben Zierke 12/1/2022 Date:

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

Depth, in Inches 0	Boring Number 1	Depth, in Inches 0	Boring Number 2
0-20"	10YR 3/2 silt loam	0	
20-36"	10YR 5/4 sandy loam, 20% rock		
36-42"	7.5YR 5/4 clay loam, 5YR 5/8 iron stains		
End of boring at Standing water table Present at Standing water not p Mottled Soil: Observed at Mottled soil not press Comments:	feet of depth Hours after boring resent in hole 3 feet of depth	End of boring at Standing water tal Present at Standing water not Mottled Soil: Observed at Mottled soil not pre Comments:	feet of depth Hours after boring present in hole feet of depth
Depth, in Inches	Boring Number 3	Depth, in Inches	Boring Number 4
	Boring Number 3		Boring Number 4
	Boring Number 3	Inches	Boring Number 4
	Boring Number 3	Inches	Boring Number 4
	Boring Number 3	Inches	Boring Number 4
	Boring Number 3	Inches	Boring Number 4
	Boring Number 3	Inches	Boring Number 4
	Boring Number 3	Inches	Boring Number 4
	feet le: feet of depth feet le: feet of depth feet le: feet of depth	Inches	feet  feet  feet  feet of depth  feet of depth  feet of depth