

# ZIERKE SOIL TESTING

Jim Moratzka  
9885 202<sup>nd</sup> St N  
Forest Lake, MN 55025

7/18/2024

Dear Jim Moratzka,

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 septic system is compliant. A certification of compliance is in effect for three years from the date it is issued. To be clear, this should not be construed as a guarantee of future system function – there are too many factors that influence the lifespan of a septic system for an inspector to predict or even guess how long a septic system will last. A copy of this report will be filed with your local unit of government for their records.

Sincerely,



Benjamin Zierke  
MPCA Lic 119, Cert 9594

ADDRESS:  
28587 Jeffrey Ave  
Chisago City, MN 55013

PHONE 651-249-1346  
EMAIL [benzierke@gmail.com](mailto:benzierke@gmail.com)

**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: 2403221430002 Reason for Inspection Sale

Local regulatory authority info: Washington County

Property address: 9885 202<sup>nd</sup> St N Forest Lake, MN 55025

Owner/representative: Jim Moratzka Owner's phone: 651-433-3430

Brief system description: (2) 1250 gallon septic tanks, 1000 gallon lift tank, mound dispersal system

### System status

System status on date (mm/dd/yyyy): 7/18/2024

**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

No issues observed with system 7/18/2024. Homeowners reported no past issues with the system.

### 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 Zierke* 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): Previous Soil Observations, Permit Data

## 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

**Attached supporting documentation:**

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

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

**Describe verification methods and results:**

None of the above observed.

## 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:	

**Attached supporting documentation:**

Empty tank(s) viewed by inspector

Name of maintenance business: Smilies

License number of maintenance business: 2428

Date of maintenance: 7/17/2024

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: \_\_\_\_\_

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

**Describe verification methods and results:**

Present for pumping by Smilies Sewer 7/18/2024. Tanks water tight and baffles in place.

### 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 8/30/2015  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 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day)  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
- Two previous verifications of required vertical separation
- Not applicable (No soil treatment area)
- \_\_\_\_\_

**Indicate depths or elevations**

A. Bottom of distribution media	101.7
B. Periodically saturated soil/bedrock	98.5
C. System separation	3.2
D. Required compliance separation*	3.0

\*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:**

See attached boring log and elevations.

**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.



9885

Relative Elevations  
in Decimal Feet:  
B1: 100.0  
B1 Redox: 98.5  
Bottom of rock: 101.7  
B1 Separation: 3.2  
Benchmark: 108.2  
(bottom of siding SW  
corner of house)

Tanks

B1

Mound System

Probe

## Logs of Soil Borings

Location of Project: 9885 202nd St N Forest Lake, MN 55025

Borings Made by Ben Zierke

Date: 7/17/2024

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

Depth, in Inches	Boring Number 1	Depth, in Inches	Boring Number 2
0-----	-----	0-----	-----
0-11"	10YR 3/2 sandy loam		
11-16"	10YR 4/3 sandy loam		
16-18"	7.5YR 4/4 sandy loam		
18-22"	7.5YR 4/4 loam, 7.5YR 5/6 concentrations (redox)		

End of boring at 1.8 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 Inches	Boring Number 3	Depth, in 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:



**Department of Public Health and Environment**

14949 62nd Street North PO Box 6  
Stillwater MN 55082-0006  
Office: 651-430-6655 TTY: 651-430-6246 Fax: 651-430-6730

Review Fee:	\$290.00
Permit Fee:	\$485.00
<b>Total Fee:</b>	<b>\$775.00</b>
Previous Payment	\$775.00
<b>Balance Due</b>	<b>\$0.00</b>

**Community:** Forest Lake City  
**Permit Number:** 0600-15-12  
**Owner:** Jim Moratzka  
 9885 202nd ST N  
 Forest Lake MN 55025-  
**Applicant:** Scandia Contracting

**PERMISSION IS HEREBY GRANTED**

To execute the work specified in this permit on the following identified property upon express condition that said persons and their agents, and employees shall conform in all respects to the provisions of Ordinance #179, Washington County Development Code, Chapter Four, Subsurface Sewage Treatment System Regulations. This permit may be revoked at any time upon violation of any of the provisions of said ordinance.

**Project Address:** 9885 202nd ST N  
**Geo Code:** 24-032-21-43-0002  
**Designer:** Zierke Soil Testing

Type of System: Mound		Pressure Distribution	
		Number Of Laterals:	3
<b>Design Criteria</b>	<b>Mound Sizing</b>	Perforation Spacing:	3 Feet
Percolation Rate: 12	Rock Bed Width: 10 Feet	Perforation Diameter:	7/32 Inch
Depth To Restriction: 18	Rock Bed Length: 75 Feet	Head Size:	1.0 Inch
Land Slope: 0.00%	Absorption Width: 15 Feet	Total Head:	18.64
Flow Rate: 750	Depth of Clean Sand: 18 Inches	Connection:	End
Number of Bedrooms: 5	Downslope Dike Width: 23 Feet	Length of Laterals:	73 Feet
	Upslope Dike: 11 Feet	Perforations / Lateral:	25
	Length of Dike: 109 Feet	Total Perforations:	75
<b>Tank Sizes</b>		Gallons Per Minute:	42
Tank 1: 1500	Tank 2: 1000	Lateral Diameter:	2 Inches
Tank 3: 0	Lift Station: 1000		

**Authorized Work/Special Conditions**

1. Effluent Filter with Alarm Required
2. Pressure laterals must have cleanouts to grade.

Permit Issue Date: 8/19/2015  
 Permit Expiration Date: 8/18/2016

Pete Ganzel  
 Senior Environmental Specialist



Onsite Sewage Treatment Program Soil Observation Log

Client/ Address: \_\_\_\_\_ Legal Description/GPS: \_\_\_\_\_ Date: 8/18/15

Soil Parent Material(s): Till (circle all that apply) Outwash Lacustrine Alluvium Loess Organic Matter Bedrock

Landscape Position: Summit Shoulder Back/Side Slope Foot Slope Toe Slope Slope Shape: Linear convex

Vegetation: moor lawns Soil Survey Map Unit(s): Shetek and Kingsley Slope (%): 5-6

Weather conditions/Time of Day: Rainy + Cool 2:45 Observation #/Location/Method: \_\_\_\_\_ Elevation: \_\_\_\_\_

Depth (in)	Texture	Rock Frag %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Saturated Soil Indicator(s) (see back)	Structure Shape	Structure Grade	Consistence
0-8	fine loamy sand		10 3/3		Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
8-20	sandy loam	2/15	7.5 9/4		Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
20-76	sandy loam grey silt blobs at 36"	2/15	7.5 9/4		Concentrations Depletions Gleyed	36"	Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid

Comments: center of road Area

Certified Statement: I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

\_\_\_\_\_  
(Designer)

P. Leonard  
(Signature)

1762  
(License #)

\_\_\_\_\_  
(Date)

## LOGS OF SOIL BORINGS

Location of Project Jim Moratzka, 40 acres, sec. 24, City of Forest Lake, Washington Co.

Borings Made by Chris Zierke

Date: 6/1/15

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

Depth, In Feet	Boring Number 1
0-----	
0-8"	Dark-brown sandy loam(10YR-3/3)
8-24"	Dark yellowish-brown sandy loam(10YR-4/4)
24-36"	Strong-brown loam(7.5YR-4/6), redox
	Click here to enter text.

End of boring at 3 feet.

Standing water table:

Present at feet of depth, Hours after boring

Standing water not present in hole

Mottled Soil:

Observed at 2 feet of depth

Mottled soil not present in bore hole

Comments:

Depth, In Feet	Boring Number 2
0-----	
0-6"	Dark-brown sandy loam(3/3)
6-18"	Dark y-brown sandy loam(4/4)
18-36"	Strong-brown loam(4/6), redox

End of boring at 3 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:

Depth, In Feet	Boring Number 3
0-----	
0-6"	Dark-brown sandy loam(3/3)
6-20"	Dark y-brown sandy loam(4/4), redox
	Below 18"
20-24"	Strong-brown loam(4/6), redox

End of boring at 2 feet.

Standing water table:

Present at feet of depth, Hours after boring

Standing water not present in hole

Mottled Soil:

Observed at 21.5 feet of depth

Mottled soil not present in bore hole

Comments:

Depth, In Feet	Boring Number 4
0-----	
0-6"	Dark-brown sandy loam(3/3)
6-24"	Dark y-brown sandy loam(4/4)
24-30"	Strong-brown loam(4/6), redox

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 2 feet of depth

Mottled soil not present in bore hole

Comments:



## Department of Public Health and Environment

14949 62nd Street North PO Box 6  
Stillwater MN 55082-0006  
Office: 651-430-6655 – TTY: 651-430-6246 – Fax: 651-430-6730

# Individual Sewage Treatment System Certificate of Compliance

Type of System: Mound  
Permit Number: 0600-15-12  
Property ID Number: 24-032-21-43-0002  
Property Address: 9885 202nd ST N  
Community: Forest Lake City  
Date of Installation: August 31, 2015

This certifies that the individual sewage treatment system installed at the aforementioned address was inspected during installation and found to be in compliance with requirements of the Washington County Development Code, Chapter Four, Individual Sewage Treatment System Regulations (Washington County Ordinance No. 128). This Certificate of Compliance is valid for five (5) years from the date of issuance unless Washington County finds evidence of an imminent threat to public health and safety. Supporting documentation with detailed information on the system can be found on the attached as-built.

A handwritten signature in blue ink, appearing to read "P. Ganzel".

Pete Ganzel  
Senior Environmental Specialist