ZIERKE SOIL TESTING

Kathy Hagen 9980 Keswick Ave N Stillwater, MN 55082

8/12/2021

Dear Kathy Hagen,

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>compliant</u>. 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



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: 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	information Local tracking number:			
Parcel ID# or Sec/Twp/Range: 1403021220003 Local re	gulatory authority: Washington County			
Property address: 9980 Keswick Ave N Stillwater, MN 55082				
Owner/representative: Kathy Hagen	Owner's phone: 651-426-7176			
Brief system description: 1500 gallon septic tank, gravity rock trench of	drainfield			
System status				
System status on date (mm/dd/yyyy): 8/12/2021				
□ Compliant – Certificate of compliance* □	Noncompliant – Notice of noncompliance			
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.	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 ocal 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 Riser added to tank 8/10/2021.				
Certification I hereby certify that all the necessary information has been gathered to determination of future system performance has been nor can be made				
abuse of the system, inadequate maintenance, or future water usage.	, and to annihilate contained adming dystern continuous, possible			
By typing my name below, I certify the above statements to be true a can be used for the purpose of processing this form.	nd correct, to the best of my knowledge, and that this information			
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 docum	entation (must be attached)			
Soil observation logs ☐ Locally required forms ☐ Other information (list): Site sketch https://www.pca.state.mn.us • 651-296-6300 • 800-657-3864 •	☐ Tank Integrity Assessment ☐ Operating Permit Use your preferred relay service • Available in alternative formats			

1. Impact on public health – Compliance component #1 of 5 Attached supporting documentation: Compliance criteria: System discharges sewage to the ☐ Yes* ☐ No Other: ground surface System discharges sewage to drain ☐ Yes* ⊠ No tile or surface waters. System causes sewage backup into ☐ Yes* ☒ No dwelling or establishment. Any "yes" answer above indicates the system is an imminent threat to public health and safety. Describe verification methods and results: No signs of seepage, surface discharge, or backup observed during site visits 7/21/21 and 8/10/2021. Kathy did not report any past issues with the system. 2. Tank integrity – Compliance component #2 of 5 Compliance criteria: Attached supporting documentation: ☐ Yes* ☐ No System consists of a seepage pit, Pumped at time of inspection cesspool, drywell, leaching pit, or other pit? Name of maintenance business: **Smilies** Sewage tank(s) leak below their ☐ Yes* ☐ No License number of maintenance business: 2428 designed operating depth? Date of maintenance: 7/21/2021 Existing tank integrity assessment (Attach) Date of maintenance (mm/dd/yyyy): (must be within three years) If yes, which sewage tank(s) leaks: Any "yes" answer above indicates the system (See form instructions to ensure assessment complies with is failing to protect groundwater. Minn. R. 7082.0700 subp. 4 B (1)) ☐ Tank is Noncompliant (pumping not necessary – explain below) Other: Describe verification methods and results: Present for pumping by Smilies Sewer 7/21/2021. Tank watertight 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? \square 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* ☐	
	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	t applicable
	Is the system operated under an Operating Permit?	elow is required
	Is the system required to employ a Nitrogen BMP specified in the system design? Yes No If "yes", B be	elow 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?	
	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)	

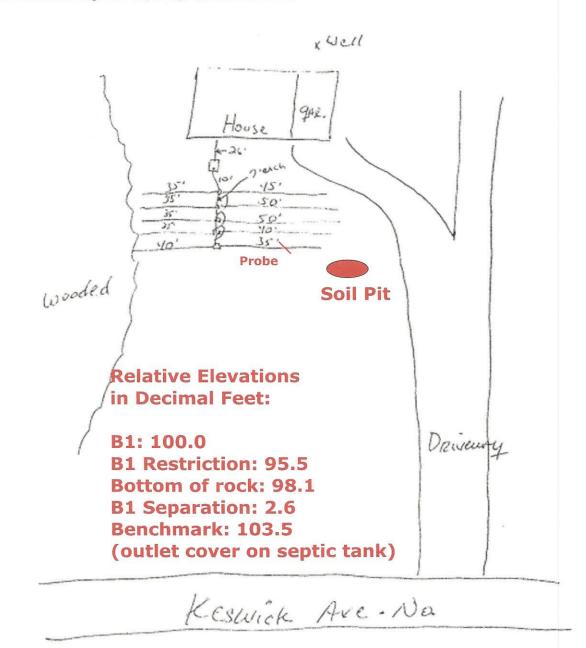
5. Soil separation – Compliance component #5 of 5 Unknown Date of installation 7/2/1990 (mm/dd/yyyy) Shoreland/Wellhead protection/Food ☐ Yes ⊠ No Attached supporting documentation: beverage lodging? Soil observation logs completed for the report (Attach) Two previous verifications of required vertical Compliance criteria (select one): separation (Attach) 5a. For systems built prior to April 1, 1996, ☐ Not applicable (No soil treatment area) and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock. ☐ Yes ☐ No* 5b. Non-performance systems built April 1, Indicate depths or elevations 1996, or later or for non-performance A. Bottom of distribution media 98.1' systems located in Shoreland or Wellhead Protection Areas or serving a food, B. Periodically saturated soil/bedrock 95.5' beverage, or lodging establishment: 2.6' C. System separation Drainfield has a three-foot vertical 2.0' D. Required compliance separation* separation distance from periodically saturated soil or bedrock.* *May be reduced up to 15 percent if allowed by Local Ordinance. 5c. "Experimental", "Other", or "Performance" ☐ Yes ☐ No* systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.

*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.

Observations by BZ 8/10/2021 in RED



- System installer + inspected on 7/2/90
- Sch. 40 Pucy from house to tank & tank to Drop box 1
- SDR 35 4" PVC between drop boxes
- Tuf -tite drop boxes

Logs of Soil Borings

Location of Project:

9980 Keswick Ave N Stillwater, MN 55082

Borings Made by Ben Zierke

Date:

8/10/2021

Observations made with backhoe-dug soil pit; USDA - SCS Soil Classification used.

Depth, in Inches	Boring Number 1	Depth, in Inches 0	Boring Number 2
0-12"	10YR 3/2 fine sand <5% rock		
12-34"	10YR 4/4 fine sand, 18% rock		
34-75"	7.5YR 4/4 fine sand, 39% rock, 50% credit for separation		
75-80"	7.5YR 4/3 loamy fine sand, 5YR 3/6 iron stains below 75" *sieve test performed to determine rock content in profile *54.5" of separation credit		
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 resent in hole X	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 Inches	Boring Number 3	Depth, in Inches	Boring Number 4
0		0	
End of boring at	feet	End of boring at	feet