ZIERKE SOIL TESTING

Jake and Erin Burton 13387 Elmcrest Ave N White Bear Lake, MN 55110

7/8/2021

Dear Jake and Erin Burton,

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	Local tracking number:						
Parcel ID# or Sec/Twp/Range: 30.031.21.32.0011 Loca	al regulatory authority: Washington County						
Property address: 13387 Elmcrest Ave N White Bear Lake, MN 5	55110						
Owner/representative: Jake and Erin Burton Owner's phone: 651-329-8109							
Brief system description: 1250 gallon septic tank, 1000 gallon septic tank, 1000 gallon lift station, mound							
System status							
System status on date (mm/dd/yyyy): _7/8/2021							
☐ 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 abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in 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.						
*Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.	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	*)						
 ☐ Soil separation (Compliance component #5) – Failing t ☐ Operating permit/monitoring plan requirements (Complete Comments or recommendations 	protect groundwater t #3) – Imminent threat to public health and safety t #3) – Failing to protect groundwater 00 (Compliance component #3) – Failing to protect groundwater						
Certification							
abuse of the system, inadequate maintenance, or future water usag	nade due to unknown conditions during system construction, possible ge.						
By typing my name below , I certify the above statements to be true can be used for the purpose of processing this form.	ue and 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 docu	umentation (must be attached)						
 ☑ Soil observation logs ☑ Locally required forms ☑ Other information (list): Site sketch 	☐ Tank Integrity Assessment ☐ Operating Permit						
https://www.pca.state.mn.us • 651-296-6300 • 800-657-3864	Use your preferred relay service Available in alternative formats						

1. Impact on public health – Compliance component #1 of 5 Compliance criteria: Attached supporting documentation: System discharges sewage to the ☐ Yes* ☐ No Other: ground surface System discharges sewage to drain ☐ Yes* ☑ No tile or surface waters. ☐ Yes* ⊠ No System causes sewage backup into 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 sign of surface discharge or system failure observed during site visit 7/7/2021. Homeowner has not had any issues with the system. 2. Tank integrity – Compliance component #2 of 5 Attached supporting documentation: Compliance criteria: System consists of a seepage pit, ☐ Yes* ☐ No Pumped at time of inspection cesspool, drywell, leaching pit, or other pit? Name of maintenance business: **Smilies** License number of maintenance business: 2428 Sewage tank(s) leak below their ☐ Yes* ☒ No designed operating depth? Date of maintenance: 7/7/2021 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 7/7/2021. Tanks 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? ☐ 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 ☐
Δ	Operating permit and nitrogen BMP* — Compliance component #4 of 5 ⋈ Not applicable
	Is the system operated under an Operating Permit?
	Attached supporting documentation: Operating permit (Attach)

5. Soil separation – Compliance component #5 of 5 Unknown Date of installation 7/14/2005 (mm/dd/yyyy) Attached supporting documentation: Shoreland/Wellhead protection/Food ☐ Yes ☒ No beverage lodging? Soil observation logs completed for the report (Attach) Two previous verifications of required vertical Compliance criteria (select one): separation (Attach) ☐ Yes ☐ No* 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. 5b. Non-performance systems built April 1, Indicate depths or elevations 1996, or later or for non-performance A. Bottom of distribution media 102.2' systems located in Shoreland or Wellhead Protection Areas or serving a food, B. Periodically saturated soil/bedrock 98.7' beverage, or lodging establishment: 3.5' C. System separation Drainfield has a three-foot vertical D. Required compliance separation* 3.0' 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

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

Describe verification methods and results:

(Advanced Inspector License required)
Drainfield meets the designed vertical separation distance from periodically

saturated soil or bedrock.

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.



Relative Elevations in Decimal Feet:

B1: 100.0
B1 Redox: 98.7
Bottom of rock: 102.2
B1 Separation: 3.5
Benchmark: 102.5
(outlet at lift station)

Logs of Soil Borings

Location of Project:

13387 Elmcrest Ave N White Bear Lake, MN 55110

Borings Made by Ben Zierke

Date:

7/7/2021

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

200			the state of the s
Depth, in		Depth, in	
	Boring Number 1	Inches	Boring Number 2
Inches		lliches	
0		0	
0-10"	10YR 3/2 fine sandy loam		
0 10	2011 3/2 line sallay loan.		
	was a second and a second a second and a second a second and a second		
10-16"	10YR 4/4 fine sandy loam		
16-20"	10YR 4/6 clay loam, redox present below		
	Productive and Comment and the product of the produ		
	16" 7.5YR 5/8 concentrations		
			"
End of boring at	1.7 feet	End of boring at	feet
Standing water tal Present at	le: feet of depth Hours after boring	Standing water tab Present at	le: feet of depth Hours after boring
Standing water not p		Standing water not p	resent in hole
Mottled Soil:	1.3 feet of depth	Mottled Soil:	feet of depth
Observed at Mottled soil not pre	· · · · · · · · · · · · · · · · · · ·	Observed at Mottled soil not pres	A
Comments:		Comments:	
Depth, in	T	Depth, in	
	Boring Number 3		Boring Number 4
Inches	N=20	Inches	****
0		0	
	I .		
End of boring at	feet	End of boring at	feet
Standing water ta	ole:	Standing water tal	ole:
Standing water ta Present at	feet of depth Hours after boring	Standing water tab Present at	ele: feet of depth Hours after boring
Standing water ta	ole: feet of depth Hours after boring present in hole	Standing water take Present at Standing water not Mottled Soil:	le: feet of depth Hours after boring present in hole
Standing water tal Present at Standing water not	feet of depth Hours after boring feet of depth feet of depth	Standing water tal Present at Standing water not	feet of depth Hours after boring feet of depth Feet of depth