

ZIERKE SOIL TESTING

Jan Lodewijk-Grootaers
14598 Old Guslander Trail N
Marine on St Croix, MN 55047

November 20, 2023

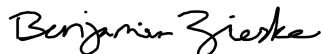
Dear Jan Lodewijk-Grootaers,

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). 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: 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: 0203120340004 Reason for Inspection Sale

Local regulatory authority info: Washington County

Property address: 14598 Old Guslander Trail N Marine on St Croix, MN 55047

Owner/representative: Jan Loedwijk-Grootaers Owner's phone: 612-518-7965

Brief system description: 1500 gallon pre-cast septic tank with gravity rock trench drainfield

System status

System status on date (mm/dd/yyyy): 11/20/2023

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

This system failed for lack of soil separation on previous inspection filed with Washington County in 2015. My findings match the inspection from that time. I suspect a good amount of cutting/filling was done in the drainfield area and no native or original soils remain. We took a boring off contour a good distance from the drainfield to attempt to locate native soils. That boring showed sandy soils with a restriction at 52" - if soils were similar in the drainfield area the system would have still failed for lack of separation as well.

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): _____

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:

None of the above observed.

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:

See attached tank integrity form.

Attached supporting documentation:

- Empty tank(s) viewed by inspector
- Name of maintenance business: _____
- License number of maintenance business: _____
- Date of maintenance: _____
- Existing tank integrity assessment (Attach)
- Date of maintenance 11/16/2023
(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 10/20/1992 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	97.2'
B. Periodically saturated soil/bedrock	100.0'
C. System separation	-2.8'
D. Required compliance separation*	2.0'

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

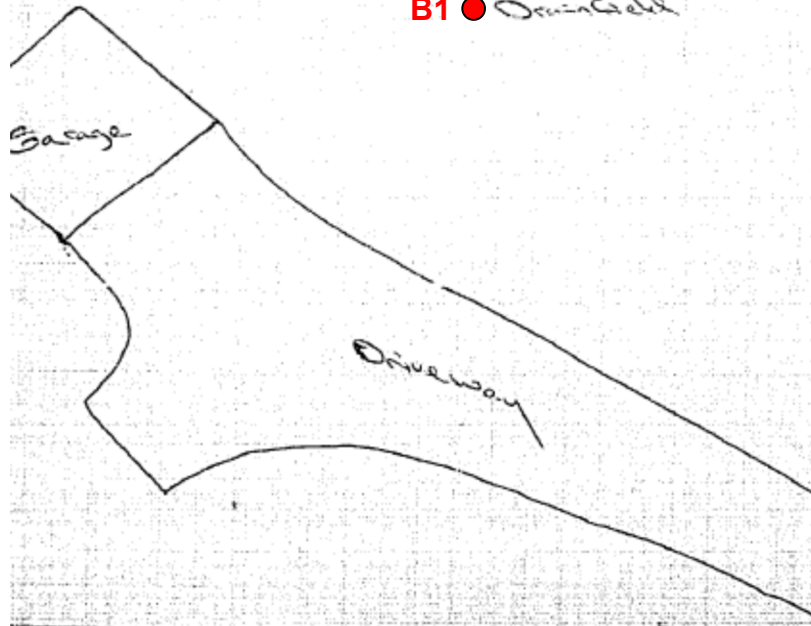
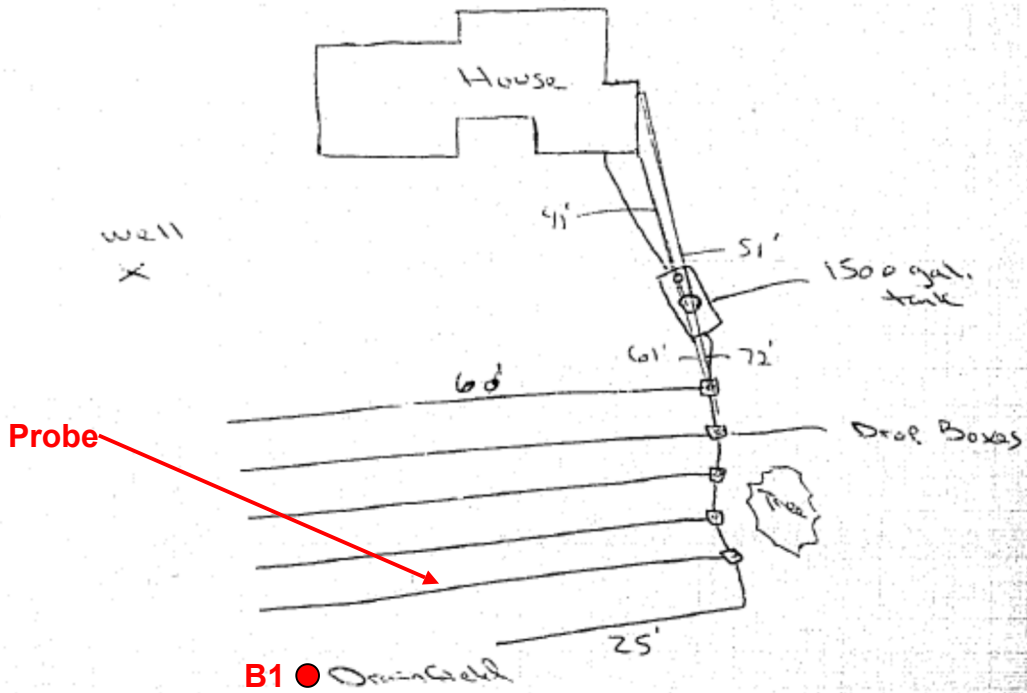
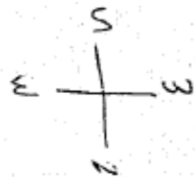
***Any "no" answer above indicates the system is failing to protect groundwater.**

Describe verification methods and results:

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.

***original as-built shown
field notes by BZ in RED**



**Relative Elevations
in Decimal Feet:**

- B1: 100.0**
- B1 Redox: 100.0**
- Bottom of rock: 97.2**
- B1 Separation: -2.8**
- Benchmark: 100.9
(garage floor)**

Logs of Soil Borings

Location of Project: 14598 Old Guslander Trail N Marine on St Croix, MN 55047

Borings Made by Ben Zierke

Date:

11/14/2023

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-----	-----
0-6"	10YR 2/2 loam, 7.5YR 3/6 iron staining (redox)		
6-12"	7.5YR 4/4 sandy loam		
12-30"	10YR 3/1 loam, 10YR 5/4 clay loam with 7.5YR 5/8 and 10YR 5/1 redox		
30-36"	10YR 4/1 loam (depleted matrix)		

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 0 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:

Purpose: This form *may* be used to certify the compliance status of the sewage tank components of the SSTS. **This form is not a complete SSTS inspection report, only a tank integrity assessment, and may only certify sewage tank compliance status when entirely completed and signed by a qualified professional.** SSTS compliance inspection report forms can be found at: <https://www.pca.state.mn.us/water/inspections>.

Instructions: This form may be completed, and signed, by a Designated Certified Individual (DCI) of a licensed SSTS inspection, maintenance, installation, or service provider business who personally conducts the necessary procedures to assess the compliance status of each sewage tank in the system. Only a licensed maintenance business is authorized to pump the tank for assessment. A copy of this information should be submitted to the system owner and be maintained by the licensed SSTS business for a period of five (5) years from the assessment date.

When this form is signed by a qualified certified professional, it becomes *necessary supporting documentation* to an Existing System Compliance Inspection Report: *Compliance inspection form - Existing system (wq-wwists4-31b)*. This form can be found on the MPCA website at <https://www.pca.state.mn.us/water/inspections>.

The information and certified statement on this form is **required** when existing septic tank compliance status is determined by an individual other than the SSTS Inspector that submits an inspection report. This form represents a third party assessment of SSTS component compliance and is allowable under Minn. R. 7082.0700, subp. 4(B)(1). This form is valid for a period of three years beyond the signature date on this form unless a new evaluation is requested by the owner or owner's agent or is required according to local regulations. Additional Administrative Rule references for this activity can be found at Minn. R. 7082.0700, subp. 4(B),(C), and (D) and; Minn. R. 7083.0730(C).

Owner information

Owner/Representative: Jan Lodewijk - Grootaers
 Property address: 14598 Old bus landen TR
 Local Regulatory Authority: _____ Parcel ID: _____

System status

System status on date (mm/dd/yyyy): 11-16-2023

Certificate of sewage tank compliance

Notice of sewage tank non-compliance

Compliance criteria:

The SSTS has a seepage pit, cesspool, drywell, leaching pit, or other pit - "Failure to Protect Groundwater."	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
The SSTS has a sewage tank that leaks below the designed operating depth - "Failure to Protect Groundwater."	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
The SSTS presents a threat to public safety by reason of structurally unsound (damaged, cracked, or weak) maintenance hole cover(s) or lids or any other unsafe condition - "Imminent Threat to Public Health or Safety."	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No

Any "yes" answer above indicates sewage tank non-compliance.

Company information

Company name: Olson's Sewer Service, Inc.
 Business license number: _____

Designated Certified Individual (DCI) information

Print name: Joel Hyphen
 Certification number: 6292

I personally conducted the work described above as a Designated Certified Individual of a Minnesota-licensed SSTS inspection, maintenance, installation, or service provider Business. I personally conducted the necessary procedures to assess the compliance status of each sewage tank in this SSTS.

By typing/signing 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.

Designated Certified Individual's signature: [Signature]
 (This document has been electronically signed.)

Date (mm/dd/yyyy): 11-16-2023