

ZIERKE SOIL TESTING

Bill Mellgren
8097 Morgan Ave
Stillwater, MN 55082

5/9/2019

Dear Bill Mellgren,

At your request, I have conducted a septic inspection to determine the compliance status of your 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 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. Proper care and maintenance of the system can prolong lifespan – see <https://septic.umn.edu/septic-system-owners> for more information. A copy of this report will be filed with your local unit of government for their records.

Sincerely,



Benjamin Zierke

ADDRESS:
28587 Jeffrey Ave
Chisago City, MN 55013

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



Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155-4194

Compliance Inspection Form
Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms - additional local requirements may also apply.

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

For local tracking purposes:

System Status

System status on date (mm/dd/yyyy): 5/9/2019

[X] Compliant - Certificate of Compliance
(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

[] Noncompliant - Notice of Noncompliance
(See Upgrade Requirements on page 3.)

Reason(s) for noncompliance (check all applicable)

- [] Impact on Public Health (Compliance Component #1) - Imminent threat to public health and safety
[] Other Compliance Conditions (Compliance Component #3) - Imminent threat to public health and safety
[] Tank Integrity (Compliance Component #2) - Failing to protect groundwater
[] Other Compliance Conditions (Compliance Component #3) - Failing to protect groundwater
[] Soil Separation (Compliance Component #4) - Failing to protect groundwater
[] Operating permit/monitoring plan requirements (Compliance Component #5) - Noncompliant

Property Information

Parcel ID# or Sec/Twp/Range:

Property address: 8097 Morgan Ave N Stillwater, MN 55082 Reason for inspection: Sale

Property owner: Bill Mellgren Owner's phone: 651-248-4406

Owner's representative: Representative phone:

Local regulatory authority: Washington County Regulatory authority phone: 651-430-6655

Brief system description: 1250 gallon pre-cast septic tank, gravity rock trench drainfield

Comments or recommendations:

Borings taken 10/9/2018. Verified system function and tank operating levels 5/9/2019.

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.

Inspector name: Benjamin Zierke Certification number: C9594

Business name: Zierke Soil Testing License number: L119

Inspector signature: [Signature] Phone number: 651-249-1346

Necessary or Locally Required Attachments

[X] Soil boring logs [X] System/As-built drawing [] Forms per local ordinance

[] 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.

Comments/Explanation:

Bill did not report any issues with the system.

Verification method(s):

- Searched for surface outlet
- Searched for seeping in yard/backup in home
- Excessive ponding in soil system/D-boxes
- Homeowner testimony (See Comments/Explanation)
- “Black soil” above soil dispersal system
- System requires “emergency” pumping
- Performed dye test
- Unable to verify (See Comments/Explanation)
- Other methods not listed (See Comments/Explanation)

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, or leaching pit. <i>Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Any “yes” answer above indicates the system is failing to protect groundwater.

Comments/Explanation:

Tank in good condition last maintenance pumping 8/28/2017 (see attached). Observed normal operating level and no issues 5/9/2019. Next maintenance pumping due August 2020.

Verification method(s):

- Probed tank(s) bottom
- Examined construction records
- Examined Tank Integrity Form (Attach)
- Observed liquid level below operating depth
- Examined empty (pumped) tanks(s)
- Probed outside tank(s) for “black soil”
- Unable to verify (See Comments/Explanation)
- Other methods not listed (See Comments/Explanation)

3. Other Compliance Conditions – Compliance component #3 of 5

- a. Maintenance hole covers are damaged, cracked, unsecured, or appear to be structurally unsound. Yes* No Unknown
- b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. Yes* No Unknown
***System is an imminent threat to public health and safety.**

Explain:

- c. System is non-protective of ground water for other conditions as determined by inspector. Yes* No
***System is failing to protect groundwater.**

Explain:

4. Soil Separation – Compliance component #4 of 5

Date of installation: 8/20/1990 Unknown
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging? Yes No

Compliance criteria:

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: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	<input type="checkbox"/> Yes <input type="checkbox"/> No
“Experimental”, “Other”, or “Performance” 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.	<input type="checkbox"/> Yes <input type="checkbox"/> No

Verification method(s):

Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local requirements differ.

- Conducted soil observation(s) (Attach boring logs)
- Two previous verifications (Attach boring logs)
- Not applicable (Holding tank(s), no drainfield)
- Unable to verify (See Comments/Explanation)
- Other (See Comments/Explanation)

Comments/Explanation:

Indicate depths or elevations

A. Bottom of distribution media	96.6'
B. Periodically saturated soil/bedrock	94.2'
C. System separation	2.4'
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.

5. Operating Permit and Nitrogen BMP* – Compliance component #5 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? 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. Operating Permit number: _____ Have the Operating Permit requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
b. Is the required nitrogen BMP in place and properly functioning?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Any “no” answer indicates Noncompliance.

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.

8097 Morgan Ave N

Relative Elevations (in decimal feet)
B1: 100.0, redox 94.1
B2: 100.0, redox 94.2
Bottom of rock: 96.6
B1 Separation: 2.5
B2 Separation: 2.4
Benchmark: 101.7
(garage floor)
Height of instrument: 105.2



Google Earth

90 ft



Logs of Soil Borings

Location of Project: 8097 Morgan Ave N Stillwater, MN 55082

Borings Made by Ben Zierke

Date: 10/9/2018

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-----	-----
0-12"	7.5YR 3/3 loam	0-12"	7.5YR 3/3 loam
12-32"	7.5YR 4/4 loam	12-32"	7.5YR 4/4 loam
32-36"	7.5YR 4/4 sandy loam	32-36"	7.5YR 4/4 sandy loam
36-47"	10YR 4/4 coarse sand	36-44"	10YR 4/4 coarse sand
47-76"	10YR 5/4 fine-very fine sand, faint redox below 71	44-76"	10YR 5/4 fine-very fine sand, faint redox below 70

End of boring at 6.3 feet
Standing water table:
 Present at _____ feet of depth _____ Hours after boring
 Standing water not present in hole
Mottled Soil:
 Observed at 5.9 feet of depth
 Mottled soil not present in bore hole
 Comments:

End of boring at 6.3 feet
Standing water table:
 Present at _____ feet of depth _____ Hours after boring
 Standing water not present in hole
Mottled Soil:
 Observed at 5.8 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:

Septic Tank Maintenance Reporting Form

**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Date of maintenance: 8-28-17 Reason for maintenance: Regular maintenance
 Property address: 8097 Morgan Ave City: Stillwater State: MN Zip: 55082
 Property owner's name: William Melgren
 Property-owner's address if different: _____
 City: _____ State: _____ ZIP: _____ Phone: _____ Fax: _____

1. Access used to remove septage: Maintenance hole Other (Go to #3 below)
 2. If maintenance hole was used, were all covers securely replaced? Yes No please explain

Explanation: _____

3. If owner refuses to allow a Subsurface Sewage Treatment System (SSTS) to be pumped through the maintenance hole, have them complete and sign the following statement.

I, _____ (owner's name), refuse to allow the removal of the solids and liquids through the maintenance hole. I understand that removal of solids and liquids through other access points is not considered maintenance.

Owner's signature: _____ Date: _____

4. Is the tank designed as a leaky tank? example: seepage pit, cesspool, drywell, leaching pit

Tank #1: Yes No Verification method used? Visual
 Tank #2: Yes No Verification method used? NA

5. Is there evidence of tank leakage from a septic, holding, pretreatment or pump tank below the operating depth or evidence of damaged, cracked or structurally unsound maintenance hole covers?

Tank	Leaking out	Leaking in	Cover damage
Septic/holding Tank #1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Septic/holding Tank #2	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pretreatment Tank	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pump Tank	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

6. How many gallons of septage were removed?

Tank #1: 1250 Tank #2: NA Pretreatment Tank: NA Pump Tank: NA

7. Is there any sensory (smell and/or sight) evidence of non-domestic wastes?

Yes Please explain: _____
 No Disposal site Wastewater treatment plant Land application Other please explain

Explanation: _____

Other information: List any troubleshooting, minor repairs conducted, tank safety* concerns or other concerns: _____

8. **Certification:** I hereby certify as a State of Minnesota-certified SSTS Maintainer that I personally conducted the work and made the observations, or directly supervised others in the performance of this job.

Maintainer's name and address: Row Sewer / Jim

Maintainer's license #: L33097 Maintainer's phone: 651 465 5505

Maintainer's signature: [Signature] Date: 8-28-17