

# ZIERKE SOIL TESTING

Elaine Borndale  
16237 Harrow Ave N  
Hugo, MN 55038

11/23/2020

Dear Elaine Borndale,

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. 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



# 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): 11/23/2020

**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: 16237 Harrow Ave N Hugo, MN 55038 Reason for inspection: Sale

Property owner: Elaine Borndale Owner's phone: \_\_\_\_\_

or

Owner's representative: Sandy Dewall Representative phone: 651-248-6516

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

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

Comments or recommendations:

### 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:  Phone number: 651-249-1346

### Necessary or Locally Required Attachments

- Soil boring logs
- System/As-built drawing
- Forms per local ordinance
- Other information (list): Tank Integrity

**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:**

No signs of ponding/seepage present during site visit 11/19/2020.

**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:**

Tanks pumped by Rowe Sewer Service 6/19/2020. See attached tank integrity forms.

**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: 7/14/1994  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	101.7'
B. Periodically saturated soil/bedrock	98.5'
C. System separation	3.2'
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.

## Logs of Soil Borings

Location of Project: 16237 Harrow Ave N Hugo, MN 55038

Borings Made by Ben Zierke

Date: 11/19/2020

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-----	-----
0-14"	10YR 3/2 loamy fine sand		
14-35"	7.5YR 4/4 loamy fine sand, redox (7.5YR 5/8) present below 18"		
35-40"	7.5YR 4/6 loamy sand lamellae layer		

End of boring at 3.3 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:

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-----	-----

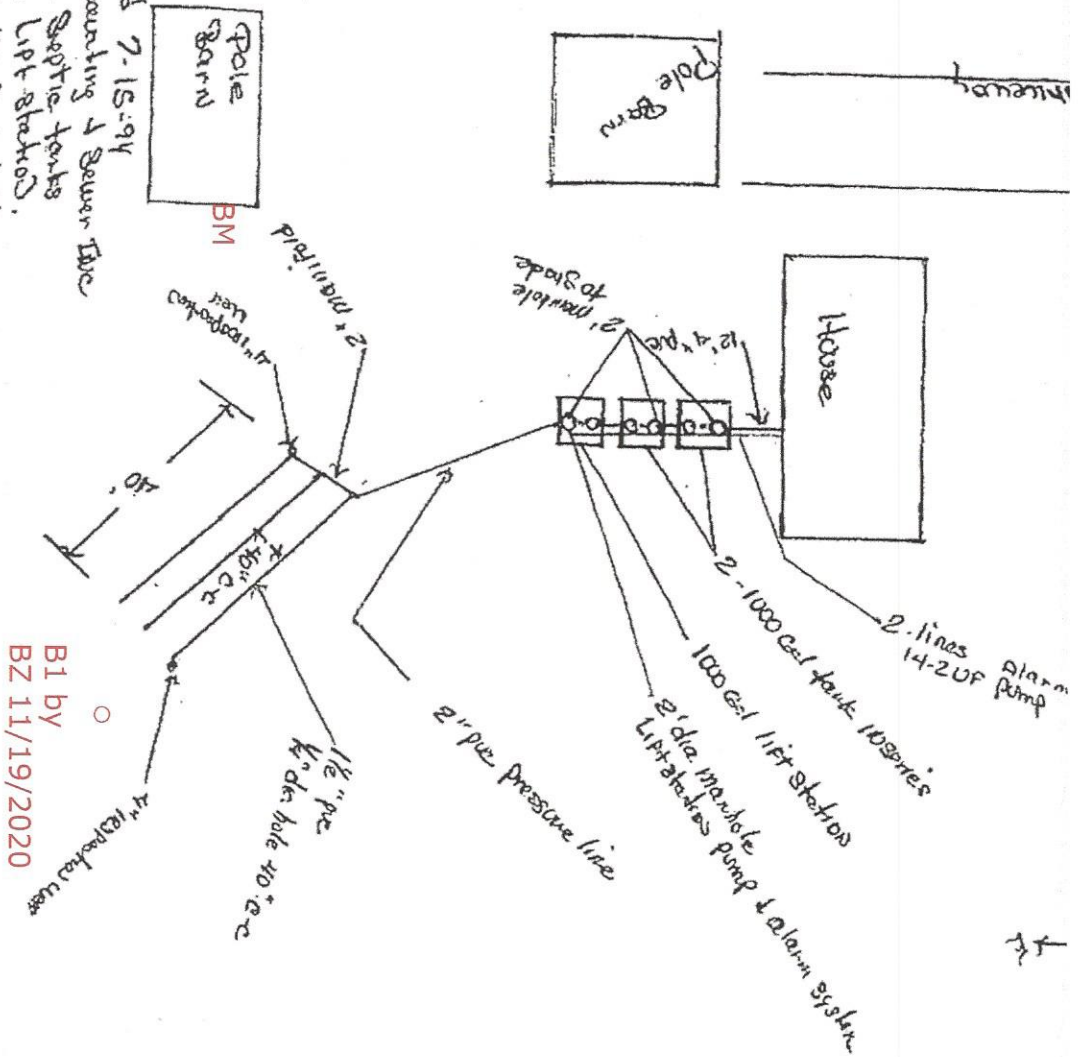
End of boring at \_\_\_\_\_ feet  
**Standing water table:**  
 Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring  
 Standing water not present in hole   
**Mottled Soil:**  
 Observed at \_\_\_\_\_ feet of depth \_\_\_\_\_  
 Mottled soil not present in bore hole   
 Comments:

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:

Installed 7-15-94  
 C&B Excavating & Sewer Inc  
 2-1000 Septic tanks  
 1-1000 lift stations  
 1/2 hp Geoside pump & alarm  
 400 Gals. tank

Relative Elevation in Decimal Feet 11/19/2020:

- B1: 100.0
- B1 restriction: 98.5
- Bottom of rock: 101.7
- B1 Separation: 3.2
- Benchmark: 102.5 - bottom of shed siding



B1 by  
 BZ 11/19/2020

# Sewage tank maintenance reporting form

## Subsurface Sewage Treatment Systems (SSTS) Program

**Purpose:** Management and maintenance of Subsurface Sewage Treatment Systems (SSTS) are important to ensure resource protection and long-term and cost-effective sewage treatment. Completion of this form complies with the sewage tank maintenance requirements under Minn. R. 7080.2450 and 7082.0600. 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 and may only certify sewage tank compliance status when entirely completed and signed on page 3 by a qualified professional.**

**Instructions:** A copy of this information must be submitted to the system owner within 30 days of the maintenance date and be maintained by the licensed SSTS maintainer business for a period of five (5) years from the maintenance date. Maintenance reporting to the local unit of government **may** be required by local ordinance. Check with your local SSTS program for maintenance reporting protocol.

### Secure maintenance hole covers

All maintenance hole covers must be returned to service in a sound and durable condition and be capable of withstanding the anticipated load.

Covers must be re-secured in accordance with Minn. R. 7080.2450, subp. 3, Items C or D:

- a) Covers installed under local ordinances adopted after February 4, 2008 must be locked, bolted or screwed or must be 95 pounds in weight. They must be made of material suitable for outdoor use, resistant to ultraviolet degradation and leaks, and not susceptible to being slid or flipped. They must have a label warning of hazardous conditions inside the tank. All screw openings must be refastened.
- b) Covers installed under local ordinances adopted before February 4, 2008 must either be buried with at least 12 inches of soil cover or be secured according to the local ordinance in effect before February 4, 2008.
- c) Covers must meet item 'a' above when raised to the ground surface or less than 12 inches from the ground surface.

### Reporting information

Date of maintenance (mm/dd/yyyy): 06 19 2020 Reason for maintenance: Regular maintenance  
 Property address: 16237 Harrow Ave N Parcel ID: \_\_\_\_\_  
 City: Hugo State: Mn Zip code: 55038  
 Property owner's name: Sandra Borndale  
 Property-owner's address if different: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_  
 Phone number: \_\_\_\_\_ Email address: \_\_\_\_\_

1. Did you measure the accumulation of scum and sludge?  Yes  No (tank(s) pumped without measuring)

Tank (check if present)	Scum	Sludge	Operating depth	Percent full
<input checked="" type="checkbox"/> Septic/holding tank #1	8"	10"	53"	
<input checked="" type="checkbox"/> Septic/holding tank #2	2"	4"	53"	
<input type="checkbox"/> Pretreatment tank				
<input checked="" type="checkbox"/> Pump tank	0	2"	24"	

2. Access used to remove septage:  Maintenance hole  Other (Unless a holding tank, go to #4 below)

3. If the maintenance hole was used, were all covers secured in place?  Yes  No If no, please explain below:

4. If the 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, \_\_\_\_\_, refuse to allow the removal of the solids and liquids through the maintenance  
(Print owner's name)  
 hole. I understand that removal of solids and liquids through other access points is not considered a compliant method of solids removal and does not fulfill the solids removal requirements of Minn. R. 7080.2450 and 7082.0600.

Owner's signature: \_\_\_\_\_ Date (mm/dd/yyyy): \_\_\_\_\_

Property address: 16237 Harrow Ave N Parcel ID: \_\_\_\_\_  
 City: Hugo State: MN Zip code: 55038

5. Is the tank designed as a leaky tank? (Example: seepage pit, cesspool, drywell, leaching pit)

Tank #1:  Yes  No Verification method used: \_\_\_\_\_  
 Tank #2:  Yes  No Verification method used: \_\_\_\_\_

6. Is there evidence of the following?

Tank (check if present)	Tank leaks below the designed operating depth	Tank leaks above the designed operating depth	Maintenance hole cover is damaged, cracked, unsecured, or appears to be structurally unsound
<input checked="" type="checkbox"/> 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
<input checked="" type="checkbox"/> Septic/holding Tank #2	<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
<input type="checkbox"/> 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
<input checked="" type="checkbox"/> Pump Tank	<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
Describe detail for any "Yes"			

7. How many gallons of septage were removed?

Tank #1: 1000 Tank #2: 1000 Pretreatment Tank: NA Pump Tank: 200

8. Where was the septage taken?  Wastewater treatment facility  Land application  Other

Explanation (Facility name/Site #): As S Field / 00.00089.00

9. Did you identify any operational issues or unsafe conditions while assessing the sewage tanks in this system?

Yes  No If yes, identify tank and explain:  
 Evidence of non-domestic waste  Baffle(s) condition  Effluent screen condition  
 Maintenance hole and extensions condition  Other conditions (e.g. structural integrity of tank or lid, electrical hazard, etc.)

Explanation: \_\_\_\_\_

10. List any troubleshooting and minor repairs completed or declined by owner:

Troubleshooting and repairs conducted:  Repairs declined by owner:  
Pump Repair Liberty 1/2 Horse Pump

Additional comments or suggestions for owner's consideration:

**Pumping record**

I personally conducted the work described above on behalf of a Minnesota-licensed SSTS Maintenance Business, in compliance with Minnesota Rules Chapters 7080 – 7083:

As a noncertified individual who has received proper training, daily work review, and periodic observation, or  
 As a designated certified individual of the business listed below.

**Company information**

Company name: Row Sewer Service

Business license number: L3309

Email: mark.rogers@rowsewer.com

Employee's signature: [Signature]

**Employee information**

Print name: James A Deitke

Certification number: (if applicable): C3629

Phone number: 651 465 5505

Date (mm/dd/yyyy): 06 19 2020



Property address: 16237 Harrow Ave  
City: Hugo State: Mn

Parcel ID: \_\_\_\_\_  
Zip code: 55038

### Optional section: Sewage Tank Compliance Certification

This form does not represent a complete system inspection report and only certifies sewage tank compliance status.

**Instructions:** This section of the form may be completed and signed by a Designated Certified Individual (DCI) of a licensed SSTS Maintenance Business who personally conducts the necessary procedures to assess the compliance status of each sewage tank in the system.

When this section of the 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/ssts-and-msts-technical-and-compliance-criteria>.

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 the inspection report. It represents a third party assessment of SSTS component compliance and is allowable under Minn. R. 7082.0700, subp. 4 Item (B) subitem (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 Items B, C, and D; 7083.0730 Item C.

**Certificate of sewage tank compliance**  
Affirm all three statements:

- The SSTS does not contain a seepage pit, cesspool, drywell, leaching pit, or other pit.
- It does not contain a sewage tank that was designed to be watertight, but subsequently leaks below the designed operating depth.
- It does not represent an imminent safety threat by reason of unsecured, damaged, or weak maintenance hole cover(s) or other unsafe condition.

**Notice of sewage tank non-compliance**  
Select all that apply:

- The SSTS has a seepage pit, cesspool, drywell, leaching pit, or other pit – **"Failure to Protect Groundwater."**
- It has a sewage tank that was designed to be watertight, but subsequently leaks below the designed operating depth – **"Failure to Protect Groundwater."**
- It presents a threat to public safety by reason of unsecured, damaged, or weak maintenance hole cover(s) or other unsafe condition – **"Imminent Threat to Public Health or Safety."**

**Company information**

Company name: Roco Sewer Service

Business license number: L3309

**Designated Certified Individual (DCI) information**

Print name: James A Deilke

Certification number: C3619

I personally conducted the work described above as a Designated Certified Individual of a Minnesota-licensed SSTS Maintenance Business. I personally conducted the necessary procedures to assess the compliance status of each sewage tank in this SSTS:

Designated Certified Individual's signature:  Date (mm/dd/yyyy): 06/19/2020