

ZIERKE SOIL TESTING

Gary Conner
355 Marshall Ave
St Paul, MN 55102

4/25/2022

Dear Gary Conner,

At your request, I have conducted a septic inspection to determine the compliance status of the Natura Farms 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 septic 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 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: 3003220340001 Reason for Inspection operating permit
Local regulatory authority info: Washington County
Property address: 19060 Manning Trl N Marine on St Croix, MN 55047
Owner/representative: Gary Conner Owner's phone: 651-329-1832
Brief system description: Pre-cast septic tank and gravity rock trench drainfield

System status

System status on date (mm/dd/yyyy): 4/25/2022

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*

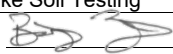
Comments or recommendations

Recommend replacing inspection pipes over drop boxes. Drop boxes should be uncovered and cleaned out as well. In the future, mark inspection pipe locations with stakes so that snow plow can avoid them.

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:  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

Attached supporting documentation:

Other: _____
 Not applicable

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 during site visit 4/25/2022. Property manager reported no past issues with the system, other than a supply pipe freeze up this past winter.

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:	

Attached supporting documentation:

Empty tank(s) viewed by inspector

Name of maintenance business: Smilies

License number of maintenance business: 2428

Date of maintenance: 4/25/2022

Existing tank integrity assessment (Attach)

Date of maintenance (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: _____

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

Describe verification methods and results:

Present for pumping by Smilies Sewer 4/25/2022. 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? 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 10/16/1989 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	96.5'
B. Periodically saturated soil/bedrock	93.5'+
C. System separation	3.0'+
D. Required compliance separation*	3.0'

*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:

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.

4" CAST IRON PIPE
THROUGH THE DRIVEWAY -
4" OF STYRAFOAM OVER
THE CAST IRON PIPE BEFORE
BACKFILLING

DRIVEWAY

Septic Tank

2 3/4" GAL. CAP. 2 TANKS -
4" CLEARANCE OUT TO WALL

4" CLEARANCE OUTS ON SPID BOXES

**Relative Elevations
in Decimal Feet:**
B1: 100.0, redox 93.5+
Bottom of rock: 96.5
B1 Separation: 3.0+
Benchmark: 101.2
(cover on septic tank)

1270 SQ. FT. OF DRAINFIELD
7 TRENCHES - APPROX. 60' LONG
36" WIDE - 36" TO 42" DEEP
7'6" CENTER TO CENTER TRENCH
SPACING
KEEP BOTTOM OF TRENCH LEVEL

Drainfield

SLOPE →

FUTURE
DRAINFIELD
AREA

BH1

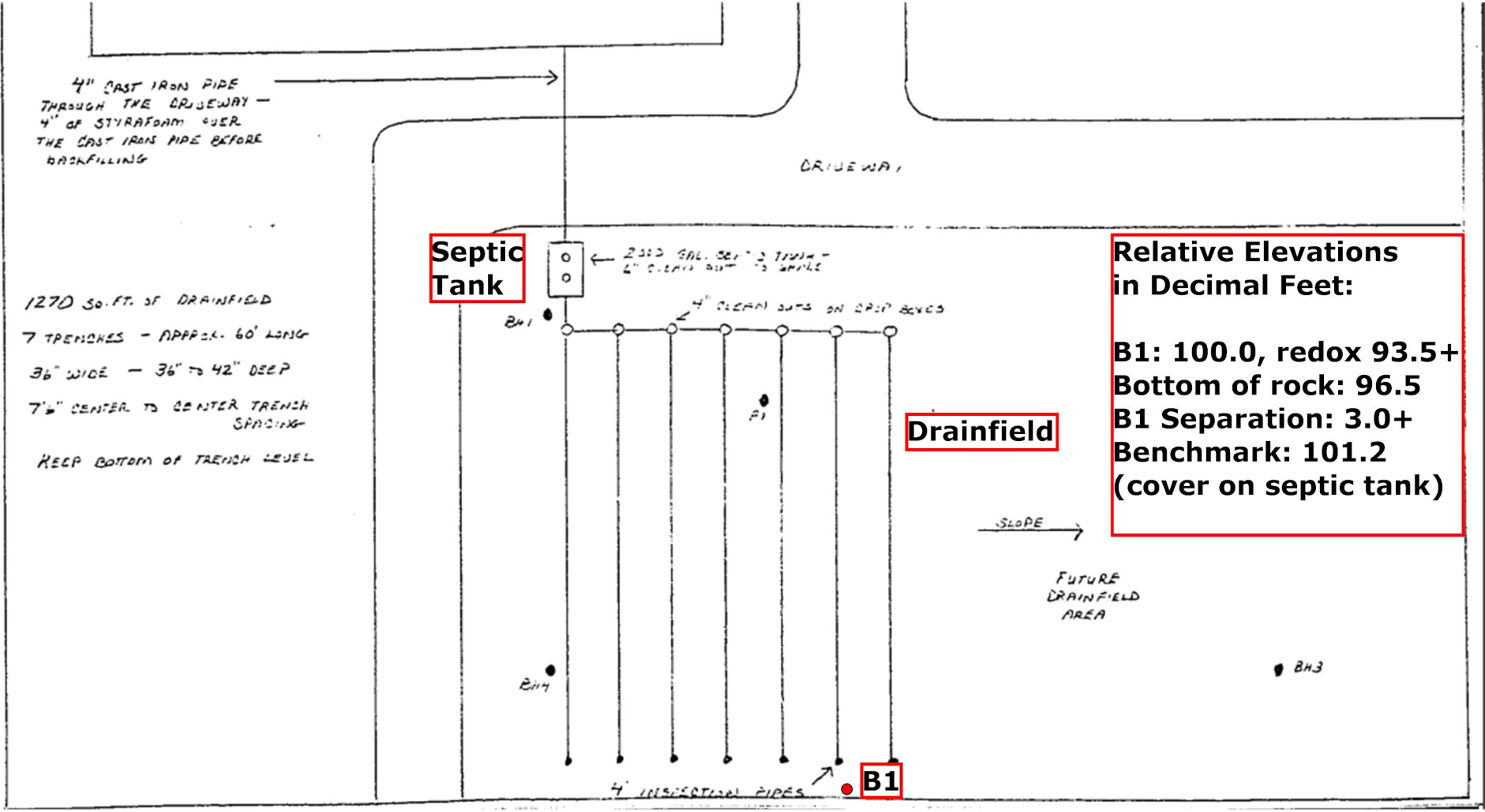
P1

BH4

BH3

4" INSULATION PIPES

B1



Logs of Soil Borings

Location of Project: 19060 Manning Trl N Marine on St Croix, MN 55047

Borings Made by Ben Zierke

Date:

4/25/2022

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-----	-----
0-13"	10YR 3/2 loamy sand		
13-28"	10YR 4/3 medium sand		
28-45"	7.5YR 4/4 medium sand, 10% rock		
45-66"	10YR 5/4 medium-coarse sand, 15% rock		
66-78"	10YR 4/3, 10YR 4/4 coarse sand 20% rock		

End of boring at 6.5 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:

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: