ZIERKE SOIL TESTING

Cora Indehar
9950 223rd St Ct N
Forest Lake, MN 55025

9/10/2019

Dear Cora Indehar,

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

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): 9/10/2019

☒ **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: 9950 223rd St Ct N Forest Lake, MN 55025
Reason for inspection: Sale

Property owner: Cora Indehar
Owner's phone: 651-307-2819

or

Owner's representative:
Representative phone:

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

Brief system description: 1250 gallon septic tank, split 1500 gallon tank (pump in 500 gal cmpt), gravity rock trench drainfield

Comments or recommendations:

Previously passed compliance 3/24/2016.

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.	☐ Yes ☒ No
System discharges sewage to drain tile or surface waters.	☐ Yes ☒ No
System causes sewage backup into dwelling or establishment.	☐ Yes ☒ No

Any "yes" answer above indicates the system is an imminent threat to public health and safety.

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)*

Comments/Explanation:

No signs of past leakage or ponding in drainfield, homeowner has not had any issues with system.

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:	
System consists of a seepage pit, cesspool, drywell, or leaching pit. *Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.*	☐ Yes ☒ No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	☐ Yes ☒ No

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

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)*

Comments/Explanation:

Tanks pumped 5/28/2019 by Olsons. Tanks watertight and baffles in place.

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:

Property address: 9950 223rd St Ct N Forest Lake, MN 55025 Inspector initials/Date: BZ | 9/10/2019 (mm/dd/yyyy)

4. Soil Separation – Compliance component #4 of 5

Date of installation: 9/26/1993 (mm/dd/yyyy) ☐ Unknown

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.	☒ Yes ☐ 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.*	☐ Yes ☐ 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.	☐ Yes ☐ No

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

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	99.4'
B. Periodically saturated soil/bedrock	96.8'
C. System separation	2.6'
D. Required compliance separation*	2.0'

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

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?	☐ Yes ☐ No
b. Is the required nitrogen BMP in place and properly functioning?	☐ Yes ☐ 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.*

Service Order

Service Order #: 91402

Olson's Sewer Service, Inc. 17638 Lyons Street N.E. Forest Lake, MN 55025 651-464-2082

Date: 5/28/2019 **Preferred Time:** 8:00 AM 12:00 PM **Road Restrictions (Tons)** **IMPORTANT NOTE**

Addr: 9950 223rd Street Court North

Name: Cora Indehar
City: Forest Lake, MN 55025
Cty: Washington
Twp:

C1: (651) 307-2819 Cora
C2: (651) 336-1537 Tim

Driving Dir	Cranberry Heights
Tank Type	Pre-cast
Treatment Type	Pressure Trench
Treatment Area	750Sq Ft
Dist to Tank 1	150 Ft
Dist to Lift Tank	

	PreT	T1	T1C	T2	T3	LS
Sizes:		1250		1000		500
Depth to MH:		grade C		12" O		Grade
Riser Feet:				2		
LS Outlet to Bottom:						

Water Meter	
Effluent Filter	
Two Techs	
City Sewer	N
Install Date	9/26/1993
Installer	Mitch Perry
As Built	W1529
Cleanout	
Power Disconnect at Lift	Y
Looped	N
# Bedrooms	
Pump Breaker	

Baseline Equal Dist Hgt

1		4	
2		5	
3		6	

	PreT	T1	T1C	T2	T3	LS
Covers Secure:		Y		Y		
Infiltration ↑ OL:		N				
Infiltration ↓ OL:		N		N		
Scum Depth:		1		0		
Sludge Depth:		6		4		
Inlet Baffle Intact:		Y		Y		
Outlet Baffle Intact:				Y		
Pump Function:						
Alarm Function:						
Filter Alarm Function:						

Lift Pump: 1/3 hp.38 GPM @ 12' of head=120 per cycle

	Service Type	Last Service Date	Mobilize Time	At Site Time	Complete Time	Disposal Time	Leave Disposal Time
1	Maintenance Pumping	3/9/2016	7:40 AM	8:10 AM	9:20 AM	10:05 AM	
2	LUG Permit	3/9/2016		11:10 AM	11:50 AM	2:00 PM	
3	Dig Open	3/9/2016					
4	Riser Install						

Time Dosing		Iron Filter		S&E Quality		Eq Dist Hgt 1	
Lint Filter		Sump Pump		PH Reading		2	
Switch Tree		Ejector Pump		Non Dom Wastes		3	
Event Counter		Mgmt Plan				4	
Garbage Disp.		Monitoring		TA Visual Insp		5	
Water Softener		Irrigation				6	

	Readings	Previous	Functioning
Event/Cycle Ctr			
Elapsed Time			
Time Dosing			
Water Meter			

Dump Site	Gal Pumped
Harris	2215
Total:	**2215**

CSR: BD | Garden Hose | Chemicals | Reminder: 5/1/2022
CBYD/Date | Lift Station Last Service: 3/9/2016
Vehicle: 01
Service Person: MS
Inv #: 89144
Follow Up

Sewage Type Disposed: Septage X | Holding Tank | Commercial
Amt Billed: 467.00 | Payment Type: pd 5/31 cc

Service Order Comments	Cora contacted us through our web site. She called in when Barb was about to contact her.
Site Comments	the second tank is a 1500 gallon split tank with a 1000 gallon septic tank and the 500 gallon lift station.
Price Quoted	450.00 + 17.00 + Risers (369.00 - 469.00) If over 469.00 need approval for the riser
Post Comments	Riser on T2 is starting to buckle down by the rank; riser is 28" deep and to ring to grade will need to be 41" long. I also recommend a new cover. Mini Hoe job-2-eople. BD provided an estimate and we will be doing this. Est #15674

Logs of Soil Borings

Location of Project: 9950 223rd St Ct N 55025

Borings Made by Ben Zierke Date: 3/7/2016

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

Depth, in Inches	Boring Number 1
0----------	----------
0-66"	Sand fill, 10YR 4/4

End of boring at 5.5 feet

Standing water table:

Present at feet of depth Hours after boring

Standing water not present in hole [X]

Mottled Soil:

Observed at feet of depth

Mottled soil not present in bore hole [X]

Comments:

Depth, in Inches	Boring Number 2
0----------	----------
0-20"	Sand fill
20-48"	Sandy loam fill
48-54"	10YR 3/3 sandy loam
54-60"	10YR 5/4 clay loam, redox starting at 56"

End of boring at 5 feet

Standing water table:

Present at feet of depth Hours after boring

Standing water not present in hole [X]

Mottled Soil:

Observed at 4.7 feet of depth

Mottled soil not present in bore hole [ ]

Comments:

Depth, in Inches	Boring Number 3
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:

Depth, in Inches	Boring Number 4
0----------	----------

End of boring at feet

Standing water table:

Present at feet of depth Hours after boring

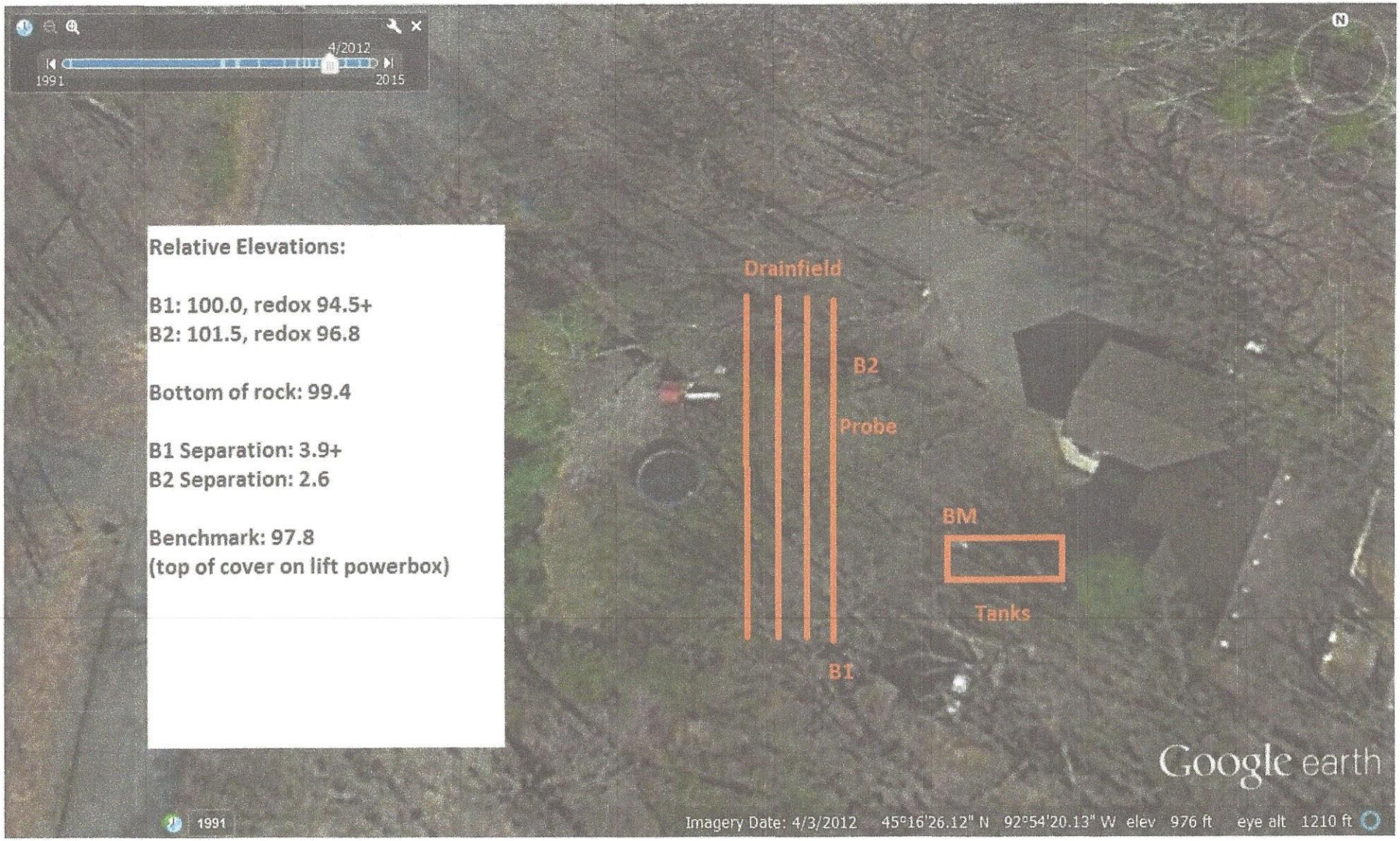
Standing water not present in hole [ ]

Mottled Soil:

Observed at feet of depth

Mottled soil not present in bore hole [ ]

Comments:


4/2012
1991
2015
Relative Elevations:
B1: 100.0, redox 94.5+
B2: 101.5, redox 96.8
Bottom of rock: 99.4
B1 Separation: 3.9+
B2 Separation: 2.6
Benchmark: 97.8
(top of cover on lift powerbox)
Drainfield
B2
Probe
BM
Tanks
BI
Google earth
1991
Imagery Date: 4/3/2012 45°16'26.12" N 92°54'20.13" W elev 976 ft eye alt 1210 ft