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): 5/9/2016

☐ **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: 12620 181st St N Marine on St Croix MN 55047
Reason for inspection: Sale

Property owner: Karla Krick
Owner's phone: 651-246-2114

or

Owner's representative:
Representative phone:

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

Brief system description: Two 1,000 gallon septic tanks and a gravity drop box drainfield

Comments or recommendations:

System was installed in 1997 and was not installed in correct location. Design sketch and paperwork instructed installer to put system between B-2, B-4, and B-5 (see attached sketch). System went into area between B-1, B-2, and B-3. Paperwork provided by homeowner includes permit review from Washington County (see attached).

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: 9594

Business name: Zierke Soil Testing
License number: 119

Inspector signature:
Phone number: 651-462-2294

Necessary or Locally Required Attachments

☒ Soil boring logs ☒ System/As-built drawing ☐ Forms per local ordinance

☒ Other information (list): Washington County SSTS Maint. Report, Washington County Permit Review Paperwork

Property address: 12620 181st St N Marine on St Croix MN 55047 Inspector initials/Date: BJ | 5/9/2016 (mm/dd/yyyy)

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.

Comments/Explanation:

Homeowner has not had any issues with the drainfield.

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. *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.

Comments/Explanation:

Tanks last pumped 10/23/14. See attached.

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:

Property address: 12620 181st St N Marine on St Croix MN 55047 Inspector initials/Date: BZ | 5/9/2016 (mm/dd/yyyy)

4. Soil Separation – Compliance component #4 of 5

Date of installation: 7/14/1997 (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	97.2
B. Periodically saturated soil/bedrock	97.0
C. System separation	0.2
D. Required compliance separation*	3.0

*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.*

Logs of Soil Borings

Location of Project: 12620 181st St N Marine On St Croix, MN 55047

Borings Made by Ben Zierke Date: 4/25/2016

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

Depth, in Inches	Boring Number 1
0----------	----------
0-8"	10YR 3/3 sandy loam
8-36"	10 YR 4/4 sandy loam
36-40"	7.5YR 4/4 sandy loam, standing water at 36"

End of boring at 3.3 feet

Standing water table:

Present at feet of depth Hours after boring

Standing water not present in hole [5]

Mottled Soil:

Observed at 3 feet of depth

Mottled soil not present in bore hole [ ]

Comments:

Depth, in Inches	Boring Number 2
0----------	----------
0-6"	10YR 3/3 loamy sand
6-66"	7.5YR 4/4 loamy sand, intermittent light lamellic bands below 48"

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 3
0----------	----------
0-6"	10YR 3/3 loamy sand
6-36"	10YR 4/4 loamy sand
36-40"	10YR 5/4 clay loam, strong redox at 36"

End of boring at 3.3 feet

Standing water table:

Present at feet of depth Hours after boring

Standing water not present in hole [X]

Mottled Soil:

Observed at 3 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:

Relative Elevations

- B1: 100.0, redox 97.0
- B2: 99.1, redox 93.6+
- B3: 100.1, redox 97.1

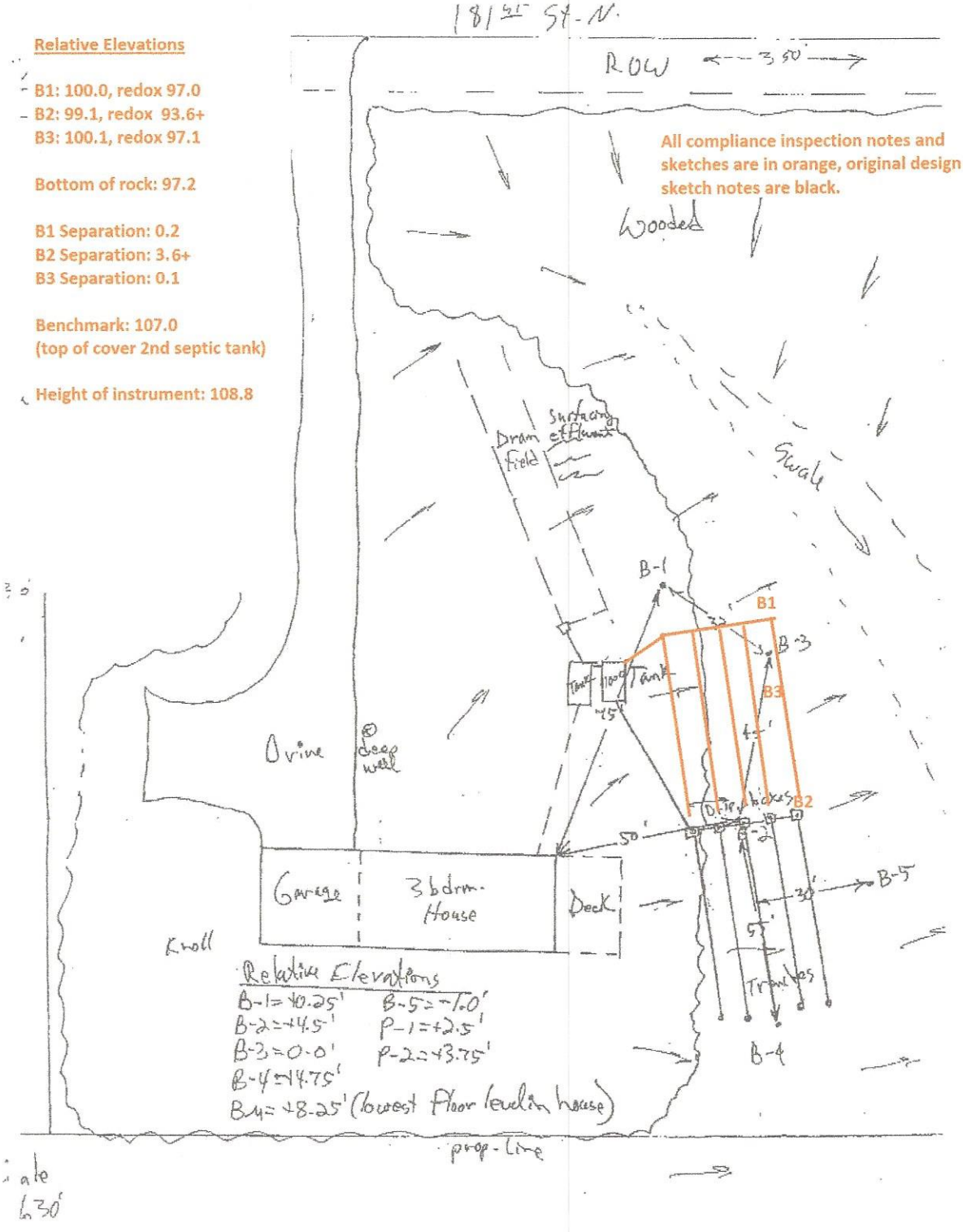
Bottom of rock: 97.2

B1 Separation: 0.2
B2 Separation: 3.6+
B3 Separation: 0.1

Benchmark: 107.0
(top of cover 2nd septic tank)

Height of instrument: 108.8

All compliance inspection notes and sketches are in orange, original design sketch notes are black.



WASHINGTON COUNTY, MINNESOTA
Department of Health, Environment, and Land Management 612/430-6708

NEW SCANDIA TOWNSHIP

PERMIT NUMBER : 9497073 SEWAGE PERMIT

Owner : BECKY MONSON
ROUTE 2, BOX 114
PINE CITY MN 55063

Applicant : BECKY MONSON 320-629-3149

DRAINFIELD REPLACEMENT PERMIT	70.00
SEPTIC APPLICATION/SOIL REVIEW	150.00
Total Fees :	220.00
Total Paid :	220.00
Total Due. :	.00

PERMISSION IS HEREBY GRANTED

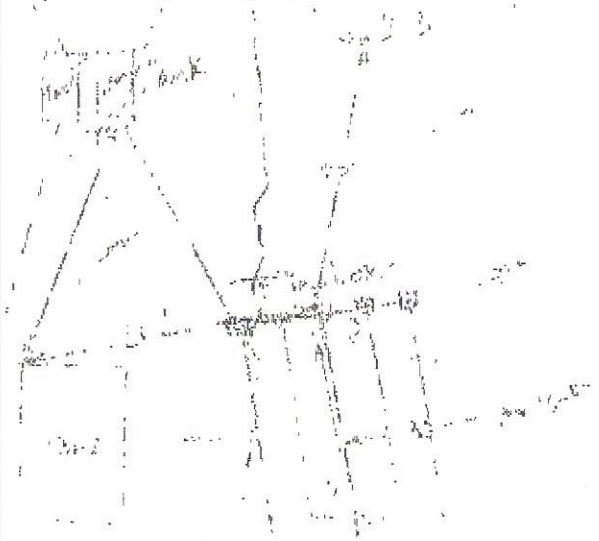
To execute the work specified in this permit on the following described property upon express condition that said persons and their agents, employees and workmen shall conform in all respects to the provisions of the Building Code, and/or Ordinances.
This permit may be revoked at any time upon the violation of any of the provisions of said code and ordinances.

Project Address : 12620 181ST ST N MARINE ON ST CROIX MN 55047

Flow Capacity 450 Gal/Day
Soil Conditions: Depth to Restriction 72 Inches Perc Rate 16 Min/Inch

Soil Treatment Area Type:
In Ground Y In Fill N Bed N Drain Field Y

Authorized Work / Special Conditions
- Install individual sewage treatment system as per approved design in area tested and shown on site plan.
- OK to use existing sewage tank if inspection shows sound construction (precast) and functioning baffles.
- THIS SYSTEM MUST BE INSTALLED BY A CERTIFIED/LICENSED SEWAGE TREATMENT SYSTEM INSTALLER HOLDING A CURRENT LICENSE WITH THE MINNESOTA POLLUTION CONTROL AGENCY. (A list of installers is available at your request.)
- Maximum trench depth 36 inches into natural soil.



** Permit Expiration Date : Sewage Treatment : 7/14/99

A CERTIFICATE OF OCCUPANCY MUST BE REQUESTED AND ISSUED PRIOR TO USE OR OCCUPANCY OF WORK PERMITTED BY A BUILDING PERMIT.
** This permit shall expire and be null and void if the work authorized by the Building Permit is not commenced within 60 days of the date of issuance or if work is abandoned or suspended for a period of 120 days. Term of the Building Permit is 12 months from date of issue. Term of sewage treatment permit is 6 months from date of issue.
Penalty for violation of any of the provisions of building code: Fine not to exceed five hundred dollars ($500.00) or imprisonment for not more than ninety (90) days, or both.

Permit Issue Date 7/14/97 Code Enforcement Officer

APPLICANT

STANDARD SYSTEM DESIGN
INDIVIDUAL SEWAGE TREATMENT SYSTEM

WASHINGTON COUNTY HEALTH, ENVIRONMENT & LAND MANAGEMENT
14900 N. 61ST STREET, P.O. BOX 3803, STILLWATER, MN 55082-3803
612/430-6708 OR 612/430-6656 FAX 612/430-6730

Owner's Name	Steve Monson
Job Site Address	12620 181st Street N., Marine-on-St.Croix, MN.
City or Township	Lot 1, Hardwood Hills, Sec. 33, New Scandia Twp.
Use of Building	single family-residential

Design Flow Rate	450 gpd			Land Slope	15 Percent
Required Tank Sizes	1000 Gallons			and	1000* Gallons
Type of System (standard, at grade or bed)	standard				
System Size:	750 -Square Feet	250 -Lineal Feet		36" -Trench Width	
Depth of rock below pipe	12"			Depth of Rock Above Pipe	2"
MINimum Depth of Trench From Existing Grade	24 Inches			MAXimum Depth of Trench From Existing Grade	36 Inches
Recommended Number of Trenches	5			Recommended Length of Trenches	50'
Trench Spacing Measured Center to Center					6-8 Feet
Any Other Special Conditions	*check existing tank for size & integrity-replace if necessary. Install system between B-2, B-4, & B-5.				

IF PRESSURE DISTRIBUTION IS USED, COMPLETE THE PRESSURE DISTRIBUTION WORK SHEET ATTACHED.

This design must be accompanied by a site plan that clearly shows the location of the area tested and approved by the following:

1. Use an appropriate scale and indicate direction by use of a north arrow.
2. Show ALL property boundaries, rights-of-way, easements, wetlands. If necessary, an enlarged detail of the house site may also be required.
3. Show location of house, garage, driveway and all other improvements existing or proposed.
4. Show location and layout of sewage treatment system.
5. Show location of water supply (well and/or community supply line).
6. Dimension all setbacks and separation distances.

This system has been designed by a Pollution Control Agency (PCA) Certified Professional.

Designer Name Christopher Zierke PCA Certification # 00998

Address 27072 Flintwood Circle, Wyoming, MN. 55092 Phone # 462-2294

Signature [signature] Date 6/19/97

SEWERDESIGN DC 3/94

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
GOVERNMENT CENTER
14949 62nd STREET NORTH P.O. BOX 6 STILLWATER, MN 55082-0006
Office: 651-430-6655 TDD: 651-430-6246 FAX: 651-430-6730

SSTS MAINTENANCE REPORT

Date of Maintenance 10/23/14 Reason for Maintenance: Reg. Maint.

Property Address: 12620 181st St N. Property Owner's Name: Mike | Karla Krick

Municipality: Marine State MN Zip Code 55047 GEO Code/Property I.D. #:

What was done to the system?	Tank Measurements (must be completed if tanks NOT pumped)
☒ Tank(s) Pumped ☐ Sludge and scum measured. Do tanks need to be pumped? ☐ Yes ☐ No (*if no provide measurements*)	Liquid Level of Tank ____ in. Sludge Level ____ in. Scum Level ____ in. Total (Sludge + Scum) ____ / Liquid Level ____ = % Sludge & Scum ____ *

* Tank must be pumped if this value is greater than 25%.

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 solids and liquids through the maintenance hole. I understand that removal of solids and liquids through other access points is not considered maintenance.

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

Tank#1 ☐ Yes ☒ No Verificatio Method Used: Pre-Cast

Tank#2 ☐ Yes ☒ No Verificatio Method Used: "

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	☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No
Septic/Holding Tank #2	☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No
Pretreatment Tank	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Pump Tank	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

6. **How many gallons of septage were removed?**

Tank #1 1000 Tank #2 1000 Pretreatment Tank _____ Pump Tank _____

7. **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: V.E.S. Inc. Maintainer's Address: Scandia, MN

Maintainer's License #: 2428 Maintainer's Phone #: 651-433-3934

Maintainer's Signature K V Date: 10/23/14