# Wastewater Treatment and Dispersal Operating Permit

#### Facility information

Permittee Name: Robert Dotzler Phone Number: 763-434-4909

Site address: 11683 - 117<sup>th</sup> Ave

City, State, Zip: Finlayson MN 55735

Parcel ID Number: 31-1-072700 County: Aitkin

Legal Description: SEC 26 T 43 R 22 LOT Lot 21 echo hill townsite

## **System Information**

Residential/Commercial: Residential Type I

Design Flow: 300 GPD Hydraulic Loading: 0.83 gpd/ft2

System Type: Performance / Type IV Organic Loading: 0.00009 BOD/ft2

Treatment Level: Level A Anticipated Life: 25 – 40 Years

#### Description of Wastewater Treatment and Dispersal System

Sewage flows by gravity from the home to a 550 gallon trash trap. Effluent will then flow by gravity to a 450 gallon chamber with a MircoFAST 0.5 pretreatment unit. Effluent will then enter the 650 gallon pump chamber. A timed dose pump will dose effluent to a 12' x 21' Pressurebed built from washed rock or EZ Flow drainfield media.

#### **Maintenance Requirements**

Parameter	Maintenance	Frequency	
Septic tank	Check solids levels, pump as needed	Semi-annual	
Pretreatment unit	Maintain per manufactures recommendations	Semi-annual	
Pumps and controls	Test, and clean as needed	Semi-annual	
Soil dispersal	dispersal Observe ponding, clean laterals as needed		

#### **Performance Standard Requirements**

During the period beginning on the date of the Operating Permit and lasting until the Permit's expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the results must be found within the compliance limits.

Parameter	Compliance Limit	Sample Frequency	Location	
Design Flow (GPD)	300 gpd	Semi-annual	Event counter	
Average Flow (GPD)	150 gpd	Semi-annual	Event counter	
CBOD₅ (mg/l)	15 mg/l	As needed	After treatment	ARREST.
TSS (mg/l)	15 mg/l	As needed	After treatment	-
Fecal coliform bacteria (CFU/100ml)	1,000 cfu/100ml	Annual	After treatment	
Total Nitrogen (mg/l)	n/a	n/a	After treatment	
Total Phosphorus (mg/l)	n/a	n/a	After treatment	
Dissolved oxygen (mg/l)	n/a	n/a	After treatment	
Ponding/Surfacing	Minimal ponding / no surfacing	Annual	Drainfield	

#### Monitoring and Reporting Requirements

Monitoring results obtained during each calendar year shall be submitted no later than May 31st of that year to:

Aitkin County Environmental Services 209 2nd Street NW, Room 100 Aitkin, MN 56431

- The monitoring reports shall be sent to the Permittee. Copies are to be retained by the Permittee.
- The Permittee shall notify Aitkin County Land Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.
- Monitoring plans may be modified as necessary and reapproved by Aitkin County Land Services.
- Sampling and laboratory testing procedures shall be performed in accordance with Standard Methods and the testing shall be performed by a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permittee.

# Monitoring will be done by:

Septic Check, Inc. 6074 Keystone Road Milaca, MN 56353

Phone: 320-983-2447 Fax: 320-983-2151 info@septic-check.com

Lic # 2624

## Mitigation Plan:

Problem	Solution	
Surfacing effluent	Verify cause and make any necessary repairs or reduce water use.	
Waste strength	rength If fecals exceed limit - reduce influent strength, increase retention time install UV light.	
Exceed Flow	Exceed Flow Reduce flow, pump tanks during high use times.	
System un- repairable	System un- repairable A replacement system could be constructed	

I hereby certify with my signature as the designer, that all data for the operating application is true and correct to the best of my knowledge.

Brian Koski License #2624

Septic Check, Inc. 6074 Keystone Road Milaca, MN 56353 320-983-2447