Aitkin County Environmental Services
Planning & Zoning
307 Second St. NW, Room 219
Aitkin, MN 56431
218-927-7342
aitkinpz@co.aitkin.mn.us

Wastewater Treatment and Dispersal Operating Permit

Operating Permit # _____
Application # _____
Date issued: _____
Expiration date: _____
Renewal period: _____

(Fields above are issued by the County)

Facility Information

Permittee name: Prairie River Retreat - Sheryl Ruhnke Phone number: 218-426-0010

Mailing address: 51272 Lake Ave

City: McGregor State: MN Zip code: 55760

Property ID number: 29-1-370500

Property address: 51272 Lake Ave McGregor, MN 55760

System type: Type V – Wexco MBBR Treatment level: C

System design flow (gpd): 750 GPD Residential/Commercial: Commercial

System components: 1820/2 septic tank, 1820/2 septic tank equipped with MBBR pretreatment unit, 2nd compartment serves as the clarifier w sludge return, effluent filter, to 1820/2 time dose pump tank, 10'x63' rockbed mound.

Monitoring Requirements

Parameter	Effluent limits	Frequency	Location
Design flow (gpd)	750 GPD	Daily	Dosing Tank
Average flow (gpd)	220 GPD	Daily	Dosing Tank
$CBOD_5$ (mg/L)	125	Bi-Annually 2 x yr	Dosing Tank
TSS (mg/L)	60	Bi-Annually 2 x yr	Dosing Tank
FO&G (mg/L)	5	As needed	Dosing Tank
Fecal Coliform bacteria (#/100mL)	NA	NA	NA
Total Nitrogen, Total Phosphorus (mg/L)	NA	NA	NA
Operational Field Tests, may include: Temperature, Dissolved Oxygen and pH	-	As needed	Treatment & Dose tanks
Ponding/Surfacing in soil treatment	None	Bi-Annually 2 x yr	Drainfield

Monitoring Requirements Comment Field

Maintenance Requirements

Maintenance requirements shall be performed as specified in the Management Plan as prepared by the system's Designer.

System component	Maintenance	Frequency
External grease interceptor	NA	NA
Septic tank/Trash tank	Sludge sample, pump as needed	Bi-Annually 2 x yr
Pump tank and controls	Sludge sample, pump/replace as needed	Bi-Annually 2 x yr
Effluent screen	Check Monthly; Clean as needed	Bi-Annually 2 x yr
Advanced treatment product	Per Service Plan	Bi-Annually 2 x yr
UV light disinfection device	NA	NA
Soil treatment and dispersal	Repair as needed	Bi-Annually 2 x yr

Monitoring Protocol

Any sampling and laboratory testing procedures shall be performed in accordance with the proprietary treatment product's protocol, Standard Methods, and at a Minnesota Department of Health approved laboratory. Results shall be submitted to the permitting authority at: Aitkin County Environmental Services, 307 2nd St NW, Room 219, Aitkin, MN 56431 no later than the expiration date listed.

Contingency Plan

In the event the wastewater treatment system does not meet required performance requirements as contained in this operating permit, the owner shall notify Aitkin County Environmental Services within thirty (30) days of receiving non-compliant information. The owner is responsible to obtain the services of a Minnesota Pollution Control Agency (MPCA) licensed Service Provider or other qualified practitioner to complete the required corrective measures.

Authorization

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system at the address named above in accordance with the requirements of this operating permit, attached Management Plan and contract with the Service Provider/Inspector.

This permit is effective on the issuance date identified above. This permit and the authorization to treat and disperse wastewater shall expire on the expiration date identified above. The Permittee is not authorized to discharge after the above date of expiration. The Permittee shall submit monitoring information on forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the above date of expiration for operating permit renewal. This permit is not transferable.

The owner is required to obtain the services of a Minnesota Pollution Control Agency (MPCA) licensed and trained: 1) Service Provider or Inspector to provide ongoing system operation, maintenance, and monitoring and 2) Maintainer to pump the system's sewage tanks and components. The owner is responsible to provide the name of the Service Provider or Inspector business prior to the issuance of this operating permit. The owner has secured the services of _____ as the Service Provider or Inspector for this system. The Service Provider or Inspector is hereby authorized to provide the required monitoring data and routine maintenance service records to both Aitkin County Environmental Services.

[For systems that generate high strength wastewater, the following items should be added to the operating permit: "If there is a change of use within the facility (i.e., change in menu, increase in food capacity, change in water use fixtures, etc.), the permittee is required to notify Aitkin County Environmental Services and the Service Provider before any changes occurs. Changes to the facility that could potentially impact performance of the wastewater treatment and dispersal system shall not take place until appropriate evaluation has been completed."]

I hereby certify with my signature as the Permittee that I understand the provisions of the wastewater treatment and dispersal system operating permit including maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by the use of this system. If I fail to comply with the provisions of this operation permit, I understand that penalties may be issued. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the operating permit.

The Operating Permit is hereby granted to: Prairie River Retreat - Sheryl Ruhnke

Permittee (please print): Sheryl Ruhnke

Title: OWNER **Date:** 6/5/2023

Permitting Authority (please print): _____

Title: _____ Date: _____

Permittee Signature: X _____

Permitee Signature

Permitting Authority Signature: X _____

Aitkin County Representative Signature

Instructions for Completing an Operating Permit

The following instructions provide an explanation for local units of government to complete the operating permit template. This is intended to provide guidance to local units of governments (LGU) in developing operating permits for Type IV and Type V systems, including both residential and commercial systems. The template could be modified for holding tanks or any other system. Since the Management Plan is considered part of the operating permit, it needs to be attached to the operating permit. A signed contract, between the owner and Service Provider, should be attached to the operating permit to help ensure the owner has made the necessary arrangements to have the system maintained and monitored.

LGU Name, Department and Address – fill in the name, department and address of local unit of government at the top of the operating permit.

Wastewater Treatment and Dispersal Operating Permit No. – assign an operating permit number to be able to track the system over the years.

Permittee Name, Business Name, Telephone Number, and Address – fill in the name, address and phone number of the owner. If this is a business, fill in name of the business, too.

Property Id. Number (GPS Location) – these are simply identifiers used by local units of government in the event the property address changes over time.

Name of Local Unit of Government – fill in the name of the local unit of government. This authorizes the Permittee to operate the wastewater treatment system at the address named above, according to the operating permit, attached Management Plan and contract with the Service Provider.

Issuance Date – fill in the date the operating permit is issued. The operating permit should not be issued until all required information is submitted.

Expiration Date – fill in the date when this operating permit expires. The first time an operating permit is issued to an owner, it should be issued for one (1) year. This helps ensure the owner actually does the required maintenance and monitoring during the first year. If the owner complies, the operating permit can then be issued for a longer period of time as determined by the local unit of government (typically 3 to 5 years). However, if the owner does not comply the first year, the second operating permit could, again, be issued for a period of one (1) year.

System Type – fill in as Type IV or Type V system. Holding tanks may also be issued operating permits (Type II system).

Treatment Level – specify Treatment Level A, A2, B, B2, C, TN or TP. Treatment Level A = Carbonaceous Biochemical Oxygen Demand, five day ($CBOD_5$) 15 milligrams per liter (mg/L), Total Suspended Solids (TSS) 15 mg/L, Fecal Coliform Bacteria 1000 per 100 milliliter (mL); Treatment Level A2 = $CBOB_5$ 15 mg/L, TSS 15 mg/L; Treatment Level B = $CBOD_5$ 25 mg/L, TSS 30 mg/L, Fecal Coliform Bacteria 10,000 per 100 mL; Treatment Level B2 = $CBOD_5$ 25 mg/L, TSS 30 mg/L; Treatment Level C = $CBOD_5$ 125 mg/L, TSS 60 mg/L, Oil and Grease (O&G) 25 mg/L; Total Nitrogen (TN) = 20 mg/L or less, or Total Phosphorus (TP) = 2 mg/L or less.

System Design Flow – fill in the design flow specified on the construction permit for the system, along with the projected average daily flow for the system. Average daily flow is generally 60 to 70 percent of design flow.

Residential/Commercial – specify if the system is residential or commercial. You may specify additional information, such as classification of dwelling, number of bedrooms; or type of commercial establishment.

System Components – provide a brief description of the system components. An example would be the following: 600 gallon trash tank, 600 gallon Brand X proprietary treatment device, 1 Brand Y Ultra Violet (UV) light disinfection unit, 500-gallon pump tank, pump, floats and controls, and 250-foot shallow trenches using pressure distribution.

Monitoring Requirements (Table)

The monitoring requirements specified in an operating permit are unique to the site and soil conditions of the property (its environmental sensitivity) and system complexity. The monitoring requirements include specific parameters to be monitored, target limits and the frequency and location of monitoring. The monitored parameters, at a minimum, would include: 1) wastewater flow - the most basic parameter to know in understanding system performance, 2) ponding in the soil treatment system and 3) surfacing of the soil treatment system. Monitoring for $CBOD_5$, TSS, fecal coliform bacteria and nitrogen are unique to the site, its receiving environment and complexity of the wastewater system. Field tests for temperature, pH and dissolved oxygen can be performed by the Service Provider to serve as general indicators of system performance.

1. **Flow** – flow to each system needs to be determined as specified in the Management Plan or as determined by the local unit of government. Flow can be determined several ways, using water meters, event counters, and running time clocks. Telemetry can also be used and has the advantage that flow can be determined continually.

   The determination for the frequency of flow measurement is done on a case-by-case basis. At first, daily flow monitoring may be needed to determine average flow and peak flows to a system. After a period of time, weekly or monthly flow determination may be acceptable. Flow determinations once a year generally provide limited information.

2. **$CBOD_5$** – monitoring for $CBOD_5$ is not typically required for the majority of wastewater systems used for single-family homes generating typical domestic strength effluent. However, monitoring for $CBOD_5$ may be needed periodically. For example, there may be a need to audit systems as part of the product registration process in Minnesota or if the Service Provider is trying to troubleshoot a system. For commercial systems, monitoring for $CBOD_5$ is generally necessary to determine $CBOD_5$ removal efficiencies of proprietary treatment devices and/or organic loading rates to the soil's infiltrative surface.

3. **TSS** – monitoring for TSS is not typically required for most residential wastewater systems that generate typical domestic strength effluent. However, turbidity measurements may be taken in the field by Service Providers. Monitoring for TSS may be needed periodically as part of an audit process for the registration of proprietary treatment products in Minnesota. For commercial systems, monitoring for TSS may be necessary.
4. **O&G** – monitoring for Oil and Grease (O&G) is not typically required for most residential wastewater systems; however, it is an important parameter to monitor for facilities that have food preparation and service and for residences that generate high strength wastewater.
5. **Fecal Coliform Bacteria** – monitoring for fecal coliform bacteria should generally be required for systems listed as Treatment Level A and Treatment Level B systems where reduced vertical soil separation is used.
6. **Total Nitrogen and Total Phosphorus** – monitoring for Total Nitrogen (TN) may be needed in areas identified as nitrogen sensitive environments. Monitoring for Total Phosphorus (TP) may be required in phosphorus sensitive lake environments.
7. **Operational Field Tests** – these are tests performed by the Service Provider to help 'monitor' system performance and identify problems (troubleshooting a system). Although field tests are not a strict monitoring requirement, they are appropriate to list in the operating permit if specified in the Management Plan or in the product's Operation and Maintenance Manual. The local unit of government will determine if the permittee is required to report field test results as part of the operating permit.
8. **Ponding/Surfacing in Soil Treatment** – all systems should be monitored periodically as specified in the Management Plan to determine extent and frequency of ponding in soil treatment systems. A check for surfacing is needed.

Maintenance Requirements (Table)

This table lists some of the basic maintenance requirements for each major component of the wastewater system. Since you can't possibly list all the maintenance requirements in this table, it is best to reference the Management Plan. You could also reference the proprietary products Operation and Maintenance Manual.

1. **System Component** – list each system component, including the external grease interceptor, septic tank, trash tank, surge tank, effluent screen, pump tank and controls, proprietary treatment product, disinfection device, and soil treatment and dispersal system.
2. **Maintenance** – briefly identify the maintenance requirements of each major system component. For additional information, you could also reference the proprietary product documents listed on the MPCA website at http://www.pca.state.mn.us/programs/ists/productregistration.html.
3. **Frequency** – briefly identify the frequency of maintenance as per the systems Management Plan and Operation and Maintenance Manual.

Monitoring Protocol – this section of the operating permit states that testing needs to be performed in accordance with approved methods and the results submitted to the: 1) local unit of government and 2) manufacturer within a specified time frame. Fill in the name and address of both entities in the spaces provided.

Contingency Plan – this briefly describes requirements if the system does not function as intended. The owner must notify the local unit of government within thirty (30) days of receiving non-compliant information. The Management Plan may identify some of the corrective actions required or the permittee will need to consult their Service Provider. The owner is responsible to obtain the services of a MPCA-licensed Service Provider or other qualified practitioner to complete the required corrective measures. More detail could be added here by the local unit of government.

Authorization – fill in the length of time of the operating permit; this is typically one to five years. Fill in the name of the local unit of government in the second blank space. Note that this permit is not transferable.

Next, fill in the name of treatment product's manufacture; the manufacturer is required to train practitioners in servicing the registered treatment device(s). Fill in the name of the Service Provider in the next space; the owner is required to identify who the MPCA licensed Service Provider will be (in a contract). This is needed to ensure the owner has made the necessary arrangements to have the system maintained and monitored.

The Service Provider is authorized to provide monitoring data and routine maintenance service records directly to the local unit of government and to the manufacturer of the treatment product. For systems generating high strength wastewater, the following should be added to the operating permit: "If there is a change of use within the facility (i.e., change in menu, increase in food capacity, change in water use fixtures, etc.), the permittee is required to notify the local unit of government and the Service Provider before the change(s) occurs." Changes to the facility that could potentially impact performance of the wastewater treatment and dispersal system shall not take place until appropriate evaluation has been completed.

In the final paragraph, fill in the name of the local unit of government. It contains a general indemnification statement. The permittee is reminded that this permit is not transferable and that a new operating permit would be needed by a new property owner.

The Operating Permits Hereby Granted to – print the name of the owner who signed the operating permit.

Signature of Permittee (and date of signature) – the owner signs and dates the operating permit.

By Order of – signature of the permitting authority, title, and date.

SEPTIC CHECK

MAINTENANCE SERVICE AND OPERATING CONTRACT FOR WATER AND WASTEWATER TREATMENT SYSTEM

It is hereby agreed this 1st day of May 2023 by and between Wex Companies, Inc. DBA Septic Check (Service Provider) and Client:

CLIENT NAME AND SITE ADDRESS	
Owner/Contact:	Sheryl Ruhnke
Client/Company Name:	Prairie River Retreat
Site Address:	51272 Lake Ave
City, State, Zip:	McGregor, MN 55760
Parcel ID:	29-1-370500
LGU or Permitting Authority:	Aitkin County

That in consideration of the payments provided herein, the Service Provider shall provide operation and maintenance services for the wastewater treatment system located at the property described in this Contract. The operation and maintenance services to be defined in this Contract include the responsibilities of the Client and Service Provider. The specific tasks shall be agreed upon by the Service Provider and Client as outlined in the Maintenance Service and Operating Contract, Operation and Maintenance Manual, and the Operating Permit of the Local Governmental Unit (LGU) listed above. The Service Provider agrees to make regularly scheduled visits to the facility, oversee and review system operation, provide/oversee sample collection as required, prepare and file reports including those required under the LGU Operating Permit listed above.

Licensing. The Service Provider shall maintain its Minnesota Pollution Control Agency licensing at all times. The minimum licensing requirement shall be Service Provider.

Performance Specifications. The Service Provider shall perform all services directly or indirectly required under this Contract in a good workmanlike manner consistent with industry standards. The Service Provider warrants that it has the necessary equipment, training, and certification/ license(s) to provide the services required by this Contract. The Client has the right to inspect and may reject any services provided that were not completed in a workmanlike manner.

Responsibilities. In no event shall the Service Provider be responsible for special or consequential damages, including but not limited to, loss of time, injury to property, or any other consequential damages or incidental or economic loss due to equipment failure or for any other reason. This Contract does not assume any responsibilities or obligations which are normally the responsibility of the Client as related to parts or labor, and does not extend to cover any costs that are associated to work not outlined in this Contract.

SCOPE OF WORK:

Service Provider will provide all the labor and equipment necessary to perform **Basic Service** outlined below:

- **Labor:** Bi-Annual site visits two (2) times per year to perform routine service requirements for the wastewater system.
- **Sampling:** Bi-Annual effluent sampling for CBOD, TSS, and FOG collected from the final dose tank to the drainfield systems. Sampling outside of what is required to meet permit requirements, or what is outlined specifically in the Operation and Maintenance Manual will be billed separately.
- **Septic Tanks:** The septic tanks and the pump tanks will be monitored annually for solids accumulation. Service Provider will coordinate tank cleaning and will inspect the tank as it is cleaned. Effluent filters in the final tank will be inspected annually and cleaned as necessary. Tank cleaning by a certified pumper is not included in the basic fee.
- **Aerobic Treatment Unit:** Maintain per manufacturer's recommendations.
- **Pumps:** Pumps will be maintained and cleaned per manufacturer's recommendations. Any parts or repairs necessary beyond general maintenance will be billed separately.
- **Control Panel:** The control panels will be inspected for proper operation. Pump run times and cycle counts will be recorded. Flow will be calculated using this data.
- **Drainfield:** The drainfield will be inspected annually by completing a "walk around" to observe any obvious signs of problems and ponding.
- **Annual Reporting:** Reports will be completed as required by the Permitting Agency. An annual service report and sample report will be submitted to the Client when the work is completed.

OUTSIDE SCOPE OF WORK:

Non-Basic Service will include items such as alarm response and repairs or maintenance not described in the Basic Service. Labor and transportation for such service are listed in Exhibit A.

The Client is responsible for maintaining the following:

- **Alarm Response:** Service Provider will be available to respond to alarm conditions as notified by the owner or automatic dialer (if installed). A typical response time is three (3) to six (6) hours and within 24 hours. Some alarms may need to be responded to immediately.
- **Repairs:** Parts/material costs will be as needed for each repair. Estimates for repairs can be provided before work starts if you prefer, although some potential alarm conditions may not permit delay. Equipment and repair rates are listed in Exhibit A of this Contract.
- **Collection System Maintenance:** Gravity and pressure collection lines in the system will be maintained by the Client.
- **Tank Pumping:** Tank pumping (as needed) will be invoiced to the Client when work is completed by the Service Provider.

Site Visits. During the Contract period, employees and agents of Service Provider will be provided access to the treatment system location for the purpose of operation, testing, and

maintenance. Access will be necessary 24 hours a day, 7 days per week. Unexpected conditions may occur in the process that require unplanned site visits, but Service Provider will make every effort to visit on a schedule agreed to in advance with the Client.

Monitoring. The Client will provide the Service Provider with access to remote monitoring capabilities if the treatment system has been constructed with remote monitoring equipment and capabilities. Access includes any utility requirements necessary for remote viewing of the main control panel such as a wireless internet connection, DSL modem, wireless modem, or phone line connection. Only the Client and Service Provider will be provided this access.

Equipment. The Client owns all equipment within the wastewater treatment system and is therefore responsible for any repairs and periodic maintenance required to keep the treatment system operating efficiently. The Service Provider will complete all the necessary routine maintenance requirements on behalf of the Client. Major repairs will be coordinated by the Service Provider, but the costs associated with the repairs are to be paid by the Client. The Service Provider will provide all necessary equipment to complete the maintenance tasks outlined in this Contract.

Sampling Procedure. Effluent testing will consist of grab samples collected and delivered to a Minnesota State Certified Laboratory for third party independent testing. The samples required and frequencies are outlined by the Operating Permit. Sample handling will be conducted by Service Provider personnel. Costs associated with the sampling and sample delivery are included in the Contract fees. Additional testing outside the requirements of the permit or to be used for trouble shooting will be billed separately.

Reports. The Service Provider will compile records of the results and dates of sampling. These records will be delivered to the Client, after the work is completed, and Permitting Agency annually, or more frequently at the Client's request.

Permit. The Client will maintain a current Wastewater Disposal Permit with the Permitting Agency at all times. The Service Provider will be available on behalf of the Client to attend meetings involving the Operating Permit. The Service Provider will develop a working relationship with Permitting Agency officials and alert them prior to any changes to the wastewater system operation on behalf of the Client. The Service Provider will make every effort to meet compliance limits set by the Permitting Agency agreement. The Service Provider will complete all the Permitting Agency reporting requirements on behalf of the Client.

Emergency Service Calls, Alarm Calls, and Repairs. Emergency services or repairs above and beyond the Contract requirements are outlined in Exhibit A.

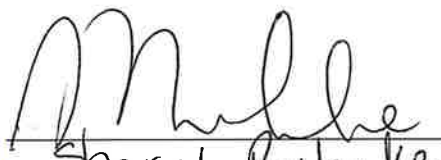
Slug Loads and Accidental Spills. Service Provider is not responsible for any illicit discharges into the wastewater system that may harm the treatment efficiency such as: accidental release of cleansers/oils/degreaser, slug flows of water or high strength waste, or other chemical discharges. Trucking or hauling the waste may be required in those circumstances.

EXHIBIT A EQUIPMENT AND REPAIR RATES *(if applicable)*			
SMALL REPAIRS	**Hourly Rate**	**LARGE REPAIRS**	**Hourly Rate**
Labor Rate, Regular Business Hrs 7am–5pm, Monday – Friday	$150	Large Excavator	NA
Labor Rate, Before/After Business Hrs	$250	Mini Excavator	NA
Large Jetter / Line Cleaning	$425		
Sewer Camera / Televising	$425	Skid Steer	NA

CONTRACT TERMS	
Contract Length:	Upon acceptance of this contract, automatic annual renewal.
Frequency of Regular Service Visits:	2x/year
Cost for Operation and Maintenance Contract:	$1220/year with annual price increases equivalent to the Regional Consumer Price Index (CPI) to cover variable costs such as fuel, materials, and laboratory fees (average 3% per year approximately).
Basic Service, Billing Amount, and Terms:	$610 after each regular service visit is complete. All other charges are due net 30 days from the date of the invoice.
Alarm/Emergency Call, and Repair Charges:	See Exhibit A.

Termination. The Client or Service Provider may terminate this Contract, without cause, upon 30 days written notice.

Client:

Sign: 

Signed by: Sheryl Ruhnke

Date: 6/5/2023

Service Provider:

WEX Companies, Inc DBA Septic Check

Sign: 

Signed by: Brian Koski, Owner, Septic Check

Date: 5/1/2023