

AUG 05 2020

Check From: Prairie River Minerals Transmittal form
Check # 5039 **NPDES/SDS Permit Program**
Amt of Check 10,540
Date of Check _____
Date of Dep. _____

Doc Type: Permit Application

Instructions on page 6

The National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program regulates wastewater discharges to land and surface waters. This form is required for all applicants, except permit termination/transfer.

Complete the application by typing or printing in black ink. Attach additional sheets as necessary. For more information, please contact the Minnesota Pollution Control Agency (MPCA) at: In Metro Area: 651-296-6300 or Outside Metro Area: 800-657-3864.

MPCA use only

Permit Number

Date received (mm/dd/yyyy)

Applications that are submitted without an authorized signature, the required application fee, and attachments will be returned. Please make a copy for your records. Send the completed permit application, attachments (including plans and specifications, if applicable), and check to:

Attn: Fiscal Services – 6th floor
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Existing permit informationExisting Permittee name: _____ Existing Permit number: MN**Contact information****1. Facility owner**

Organization name: Prairie River Minerals, LLC
Mailing address: 415 NW 8th Avenue, Suite B
City: Grand Rapids State: MN Zip: 55744
Telephone: (218) 404-4257 Fax: _____ Email: lsutherland@prairieriverminerals.com
Authorized agent: Lawrence Sutherland Title: Chief Executive Officer

2. Facility operator

Organization name: Prairie River Minerals, LLC
Mailing address: 415 NW 8th Avenue, Suite B
City: Grand Rapids State: MN Zip: 55744
Telephone: (218) 404-4257 Fax: _____ Email: lsutherland@prairieriverminerals.com
Authorized agent: Lawrence Sutherland Title: Chief Executive Officer

24-hour Emergency contact backup:Name: Marty Halverson Phone: (218) 969-3250**3. Discharge Monitoring Report contact**

Organization name: Northeast Technical Services, Inc.
Name: Scott Seeley Title: NPDES Compliance Project Manager
Mailing address: 526 Chestnut Street
City: Virginia State: MN Zip: 55792
Telephone: (218) 741-4290 Fax: _____ Email: SSeeley@nettechnical.com

4. Billing contact

Organization name: Prairie Mineral Minerals, LLC
Name: William Shaughnessy Title: President/Owner
Mailing address: 415 NW 8th Avenue, Suite B
City: Grand Rapids State: MN Zip: 55744
Telephone: (763) 954-0125 Fax: _____ Email: wshaughnessy@prairieriverminerals.com

24-hour Emergency contact backup:Name: Lawrence Sutherland Phone: (218) 404-4257

5. Engineer or Consultant

Organization name: Northeast Technical Services, Inc.

Name: Dennis Schubbe, P.G.

Title: Senior Project Manager

Mailing address: 526 Chestnut Street

City: Virginia

State: MN

Zip: 55792

Telephone: (218) 742-1037

Fax: _____

Email: dschubbe@nettechnical.com

Certified operator information (if applicable)

Certified operators are required for all municipal facilities and for industrial land application facilities.

6. Main certified operator

Name: _____

Title: _____

Certification (check all that apply): ☐ A ☐ B ☐ C ☐ D ☐ Type IV ☐ Type v

Certification number: _____

Expiration date: _____

7. Other certified operator(s) (attach additional sheets if necessary)

Name: _____

Title: _____

Certification (check all that apply): ☐ A ☐ B ☐ C ☐ D ☐ Type IV ☐ Type v

Certification number: _____

Expiration date: _____

Name: _____

Title: _____

Certification (check all that apply): ☐ A ☐ B ☐ C ☐ D ☐ Type IV ☐ Type v

Certification number: _____

Expiration date: _____

Name: _____

Title: _____

Certification (check all that apply): ☐ A ☐ B ☐ C ☐ D ☐ Type IV ☐ Type v

Certification number: _____

Expiration date: _____

Facility information

8. Facility information (Sand and gravel facilities can skip to #9.)

Facility name: Prairie River Minerals, LLC - Demonstration Plant

Street address: 29013 County Highway 61

City/Township: Grand Rapids (Arbo Township)

State: MN

Zip: 55744

County: Itasca County

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)
T 56 N	R 25 <input type="checkbox"/> E <input checked="" type="checkbox"/> W	35	SE	NE
Latitude	Longitude	Datum	Coordinate collection method	Date coordinate collected
47°17'17.75"N	93°28'13.13"W	WGS84	Web Map Google	7/24/2020

9. Is the facility located on tribal land? ☐ Yes ☒ No If yes, also apply to U.S. Environmental Protection Agency (EPA), Region V, John Coletti (312-886-6106).

10. The 1993 Legislature revised the MPCA's responsibilities in Minn. Stat. § 115.03, subd. 1 (e)(10) "Requiring that applicants for wastewater discharge permits evaluate in their applications the potential reuses of the discharged wastewater;"

As a result of this 1993 Law, the MPCA has been charged with requiring permit applicants to evaluate the reuse potential of their wastewater prior to discharge. Therefore, please provide an evaluation below of reuse potential of your wastewater prior to discharge. Some ideas include lawn watering, irrigation of parks or public property, use of cooling tower blowdown for thermal discharges, wetland reclamation, etc.

Process water from Prairie River Mineral's (PRM's) Demonstration Plant (plant) will be recovered and reused in the plant. Some process water will remain as moisture in the rejects/waste that will be placed in stockpiles on the ground surface in a waste management area near the plant. No process water will be discharged from the plant.

11. List all environmental permits the facility has received or applied for:

Construct. Stormwater Permit, Scram Permit To Mine, Air Permit, Gen. Ind. Stormwater Permit, Water Appropriation Permit

Surface water discharge (Sand and gravel facilities can skip to the application information section.)

12. Does the facility discharge to a surface water of the state? ☐ Yes ☒ No
If no, the surface water discharge section does not need to be completed.

13. Identify all surface water discharge stations.

Station ID: SD

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)	
T N	R <input type="checkbox"/> E <input type="checkbox"/> W				
Latitude	Longitude	Datum	Coordinate collection method	Date coordinate collected	
UTM Northing	UTM Easting	UTM Zone	UTM Datum	Coordinate collection method	Date coordinate collected
Receiving water:					

Station ID: SD

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)	
T N	R <input type="checkbox"/> E <input type="checkbox"/> W				
Latitude	Longitude	Datum	Coordinate collection method	Date coordinate collected	
UTM Northing	UTM Easting	UTM Zone	UTM Datum	Coordinate collection method	Date coordinate collected
Receiving water:					

Groundwater monitoring wells

14. Are there groundwater monitoring wells at the facility? ☐ Yes ☒ No
If no, the groundwater monitoring wells section does not need to be completed.

15. Identify all groundwater monitoring well station locations:

Station ID: GW -01 (Proposed Location)

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)	
T 56 N	R 25 <input type="checkbox"/> E <input checked="" type="checkbox"/> W	35	SE	NE	
UTM Northing	UTM Easting	UTM Zone	UTM Datum	Coordinate collection method	Date coordinate collected
5237391.56181	464368.298867	15N	NAD 83	DOQ (aerial photo)	7/27/2020

Station ID: GW -02 (Proposed Location)

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)	
T 56 N	R 25 <input type="checkbox"/> E <input checked="" type="checkbox"/> W	35	SE	SE	
UTM Northing	UTM Easting	UTM Zone	UTM Datum	Coordinate collection method	Date coordinate collected
5237102.59213	464463.703398	15N	NAD 83	DOQ (aerial photo)	7/27/2020

Station ID: GW -03 (Proposed Location)

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)	
T 56 N	R 25 <input type="checkbox"/> E <input checked="" type="checkbox"/> W	35	SE	SW	
UTM Northing	UTM Easting	UTM Zone	UTM Datum	Coordinate collection method	Date coordinate collected
5237047.02952	463957.289885	15N	NAD 83	DOQ (aerial photo)	7/27/2020

Station Locations

16. Identify all other permitted station locations not identified above:

Station ID:

Station type: ☐ Influent Waste Stream (WS) ☐ Internal Waste Stream (WS) ☐ Surface Water Monitoring (SW)
☐ Land Application (LA) ☐ Other (specify): _____

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)
T N	R <input type="checkbox"/> E <input type="checkbox"/> W			
Latitude	Longitude	Datum	Coordinate collection method	Date coordinate collected

Surface water (surface water monitoring stations only): _____

Station ID:

Station type: ☐ Influent Waste Stream (WS) ☐ Internal Waste Stream (WS) ☐ Surface Water Monitoring (SW)
☐ Land Application (LA) ☐ Other (specify): _____

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)
T N	R <input type="checkbox"/> E <input type="checkbox"/> W			
Latitude	Longitude	Datum	Coordinate collection method	Date coordinate collected

Surface water (surface water monitoring stations only): _____

Station ID:

Station type: ☐ Influent Waste Stream (WS) ☐ Internal Waste Stream (WS) ☐ Surface Water Monitoring (SW)
☐ Land Application (LA) ☐ Other (specify): _____

Township (26-71 or 101-168)	Range (1-51)	Section (1-36)	¼ Section (NW, NE, SW, SE)	¼ of ¼ Section (NW, NE, SW, SE)
T N	R <input type="checkbox"/> E <input type="checkbox"/> W			
Latitude	Longitude	Datum	Coordinate collection method	Date coordinate collected

Surface water (surface water monitoring stations only): _____

Submittals

- ☒ The applicable application and any applicable attachments required by the application.
- ☒ Map: attach a U.S. Geological Survey topographical map or similar that indicates the location of the existing or proposed facility, the location of the stations identified above, the receiving water (if applicable) and any additional information required by the applications applicable to your facility.
- ☐ Schematic: attach a schematic of the treatment facility that includes all facility components, indicating the direction of wastewater flow and the location of the stations identified above.
- ☒ (Industrial facilities only) Flow Diagram or Water Balance Diagram: attach a flow diagram on the process in its entirety from raw water to discharge.
- ☐ (Major Municipal facilities only) Facility Description: attach a facility description that describes the collection system and wastewater treatment facility.

Note: Please ensure this form and all applicable applications and attachments are complete. Incomplete applications will be returned. Review your existing NPDES/SDS Permit to ensure all required submittals have been completed. Failure to complete the application for reissuance or failure to complete requirements of the existing permit is considered a violation and may be subject to enforcement.

Application fees

An application fee is required under Minn. Stat. § 116.07, subd. 4d (1990) and Minn. R. ch. 7002 (Permit Fee Rules). The application fee is determined by the type of permit you are applying for. Please make your check payable to the MPCA.

Indicate which type of permit you are applying for:

(refer to flow chart on page 8 of the instructions to determine the appropriate fee category)

- | | |
|--|---|
| <input type="checkbox"/> Individual Permit Reissuance, no modifications: \$1240 | <input checked="" type="checkbox"/> Individual Permit Issuance: \$9300 |
| <input type="checkbox"/> Individual Permit Reissuance, modifications: \$2480 | <input type="checkbox"/> Individual Pretreatment Permit Issuance: \$2480 |
| <input type="checkbox"/> Individual Permit Reissuance, construction: \$2480 | <input type="checkbox"/> Individual Dredge Materials Disposal Permit Issuance: \$2480 |
| <input type="checkbox"/> Individual Permit Reissuance, construction, increased design flow: \$9300 | <input type="checkbox"/> Individual Stormwater Permit Issuance: \$400 |
| <input type="checkbox"/> Individual Permit Minor Modification: \$1240 | <input type="checkbox"/> Biosolids Treatment or Storage Permit Issuance: \$9300 |
| <input type="checkbox"/> Individual Permit Major Modification: \$2480 | <input type="checkbox"/> General Permit (MNG) Reissuance: \$1240 |
| <input type="checkbox"/> Individual Permit Major Modification, construction: \$2480 | <input checked="" type="checkbox"/> General Permit (MNG) Issuance: \$1240 |
| <input type="checkbox"/> Individual Permit Major Modification, construction, increased design flow: \$9300 | <input type="checkbox"/> General Permit (MNG) Modification: \$1240 |

Certification

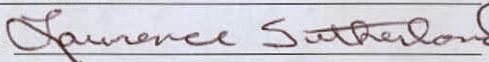
Federal Regulations (40 CFR Part 122.22) and State Regulations (Minn. R. 7001.0060) require all permit applications to be signed as follows:

- A. For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: 1) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or 2) The manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding 425 million, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- B. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
- C. For a municipality, county or other political subdivision: by a principal executive officer or ranking elected official.
- D. For a state, federal or other public agency/agents: by a commissioner, assistant or deputy commissioner; director, assistant or deputy director.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed name: Lawrence Sutherland

Title: Chief Executive Officer

Authorized signature:  Date (mm/dd/yyyy): 07/31/2020

State tax ID#: 6925617

Federal tax ID#: 83-3078765

PRAIRIE RIVER MINERALS, LLC
SDS PERMIT APPLICATION TRANSMITTAL FORM SUBMITTALS

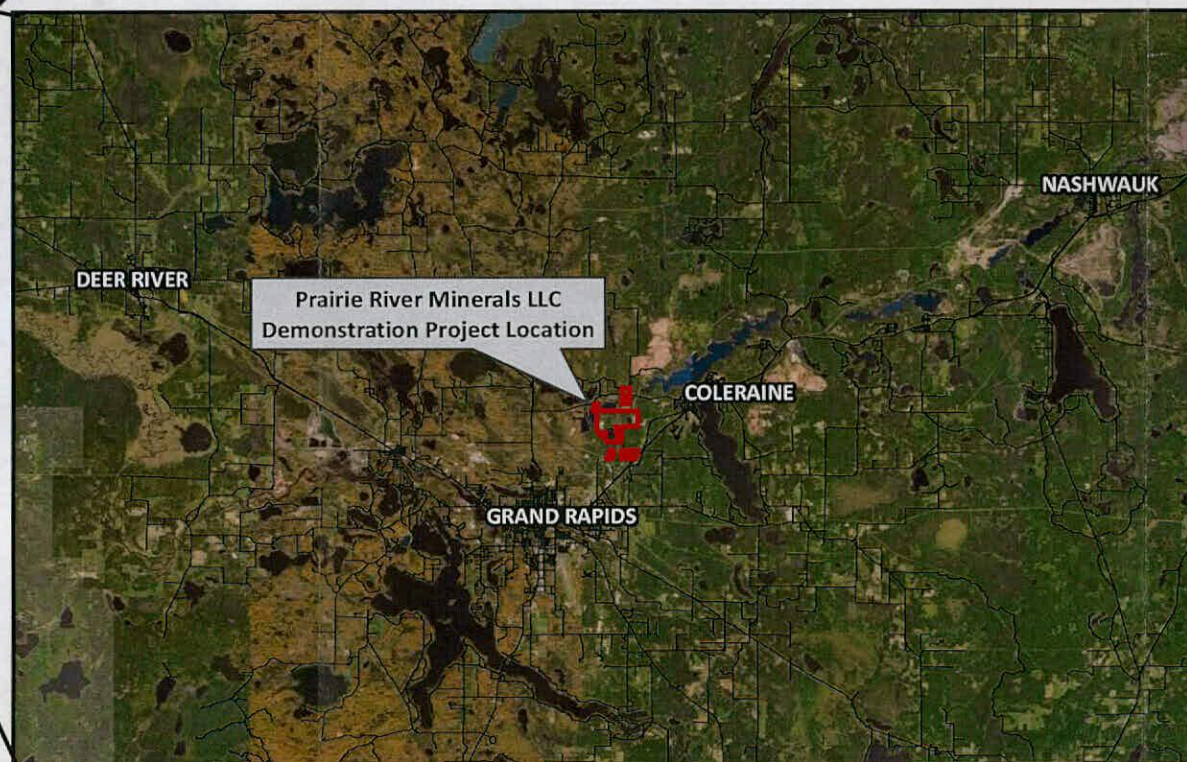
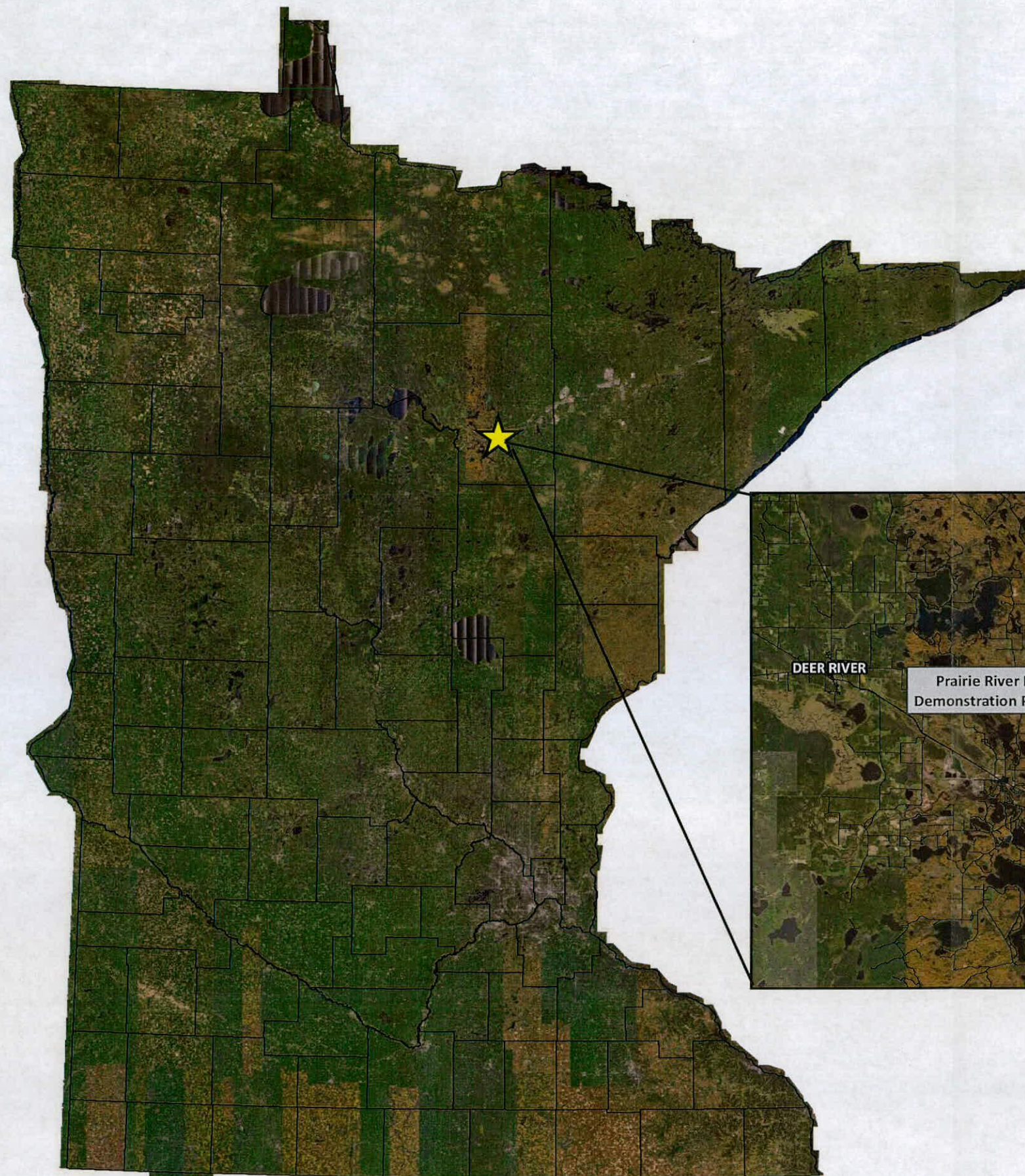
Figure 1 General Site Location

Figure 2 Site Vicinity Map

Figure 3 Demonstration Project Layout

Figure 4 Proposed Groundwater Monitoring System

Figure 5 Proposed Water Balance



0 105,000 210,000 420,000

Feet

1 Inch = 225,000 Feet

Legend



Project Location



Jessie Load Out Properties



County Boundary

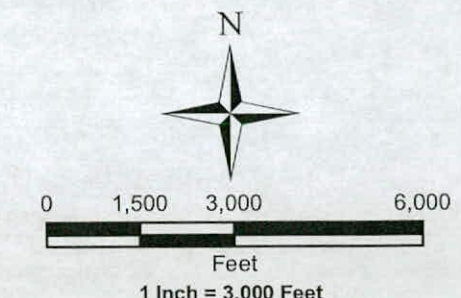
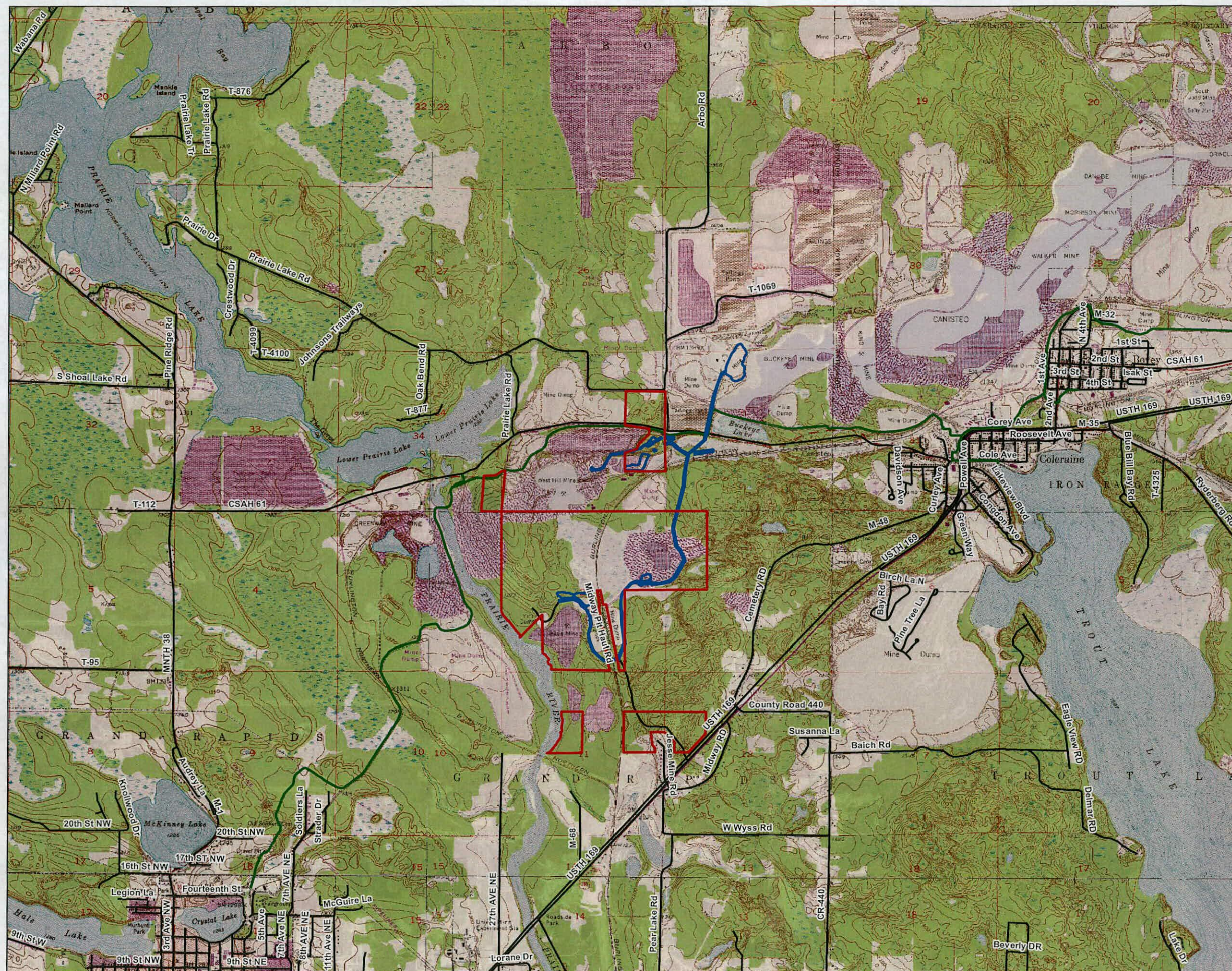
Figure 1
General Site Location

State Disposal System Permit Application
Prairie River Minerals LLC
Coleraine, Minnesota (Itasca County)



Date Drawn:
27 July 2020
Drawn By:
C. Hafdahl
NTS Project #:
20759E

1



Legend

- PRM Properties
- Demonstration Project Layout
- Mesabi Trail

Notes:

- Basemap was provided by Minnesota Geospatial Commons.
- PRM Properties identified using SLC Parcel Boundaries, 2020

Figure 2
Site Vicinity Map

State Disposal System Permit Application
Prairie River Minerals LLC
Coleraine, Minnesota (Itasca County)



Date Drawn:
27 July 2020
Drawn By:
C. Hafdah
NTS Project #:
20759E

2



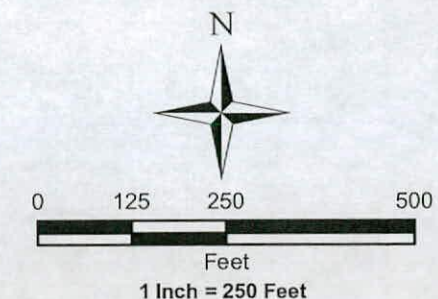
Legend

- Stormwater Pond
- Slope and Road Waste Management Area (WMA)
- Product Loadout Area
- Surge Stockpile Area
- Plant Area
- Product Stockpile
- Stockpile
- Pump Location
- Pipe Route
- Stockpile Feed Haul Road
- County Highway 61
- US Highway 169
- Mesabi Trail

Notes:

- Basemap was provided by MN Geospatial Image Services, Itasca County, 2018.
- Stockpile locations were drawn using MN Atlas and MN Topo for reference.
- Figures depicted are approximations.

Figure 3
Demonstration Project Layout
 State Disposal System Permit Application
 Prairie River Minerals LLC
 Coleraine, Minnesota (Itasca County)



Legend

	Stormwater Pond
	Slope and Road Waste Management Area (WMA)
	Product Loadout Area
	Surge Stockpile Area
	Plant Area
	Product Stockpile
	Proposed Groundwater Monitoring Location
	Pipe Route
	Stockpile Feed Haul Road
	County Highway 61
	Mesabi Trail

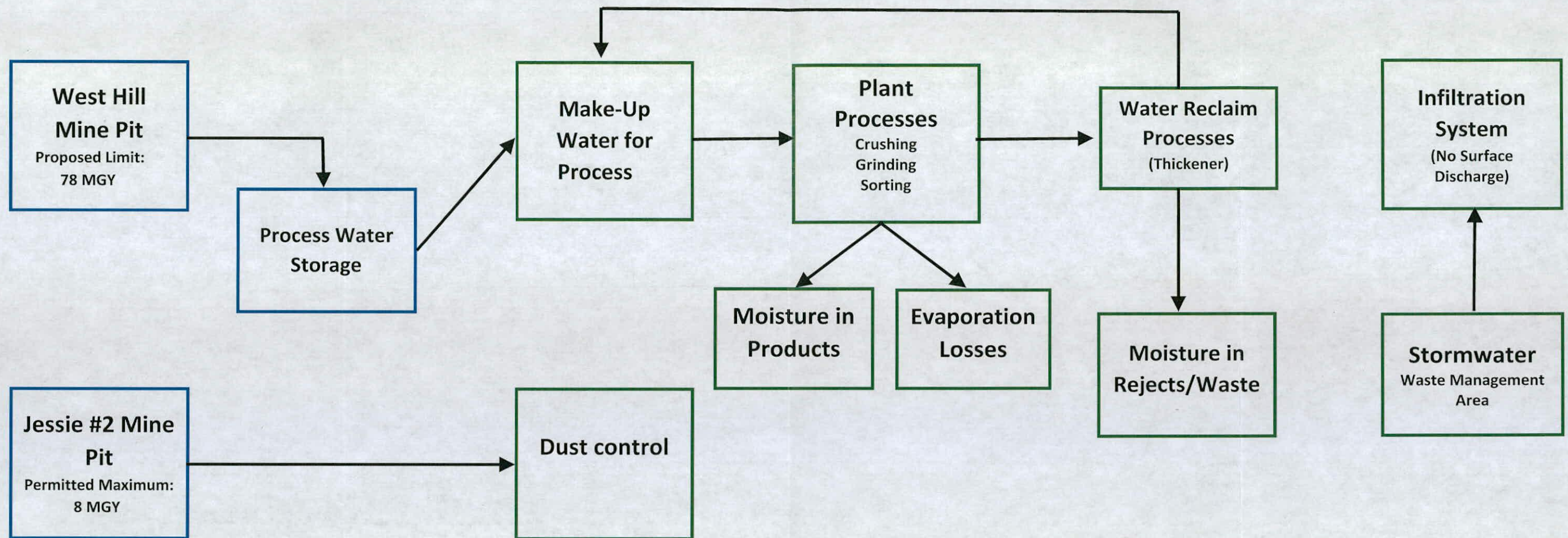
Notes:

- Basemap was provided by MN Geospatial Image Services. Itasca County, 2018.
- Stockpile locations were drawn using MN Atlas and MN Topo for reference.
- Figures depicted are approximations.

Figure 4
Proposed Groundwater Monitoring System
 State Disposal System Permit Application
 Prairie River Minerals LLC
 Coleraine, Minnesota (Itasca County)

WATER SOURCES

WATER USE AND MANAGEMENT



Notes:

- Water loss via moisture in products and rejects/waste is estimated at 100 gpm.



Northeast Technical Services
www.netechnical.com
218.741.4290
526 Chestnut Street
Virginia, MN 55792

Figure 5
Proposed Water Balance
PRM Demonstration Project

State Disposal System Permit Application
Prairie River Minerals LLC
Coleraine, Minnesota (Itasca County)

Date Drawn:
31 July 2020

Drawn By:
C. Hafdahl

NTS Project Number:
20759



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Industrial Land Discharge of Process Wastewater Application

SDS Permit Program

Doc Type: Permit Application

Purpose: The State Disposal System (SDS) Permit Program regulates wastewater discharges to land. This application applies to industrial facilities that treat process wastewater for disposal by land application. Any other discharge types will require a different permit application.

Instructions: Complete the application by typing or printing in black ink. Attach additional sheets as necessary. For more information, please contact the Minnesota Pollution Control Agency (MPCA) at: In Metro Area: 651-296-6300 or Outside Metro Area: 800-657-3864.

- Review the application to ensure all requested items are submitted with this application.
- Please make a copy for your records.
- Refer to the *Transmittal Form* for mailing instructions.

Permittee name: Prairie River Minerals, LLC

Permit number: MN

Facility information

1. Principal facility activity: Iron ore mining and preparation
2. Product(s) produced: Lump ore and sinter feed
3. Amount of product produced per Unit Time (such as tons/year, kilograms/day)*.
Average: 130,000 metric tons/ year (2020) Maximum: 130,000 metric tons/year (2020)
4. Raw material(s) consumed: 500,000 metric tons of feedstock from natural ore legacy stockpiles (2020)
5. Amount of product consumed per Unit Time (such as tons/year, kilograms/day)*.
Average: 130,000 metric tons/year (2020) Maximum: 130,000 metric tons/year (2020)
*Provide both daily maximum and long-term monthly average expected during the five-year permit term. If an effluent limitation guideline applies and is expressed in terms of production (or other measure of operation) please report the expected actual production rates in the units used in the applicable effluent guideline. Consumptive use and/or production rates should be in sufficient detail so as to aid in the development of technology-based effluent limitations. For new discharges, actual production shall be estimated using projected production.
6. Standard Industrial Classification (SIC) Code Number (list all that apply):
101101 Iron Ore Mining and 101102 Iron Ore Preparation
7. If established, please indicate what you believe to be the applicable federal effluent limitation guideline(s) for your waste stream(s): 40CFR
8. What date did the facility initiate operation? Not operating pending issuance of permits.

Water supply

9. What is the source of the intake water supply for the facility?

Source	Rate of supply (gallons/day)
<input type="checkbox"/> Municipal water supply, city name: _____	_____
<input type="checkbox"/> Ground water, intake location: _____	_____
<input checked="" type="checkbox"/> Surface water, name: <u>West Hill Mine Pit</u>	<u><216,000</u>
10. If this is a surface or ground water intake, please provide the Minnesota Department of Natural Resources (DNR) Water Appropriation Permit Number: Pending issuance
11. Is the intake water supply chlorinated or otherwise disinfected? ☐ Yes ☒ No
12. Is the intake water supply treated with a scale and/or corrosion inhibitor? ☐ Yes ☒ No

Wastewater treatment

13. How does the facility dispose of sewage (sanitary wastewater)?
Subsurface Sewage Treatment System - installation/construction pending

14. Does the facility generate process wastewater? ☒ Yes ☐ No

If yes, the process wastewater from the facility is disposed of to: (check all that apply)

- ☐ Municipal storm sewer ☐ Land
☐ Sanitary sewer ☐ Surface water: _____
☐ Stormwater retention basin or pond ☐ Other (specify): _____
☒ Septic tank/drainfield

15. Provide a complete description of the existing or proposed wastewater treatment system, including the land treatment system. For existing facilities, indicate what changes, if any, have occurred since the last permit was issued.

A subsurface sewage treatment system (SSTS) is proposed for the Demonstration Plant. Design of the SSTS has not been initiated and is not available for describing in this Industrial Land Discharge of Process Wastewater Application. The SSTS will be designed to meet all applicable rules and regulations including State, County, and local as required.

16. What products, by-products, and wastes are stored at the facility? Describe all storage facilities.

Lump ore product and sinter feed product will be stockpiled separately on the ground surface near the Demonstration Plant. Products composition will average approximately 62.5% Fe and 3-5% SiO₂. The product stockpiles will not be covered and will be included in the General Industrial Stormwater (ISW) Permit for the project. The locations of the product stockpiles are shown on Figure 3 Demonstration Project Layout, provided with the Transmittal Form submittals.

Rejects/waste from the Demonstration Plant will be disposed within the WMA shown on Figure 3. Approximately 370,000 metric tons of rejects/waste will be generated during 2020. Rejects/waste will be placed on the ground surface after preparing the WMA (i.e., after clearing and grubbing, and construction of stormwater controls). Stormwater runoff will be controlled and managed in a stormwater infiltration pond. Additional information is included in the Pond Attachment with this Industrial Land Discharge of Process Wastewater Application form.

17. Completely describe the type, amount, and fate of all residual solids, sludge, silage, and by-products generated from plant operations and/or wastewater treatment.

Rejects/waste from the Demonstration Plant will be disposed within the WMA shown on Figure 3 included with the Transmittal Form submittals. Approximately 370,000 metric tons of rejects/waste will be generated during 2020. Of this total, approximately 33% by weight will consist of fine rejects and 67% by weight will consist of coarse rejects. Estimated bulk density of the stockpiled waste is 150 pounds per cubic foot. Moisture content of the rejects/waste is estimated to be 10%-11%. Stormwater runoff from the rejects/waste placed in the WMA will be controlled and managed in a stormwater infiltration pond located within the WMA. Rejects/waste will be placed on the ground surface after preparing the WMA (i.e., after clearing and grubbing, and construction of stormwater controls). Additional information is included in the Pond Attachment with this Industrial Land Discharge of Process Wastewater Application form.

18. Provide the flow of wastewater to be land applied. (If this is an existing facility use flow data from the last five years)

Flow (gallons)	Average	Maximum	Design
Daily	NA	NA	NA
Monthly	NA	NA	NA
Annually	NA	NA	NA

19. Provide the number of days of storage at peak production rate: NA

20. Complete the table below for each land discharge site. Attach a map with the location of each site.

Existing/ Proposed	Site name/ID (LA-001, etc.)	Legal description (Township/Range/Section/Quarter)	County	Acreage used	Leased/ Owned	If leased, owners name and mailing address
NA	NA					
NA	NA					
NA	NA					
NA	NA					

21. For each site, indicate the crop type and how the crop is managed (include crop yields, crop rotations over the past five years)

and timing of each harvest).

Site name/ID (LA-001, etc.)	Crop type	Crop management
NA		
NA		
NA		
NA		

22. For each site, indicate the application system (number and size of pumps, center pivot, stationary solid set, hand move solid set, wheel roll, traveling gun, ridge and furrow, other; length and size of force-main; length and size of irrigation pipe).

Site name/ID (LA-001, etc.)	Application system
NA	
NA	
NA	
NA	

23. For each site, indicate the runoff protection measures (dike, collection basin, respraying equipment, other). Attach a map indicating the location and specifications of all runoff protection measures.

Site name/ID (LA-001, etc.)	Runoff protection measures
NA	
NA	
NA	
NA	

24. For each site, indicate all soil types encountered and information on the slope, depth to groundwater or bedrock and any other information. Attach a soil map and soil boring logs.

Site name/ID (LA-001, etc.)	Soil types	Soil information
NA		
NA		
NA		
NA		

25. Are any draitiles present on any of the sites? ☐ Yes ☒ No

a. If yes, provide the minimum depth of tiled area: _____

b. Provide a map of the locations of existing tiles, tile inlets, tile discharge points, monitoring locations for sampling the tile line discharges, and any monitoring devices present in the tile system.

Groundwater monitoring

26. Are any groundwater monitoring wells or lysimeters present at the facility? ☐ Yes ☒ No

If yes, complete the following table. Attach a map identifying well locations.

Local name/MPCA identifying number	Unique well number	Well location	Upgradient or downgradient	Depth of water table
Proposed MW-01	TBD	NE1/4 of SE1/4, T56N, R25W, Sec.35	Upgradient	TBD
Proposed MW-02	TBD	SE1/4 of SE1/4, T56N, R25W, Sec.35	Upgradient	TBD
Proposed MW-03	TBD	SW1/4 of SE1/4, T56N, R25W, Sec.35	Downgradient	TBD

27. Have there been limit exceedances in any of the monitoring wells? ☐ Yes ☒ No

- a. If yes, describe: _____
- b. What is the plan to address the exceedances?

Chemical additives

28. Go to the MPCA chemical additive webpage at: <http://www.pca.state.mn.us/a6krka9> to find the documents necessary to complete the approval process. Your additives will **not** be approved for use until you complete this process. MPCA approval is required for any additives that are new, increasing in usage, or not previously approved. List below all chemical additives that are used or proposed to be used at the facility. This includes the process reagents, flocculants, descalants, corrosion inhibitors, biocides, wastewater treatment chemical additives, chlorine or other disinfectants, detergents, cleaning products, freeze conditioning agents, etc.

Chemical	Purpose	Location of chemical addition in process	Frequency of addition	Type of application (slug dosing or continuous feed)	Average rate of use (weight or volume per day)	Maximum rate of use (weight or volume per day)	Previously approved? Yes or No	Date of approval (mm/dd/yyyy)
Ferrosilicate	Flotation	Ore Feed	Daily	Slug	1100	1100	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Megafloc 6244	Floculant	Fines Thickener	Daily (Only one floculant will be used)	Slug	100	100	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Megafloc 4224 GR	Floculant	Fines Thickener	Daily (Only one floculant will be used)	Slug	100	100	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Corrosion						<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Ag-Lime	Inhibitor	Processing Plant	Once every two (2) weeks, plant operating 6 days a week	Slug - 20 lbs	1	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

An Additional Chemical Additives Attachment is available on the MPCA website at <http://www.pca.state.mn.us/water/permits/index.html> if more space is needed.

9. Do you use chemical dust suppressants at your facility? ☐ Yes ☒ No

If yes, fill out table below:

Product name	Location of use	Frequency of use	Average rate of use (weight or volume per day)	Maximum rate of use (weight or volume per day)

Attach the Material Safety Data Sheets, complete product labels and any other information on chemical composition, aquatic toxicity, human health, and environmental fate for each chemical dust suppressant. Chemical dust suppressants are approved separately from the process required in question 28.

Water quality sample results

30. Attach a list of all pollutants known or reasonably believed to be present at each facility discharge point and provide sample results for those pollutants.

Pollutants may include, but are not limited to, total suspended solids, biochemical oxygen demand, pH, fecal coliform, temperature (heat), nutrients (phosphorus, ammonia, nitrate, nitrite), metals, salts, cyanide, residual chlorine, fluoride, oil and grease, polychlorinated biphenyls, phenols, polynuclear aromatic hydrocarbons, volatile organic compounds, pesticides and/or radioactivity. Clearly indicate the date, location where sample was taken, types of wastewater sampled, and method(s) of sampling (e.g., grab, composite) for each sample.

At a minimum, sample results must be provided for total suspended solids (TSS), biochemical oxygen demand (BOD), fecal coliform (if believed present or sanitary

wastes will be discharged), pH, and total phosphorus, irrespective of what might be required by an existing permit.

If this is an application for reissuance of an existing permit, review your existing NPDES/SDS permit to see if it has special testing requirements as part of the application for reissuance process.

31. Certified laboratory analyzing samples:

Laboratory	Sample type (water or soil)	Minnesota Department of Health certification number
Pace Analytical	Water	MN01084

Stormwater

32. Is the facility covered by an MPCA stormwater NPDES permit? ☐ Yes ☒ No

If yes, indicate the permit number (if stormwater discharges are authorized under the stormwater general permit give unique identifying number rather than general permit number):

33. Does stormwater contact **any** raw or processed materials, finished products, industrial waste, byproducts, or any other type of materials at the facility? ☒ Yes ☐ No

If yes, describe these materials:

Raw ore consisting of crushed iron ore resources (i.e., legacy/historical natural ore stockpiles) will be stored in a surge pile located near the Demonstration Project Plant as shown on the Demonstration Project Layout provided (Figure 3 included with Transmittal Form submittals). The surge pile will be addressed in the General ISW Permit for the Demonstration Project.

Lump ore product and sinter feed product will be stockpiled separately on the ground surface near the Demonstration Plant. Products composition will average approximately 62.5% Fe and 3-5% SiO₂. The product stockpiles will not be covered and will be included in the General ISW Permit for the Demonstration Project. The locations of the product stockpiles are shown on Figure 3 Demonstration Project Layout, provided with the Transmittal Form submittals. The product stockpiles will be addressed in the General ISW Permit for the Demonstration Project.

Rejects/waste from the Demonstration Plant will be disposed within the WMA shown on Figure 3. Approximately 370,000 metric tons of rejects/waste will be generated during 2020. Rejects/waste will be placed on the ground surface after preparing the WMA (i.e., after clearing and grubbing, and construction of stormwater controls). Stormwater runoff will be controlled and managed in a stormwater infiltration pond located within the WMA.

34. Is any vehicle maintenance, transportation equipment cleaning, or airport deicing conducted at the facility? ☐ Yes ☒ No

35. Stormwater at the WMA is managed in a separate stormwater infiltration system. No surface discharge from the WMA.

Indicate where stormwater from the facility discharges to:

36. Summarize any treatment or best management practices that are used to regulate stormwater discharges at the facility:

Stormwater management controls will be in place. Best management practices will include adequate cover on the WMA and stormwater drainage structures that divert runoff to the infiltration system.

Attachments

- ☒ **Pond Attachment:** If your facility has a pond treatment component (i.e., primary, secondary, aerated, polishing, cooling, etc.), complete the Pond Attachment.



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Municipal and Industrial Pond Attachment

NPDES/SDS Permit Program

Doc Type: Permit Application

The National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program regulates wastewater discharges to land and surface waters. This attachment applies to municipal and industrial facilities with a pond system (i.e. primary, secondary, polishing, equalization, anaerobic, contaminated runoff, etc.).

Complete the attachment by typing or printing in black ink. Attach additional sheets as necessary. For more information, please contact the Minnesota Pollution Control Agency (MPCA) at: In Metro Area: 651-296-6300 or Outside Metro Area: 800-657-3864.

Permittee name: Prairie River Minerals, LLC

Permit number: MN TBD

Geology/Hydrogeology Information

1. Provide a description of the soil beneath or in the vicinity of the ponds. Use information from soil surveys or from existing soil borings or well logs if available. (Ex.: 8 feet (ft.) of fine sand underlain by 10 ft. of silty clay.)

To be determined (TBD) by a professional engineer or hydrogeologist following a geotechnical/geological exploration. This will be completed prior to final design.

2. What is the depth below ground surface of the water table at the pond site? TBD as noted in item 1 ft.

How many feet below ground surface is the bottom of the pond? TBD as noted in item 1 ft.

3. What is the depth to bedrock at the pond site? ☐ <10 ft. ☐ 10-20 ft. ☐ 20-50 ft. ☐ >50 ft. TBD as noted in Item 1

4. What is the bedrock type (Ex.: limestone, sandstone, etc.)? Bedrock depth and Type (Items 3 and 4) - TBD as noted in item 1

5. What is the proximity to the ponds of private water supply wells? ☐ < 1/4 mile ☒ 1/4 - 1 mile ☐ >1 mile

6. Describe the approximate number, type and depth of private water wells in the general vicinity of the ponds (3 mile radius). (Ex.: most (#?) wells generally drilled to greater than 50 ft., however, several shallow (20 ft.) sand point wells also present.)

According to the Minnesota Well Index - one Domestic Well is located within a 3 mile radius of the infiltration basin. Unique Well ID: 764142 - Itasca County Gun Club - 79 ft depth. PRM has a new water supply well onsite near the plant site.

7. Are the ponds located in a designated Wellhead Protection Area? ☐ Yes ☒ No

8. Are monitoring wells present at the pond site? ☐ Yes ☒ No

If yes, please submit a topographic or equivalent map showing well locations with respect to the pond system.

Have any wells shown adverse impacts (Ex.: high nitrate or chloride concentrations)? ☐ Yes ☐ No

If yes, please describe the adverse impacts: _____

9. What is the proximity to the ponds of any nearby surface waters? (Ex.: Minnesota River located 1/4 mile to the north.).

Wetlands are located directly to the east. The West Hill Mine Pit is located approximately 1400 ft to the west.

Pond Information

10. Please indicate the types of ponds that are present at the facility. (Check all that apply)

☐ Primary

☐ Secondary

☐ Polishing

☐ Equalization

- ☐ Aerated
 ☐ Anaerobic
 ☐ Cooling
 ☐ Contaminated runoff
☐ Irrigation holding
 ☐ Ash handling
 ☒ Other: Infiltration Basin/System

11. Please complete the following table for each pond at the facility.

Pond type	Max operating depth (ft.)	Min operating depth (ft.)	Mean operating depth (ft.)	Acreage at mean operating depth	Days of detention time (design flow)	Year each pond was constructed
Infiltration Basin 1	TBD	TBD	NA	TBD	NA	TBD

12. What is the source of the acreage information in question 11 above? (Ex: as built plans and specs, engineering survey, etc.)
Permit Level Design

13. Has the pond system ever been repaired or upgraded? ☐ Yes ☒ No If yes, what year? _____
If yes, please describe what the upgrade included: _____

14. Has the pond system ever been dredged? ☐ Yes ☒ No If yes, what year? _____
If yes, please describe the method of dredge material disposal: _____

15. What type of pond liner is present? ☐ Clay ☐ Synthetic/Vinyl ☐ Bentonite ☒ Other: non lined - infiltration system

16. Is the pond system ever operated at a depth so that the freeboard is less than 3 feet? ☐ Yes ☒ No
If yes, please describe the situation and identify how often it occurs: _____

17. What is the relationship between current wastewater flows and pond designed hydraulic capacity?

☐ below capacity ☐ at or near capacity ☐ above capacity TBD as noted in Item 1

18. Are there any drain tiles (designed or pre-existing) located in the vicinity of or beneath the pond system? ☐ Yes ☒ No

If yes, please submit a topographic or equivalent map showing the drain tile locations and a description of each. (The map and description should include but not be limited to: the drain tile location in relation to the pond system; the drain tile location in relation to the irrigation field [if applicable]; each drain tile discharge location; and, each discharge location station identification code [if applicable].)

19. Please list the calendar month total influent and effluent flow in million gallons for each of the past 12 months (not applicable for municipal facilities).

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Influent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Effluent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

20. What is the average annual influent CBOD₅? NA mg/L

21. Are there known or potential sources of toxic pollutants (metals, Volatile Organic Compounds [VOCs] such as, trichloroethylene, chloroform, methyl tert-butyl ether [MTBE], benzene, etc.)? ☐ Yes ☒ No

If yes, please describe: UNKNOWN AT THIS TIME - TBD

22. Is the pond system located in karst topography? ☐ Yes ☒ No

If yes and if your facility is listed in the 1993 Administrative Order requiring the preparation of a contingency plan, please ensure your facility has an updated contingency plan on file.

Review the attachment and ensure all requested items are submitted with this attachment.

**Please make a copy for your records.
Refer to the *Transmittal Form* for mailing instructions.**



NPDES/SDS Permit Program

Doc Type: Permit Application

Complete the attachment by typing or printing in black ink. Attach additional sheets as necessary. For more information, please contact the Minnesota Pollution Control Agency (MPCA) at: In Metro Area: 651-296-6300 or Outside Metro Area: 800-657-3864.

Permit number: MN

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats
wq-wwprm7-48 • 2/8/2013 Page 1 of 2

***Remember to attach the *Material Safety Data Sheets*, complete product labels and any other information on chemical composition, aquatic toxicity, human health, and environmental fate for each chemical additive.**

Please make a copy for your records.

Refer to the *Transmittal Form* for mailing instructions.

MATERIAL SAFETY DATA SHEET FERROSILICON: GAS ATOMISED POWDER

COMPANY DETAILS

Name: Exxaro FerroAlloys (Pty) Ltd.

Address: PO Box 9229
Pretoria 0001
South Africa

Tel: +27 (12) 307 8519

Fax: +27 (12) 307 7157

Emergency Telephone no: 072 397 8936

1. Product and Company Identification:

(Page 1 may be used as an emergency safety sheet)

Trade name: Ferrosilicon 14/16

Chemical Family: Metal Alloy

Chemical name:

Synonyms:

Chemical Abstract no: 8049-17-0

NIOSH no: 7602

Hazchem code:

UN-no:

2. Composition:

Fe = 85%

Si = 15%

Al, Mn, Cu, Cr, Ni, C and S less than 0,5%

Hazardous components: None

3. Hazards Identification:

None.

4. First Aid Measures:

Product in eye:

Wash, flush and clean.

Product on skin:

Wash, flush and clean.

Product ingested:

None.

Product inhaled:

Remove patient to fresh air.

5. Fire Fighting Measures:

Extinguishing methods:

Non-combustible. In the event of fire near or on top of ferrosilicon, the product does not restrict the extinguishing method.

Special hazards:

None.

Protective clothing:

None.

6. Accidental Release Measures

Personal precautions:

Wear PPE at all times.

Environmental precautions:

Avoid generation of dust. No special steps necessary.

Small spills:

None.

Large spills:

None

Document Title:	MSDS FerroSilicon - Gas Atomised Powder	Document Owner:	Head Plant
Document No.:	FA-WI-086.01	Creation Date:	30 June 1996
Revision:	1	Effective Date:	27 June 2016
If printed, always refer to the electronic copy available on the document management system as that would serve as the only valid version at all times. Printed 27 June 2016.			

7. Handling and Storage:

Handling/storage precaution:

Ferrosilicon should be stored upright, in the plastic lined bags that the product is supplied in.

Store in an enclosed, dry, ventilated area away from moisture, water, acids and hydro-acids. The enclosed storage area should protect the material from nature elements (i.e. sunlight, rain, humidity, moisture).

Do not seal damp or wet material in containers. In the event of material getting wet, it should be used within one day in the normal application or dried in a suitable drying oven or open air.

Do not store with oxidising or flammable materials.

Do not expose to direct sunlight for long periods.

Do not stack store more than two bags on top of each other.

8. Exposure Controls/Personal Protection:

Occupational exposure limits:

None.

Engineering control measures:

None.

Personal protection – respiratory:

Depending on the dust concentration when opening a container or bag, the necessary respirator must be worn.

Personal protection – hand:

None.

Personal protection – eye:

Dust safety goggles may prevent dust in eyes.

Personal protection – skin:

None.

Other protection:

None.

9. Physical and Chemical Properties:

Appearance:

Metallic powder, consisting of tiny spherical particles:

100% <212µm, 50% to 70% <45µm

Odour:

None.

pH:

-

Boiling point:

-

Melting point:

1400°C.

Flash point:

-

Flammability:

-

Auto flammability:

None.

Explosive properties:

None.

Oxidising properties:

-

Vapour pressure:

-

Density:

Bulk density = 4.1 g/cc.

Document Title:	MSDS FerroSilicon - Gas Atomised Powder	Document Owner:	Head Plant
Document No.:	FA-WI-086.01	Creation Date:	30 June 1996
Revision:	1	Effective Date:	27 June 2016
If printed, always refer to the electronic copy available on the document management system as that would serve as the only valid version at all times. Printed 27 June 2016.			

10. Stability and Reactivity:	
Conditions to avoid:	When in contact with strong acids or alkalis, small amounts of hydrogen, arsine and phosphine may be generated.
Incompatible materials:	None.
Hazardous decomposition products:	None.
Radioactivity:	None.
11. Toxicological Information:	
Not classified as harmful.	
12. Ecological Information:	
Ferrosilicon is not considered environmentally harmful.	
13. Disposal consideration:	
No specific disposal considerations. Only local in accordance with internal policy and external laws.	
14. Transport Information:	
No special steps necessary. Keep containers dry as far as possible.	
15. Regulatory Information:	
Not listed as Hazardous Chemical Substance (HCS).	
16. Other Information:	
None.	

Document Title:	MSDS FerroSilicon - Gas Atomised Powder	Document Owner:	Head Plant
Document No.:	FA-WI-086.01	Creation Date:	30 June 1996
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If printed, always refer to the electronic copy available on the document management system as that would serve as the only valid version at all times. Printed 27 June 2016.			

MEGAFLOC 6244**1 PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier: MEGAFLOC 6244
Common Name: Anionic Water-soluble Polymer
SDS Number: 0179
Product Code: WT0085
Revision Date: 3/18/2015
Version: 2
Product Use: Wastewater flocculating agent
Supplier Details: U. S. Water, a Kurita company
12270 43rd St. NE
St. Michael, MN 55376
Contact: Non-emergency #: 866-663-7632
Email: SDS@uswaterservices.com
Web: www.uswaterservices.com

EMERGENCY RESPONSE: (ChemTel)
US & Canada: 800-255-3924
International: +01-813-248-0585

2 HAZARDS IDENTIFICATION**Classification of the Substance or Mixture****GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):**

No GHS Classifications Indicated

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **NONE**

GHS Hazard Pictograms:

No GHS pictograms indicated for this product

GHS Hazard Statements:

No GHS hazards statements indicated

GHS Precautionary Statements:

No GHS precautionary statements indicated

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

MEGAFLOC 6244**3****COMPOSITION/INFORMATION OF INGREDIENTS**

Chemical Ingredients:

CAS#

% Chemical Name:

4**FIRST AID MEASURES**

Inhalation: Move to fresh air. No hazards which require special first aid measures.

Skin Contact: Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In case of persistent eye irritation, consult a physician.

Ingestion: Rinse mouth with water. Do NOT induce vomiting. No hazards which require special first aid measures.

Most important symptoms & effects (acute & delayed): None.

Indication of need for immediate medical attention: None reasonably foreseeable.

Special treatment needs: None.

5**FIRE FIGHTING MEASURES****Extinguishing Media:**

Suitable: Water, water spray, foam, carbon dioxide (CO₂), dry powder. Warning! Aqueous solutions or powders that become wet render surfaces extremely slippery.

Unsuitable: None.

Hazardous combustion products: Thermal decomposition may produce: nitrogen oxides (NO_x), carbon oxides (CO_x). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Unusual Fire or Explosion Hazards: None known

Special protective equipment/precautions: In the event of fire, wear self-contained breathing apparatus. Aqueous solutions or powders that become wet render surfaces extremely slippery.

6**ACCIDENTAL RELEASE MEASURES**

Personal Precautions, Protective equipment, emergency procedures: Personal precautions: Aqueous solutions or powders that become wet render surfaces extremely slippery. Protective equipment: Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection). Emergency procedures: Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

Environmental Precautions: As with all chemical products, do not flush into surface water.

Spill/Leak procedures: Small spills: Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. Large spills: Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. Residues: After cleaning, flush away traces with water.

Regulatory Requirements: Dispose of recovered material in accordance with all applicable state and federal regulations.

MEGAFLOC 6244**7 HANDLING AND STORAGE**

- Handling Precautions:** Aqueous solutions or powders that become wet render surfaces extremely slippery. Use personal protective equipment.
- Storage Requirements:** Keep in a dry place. Keep container closed when not in use. Incompatible with oxidizing agents.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.
- Personal Protective Equipment:**
- Eye/face protection: Safety glasses with side-shields.
 - Skin protection:
 - Hand protection: PVC or other plastic material gloves.
 - Other: Workclothes protecting arms, legs and body.
 - Respiratory protection: No personal respiratory protective equipment normally required. Dust safety masks recommended where working powder concentration is more than 10 mg/m³.
 - Additional advice: Handle in accordance with good industrial hygiene and safety practice.
 - Environmental exposure controls: Do not allow uncontrolled discharge of product into the environment. Do not flush into surface water.

Exposure Limits:**OSHA (TWA)/PEL:** Not Established**ACGIH (TWA/TLV):** Not Established**9 PHYSICAL AND CHEMICAL PROPERTIES**

- | | | | |
|-------------------------------|-------------------|------------------------------|--|
| Appearance: | White | Odor: | None |
| Physical State: | Granular solid | Solubility: | Soluble in water |
| Odor Threshold: | Not applicable | Percent Volatile: | 0% |
| Spec Grav./Density: | 0.6 - 0.9 | Freezing/Melting Pt.: | > 150°C |
| Viscosity: | Not determined | Flash Point: | Not applicable |
| Boiling Point: | Not applicable | Vapor Density: | Not applicable |
| Flammability: | No data available | VOC: | 0% |
| Partition Coefficient: | -2 | Bulk Density: | 6.67 lb/gal |
| Vapor Pressure: | Not applicable | Auto-Ignition Temp: | Does not self-ignite |
| pH: | 5-9 @ 5 g/L | UFL/LFL: | Not expected to create explosive atmospheres |
| Evap. Rate: | Not applicable | | |
| Decomp Temp: | >150°C | | |

MEGAFLOC 6244**10 STABILITY AND REACTIVITY**

Reactivity:	None known.
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Materials to Avoid:	Incompatible with oxidizing agents.
Hazardous Decomposition:	Thermal decomposition may produce: nitrogen oxides (NO _x), carbon oxides (CO _x), hydrogen cyanide (hydrocyanic acid).
Hazardous Polymerization:	Oxidizing agents may cause exothermic reactions.

11 TOXICOLOGICAL INFORMATION

Acute Oral toxicity: LD₅₀/Oral/rat > 5000 mg/kg
Acute Dermal toxicity: LD₅₀/Dermal/rat > 5000 mg/kg
Acute Inhalation toxicity: The product is not expected to be toxic by inhalation
Skin Corrosion/Irritation: Not irritating.
Serious eye damage/irritation: Not irritating.
Respiratory or skin sensitization: Not sensitizing.
Specific target organ toxicity (single exposure): No known effects.
Specific target organ toxicity (repeated exposure): No known effects.
Aspiration hazard: No hazards resulting from the material as supplied.
Carcinogenicity: Not carcinogenic.
Germ Cell Mutagenicity: Not mutagenic.
Teratogenicity: No teratogenic effects are known for the components of this product
Reproductive toxicity: Not toxic for reproduction.

12 ECOLOGICAL INFORMATION

Acute toxicity to fish:
LC₅₀/Danio rerio/96h > 100 mg/L (OECD 203)
LC₅₀/Fathead minnow/96h > 100 mg/L (OECD 203)
Acute toxicity to invertebrates:
EC₅₀/Daphnia magna/48h > 100 mg/L (OECD 202)
Acute toxicity to algae:
IC₅₀/Scenedesmus subspicatus/72h > 100 mg/L (OECD 201)
Chronic toxicity to fish: No data available
Chronic toxicity to invertebrates: No data available
Toxicity to microorganisms: No data available
Effects on terrestrial organisms: No known effects
Sediment toxicity: No data available

Elimination (persistence & degradability): Not readily biodegradable. Does not hydrolyse.

Bioaccumulative potential: Not bioaccumulating.
Partition co-efficient (Log Pow): -2
Bioconcentration factor (BCF): 0

Mobility in soil: None

Other adverse effects: None known.

MEGAFLOC 6244**13 DISPOSAL CONSIDERATIONS**

Waste from residues/unused products: Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging: Rinse empty containers with water and use the rinse-water to prepare working solution. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling: In accordance with local and national regulations.

14 TRANSPORT INFORMATION

Proper Shipping Name: Non Regulated

15 REGULATORY INFORMATION

TSCA: All components of this product are listed (or are not required to be listed) in the TSCA inventory

**WARNING**

This product can expose you to chemicals including Acrylamide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

REGULATORY KEY DESCRIPTIONS

TSCA = Toxic Substances Control Act

TSCA: All components of this product are listed (or are not required to be listed) in the TSCA inventory

EPA / CERCLA / SARA TITLE III:

CERCLA List: This product does not contain any CERCLA listed hazardous substances.

Toxic Chemical List (SARA 313): This product does not contain any chemicals subject to routine annual toxic chemical release reporting.

Extremely Hazardous Substance (SARA 302/304): This product does not contain any extremely hazardous substances subject to emergency planning requirements.

SARA 312: No data available

RCRA: No data available

16 OTHER INFORMATION

Author: U.S. Water, a Kurita company

Revision Notes: Updated to GHS format

MEGAFLOC 6244

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s). The above information is not claiming characteristics of the product in term of legal claims of performance / guarantee. This information only describes safety measures and no liability may arise from the use or application of the product described herein. This information is given in good faith and based on our current knowledge of the product.

Revision Date: 3/18/2015

MEGAFLOC 4224 GR**1****PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier: MEGAFLOC 4224 GR
Common Name: Mixture
SDS Number: 0287
Product Code: WT0097
Revision Date: 10/17/2019
Version: 2
Product Use: Wastewater Treatment
Supplier Details: U. S. Water, a Kurtia company
12270 43rd St. NE
St. Michael, MN 55376
Contact: Non-emergency #: 866-663-7632
Email: SDS@uswaterservices.com
Web: www.uswaterservices.com

EMERGENCY RESPONSE: (ChemTel)
US & Canada: 800-255-3924
International: +01-813-248-0585

2**HAZARDS IDENTIFICATION****Classification of the Substance or Mixture**

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

No GHS Classifications Indicated

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **NONE**

GHS Hazard Pictograms:

No GHS pictograms indicated for this product

GHS Hazard Statements:

No GHS hazards statements indicated

GHS Precautionary Statements:

No GHS precautionary statements indicated

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

MEGAFLOC 4224 GR**3 COMPOSITION/INFORMATION OF INGREDIENTS**

Chemical Ingredients:		
CAS#	%	Chemical Name:
64742-47-8	20-45%	Distillates, petroleum, hydrotreated light
69011-36-5	<5%	Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched

4 FIRST AID MEASURES

Inhalation: Move to fresh air. No hazards which require special first aid measures.

Skin Contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of persistent skin irritation, consult a physician.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Alternatively, rinse immediately with Diphoterine®. Get prompt medical attention.

Ingestion: Rinse mouth with water. Do NOT induce vomiting. Call a physician or poison control centre immediately.

Most important symptoms & effects (acute & delayed): None under normal use.

Indication of need for immediate medical attention: None reasonably foreseeable.

Special treatment needs: None.

5 FIRE FIGHTING MEASURES**Extinguishing Media:**

Suitable: Water, water spray, foam, carbon dioxide (CO₂), dry powder. Warning! Spills produce extremely slippery surfaces.

Unsuitable: None.

Hazardous combustion products: Carbon oxides (CO_x). Nitrogen oxides (NO_x). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Unusual Fire or Explosion Hazards: None known

Special protective equipment/precautions: Wear self-contained breathing apparatus and protective suit. Spills produce extremely slippery surfaces.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective equipment, emergency procedures: Do not touch or walk through spilled material. Spills produce extremely slippery surfaces. Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection). Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

Environmental Precautions: As with all chemical products, do not flush into surface water.

Spill/Leak procedures: Small spills: Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Large spills: Do not flush with water. Dam up. Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Residues: After cleaning, flush away traces with water.

Regulatory Requirements: Dispose of recovered material in accordance with all applicable state and federal regulations.

MEGAFLOC 4224 GR**7 HANDLING AND STORAGE**

- Handling Precautions:** Avoid contact with skin and eyes. Render surfaces extremely slippery when spilled. When using, do not eat, drink or smoke.
- Storage Requirements:** Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material. Incompatible with oxidizing agents.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.
- Personal Protective Equipment:**
- Eye/face protection: Safety glasses with side-shields.
 - Skin protection:
 - Hand protection: PVC or other plastic material gloves.
 - Other: Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur.
 - Respiratory protection: No personal respiratory protective equipment normally required.
 - Additional advice: Wash hands before breaks and at the end of workday. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.
 - Environmental exposure controls: Do not allow uncontrolled discharge of product into the environment.
- Exposure Limits:** *Distillates (petroleum), hydrotreated light*
- OSHA (TWA)/PEL: Not Established
- ACGIH (TWA/TLV): 200 mg/m³ (8 hours)

9 PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|-------------------------------|----------------------------------|------------------------------|--|
| Appearance: | Milky | Odor: | Aliphatic |
| Physical State: | Viscous liquid | Solubility: | Completely miscible |
| Odor Threshold: | Not data available | Freezing/Melting Pt.: | < 5°C |
| Spec Grav./Density: | 1.0 - 1.2 / 8.34 - 10.01 lb/gal | Flash Point: | Does not flash |
| Viscosity: | > 20.5 mm ² /s @ 40°C | Vapor Density: | 0.804 g/litre @ 20°C |
| Boiling Point: | > 100°C | Auto-Ignition Temp: | No data available |
| Flammability: | Not applicable | UFL/LFL: | Not expected to create explosive atmospheres |
| Partition Coefficient: | Not applicable | | |
| Vapor Pressure: | 2.3 kPa @ 20°C | | |
| pH: | 5.5 - 8.5 @ 5 g/L | | |
| Evap. Rate: | Not data available | | |
| Decomp Temp: | > 150°C | | |

MEGAFLOC 4224 GR**10****STABILITY AND REACTIVITY**

Reactivity:	Stable under recommended storage conditions.
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Protect from frost, heat and sunlight.
Materials to Avoid:	Incompatible with oxidizing agents.
Hazardous Decomposition:	Thermal decomposition may produce: nitrogen oxides (NOx), carbon oxides (COx). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.
Hazardous Polymerization:	None known.

11**TOXICOLOGICAL INFORMATION****Toxicological Information:**Information on the product as supplied:

Acute oral toxicity: LD50/oral/rat > 5000 mg/kg (Estimated)
Acute dermal toxicity: LD50/dermal/rat > 5000 mg/kg (Estimated)
Acute inhalation toxicity: This product is not expected to be toxic by inhalation
Skin Corrosion/Irritation: Non-irritating to skin
Serious eye damage/irritation: Not irritating (OECD 437)
Respiratory or skin sensitization: Not sensitizing
Mutagenicity: Not mutagenic
Carcinogenicity: Not carcinogenic
Reproductive toxicity: Not toxic for reproduction
Specific target organ toxicity (single exposure): No known effects
Specific target organ toxicity (repeated exposure): No known effects
Aspiration hazard: Due to the viscosity, this product does not present an aspiration hazard.

Relevant information on the hazardous components:*Distillates (petroleum), hydrotreated light*

Acute oral toxicity: LD50/oral/rat > 5000 mg/kg (OECD 401)
Acute dermal toxicity: LD50/dermal/rabbit > 5000 mg/kg (OECD 402)
Acute inhalation toxicity: LC0/inhalation/4hours/rat \geq 4951 mg/m³ (OECD 403) (Based on results obtained from tests on analogous products)
Skin Corrosion/Irritation: Non-irritating (OECD 404) Repeated exposure may cause skin dryness or cracking
Serious eye damage/irritation: Not irritating (OECD 405)
Respiratory or skin sensitization: By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)
Mutagenicity: Not mutagenic (OECD 471, 473, 474, 476, 478, 479)
Carcinogenicity: Carcinogenicity study in rats (OECD 451): Negative
Reproductive toxicity: By analogy with similar substances, this substance is not expected to be toxic for reproduction. NOAEL/rat = 300 ppm (OECD 421)
Specific target organ toxicity (single exposure): No known effects
Specific target organ toxicity (repeated exposure): NOAEL/oral/rat/90 days \geq 3000 mg/kg/day (OECD 408) (Based on results obtained from tests on analogous products)
Aspiration hazard: May be fatal if swallowed and enters airways.

Poly(oxy-1,2-ethanediyl), α -tridecyl-w-hydroxy-, branched

Acute oral toxicity: LD50/oral/rat = 500 - 2000 mg/kg
Acute dermal toxicity: LD50/dermal/rabbit > 2000 mg/kg
Acute inhalation toxicity: No data available

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Skin Corrosion/Irritation: Not irritating (OECD 404)
Serious eye damage/irritation: Causes serious eye irritation (OECD 405)
Respiratory or skin sensitization: The results of testing on guinea pigs showed this material to be non-sensitizing
Mutagenicity: In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
Carcinogenicity: Based on the absence of mutagenicity, it is unlikely that the substance is carcinogenic.
Reproductive toxicity: Two-Generation Reproduction Toxicity (OECD 416)

- NOAEL/rat > 250 mg/kg/day

Prenatal Development Toxicity Study (OECD 414)

- NOAEL/Maternal toxicity/rat > 50 mg/kg/day
- NOAEL/Developmental toxicity/rat > 50 mg/kg/day

Specific target organ toxicity (single exposure): No known effects
Specific target organ toxicity (repeated exposure): NOAEL/oral/rat/600 days = 50 mg/kg/day
Aspiration hazard: No known effects

12**ECOLOGICAL INFORMATION****Toxicity:**Information on the product as supplied:

Acute toxicity to fish: LC50/Danio rerio/96h > 100 mg/L (Estimated)
LC50/Oncorhynchus mykiss/96h > 100 mg/L (Estimated)
Acute toxicity to invertebrates: EC50/Daphnia magna/48h = 10-100 mg/L (Estimated)
Acute toxicity to algae: IC50/Algae/72h > 100 mg/L (Estimated)
Chronic toxicity to fish: No data available
Chronic toxicity to invertebrates: No data available
Toxicity to microorganisms: No data available
Effects on terrestrial organisms: No data available
Sediment toxicity: No data available

Relevant information on the hazardous components:*Distillates (petroleum), hydrotreated light*

Acute toxicity to fish: LC0/Oncorhynchus mykiss/96h > 1000 mg/L (OECD 203)
Acute toxicity to invertebrates: EC0/Daphnia magna/48h > 1000 mg/L (OECD 202)
Acute toxicity to algae: IC0/Pseudokirchneriella subcapitata/72h > 1000 mg/L (OECD 201)
Chronic toxicity to fish: NOEC/Oncorhynchus mykiss/28 days > 1000 mg/L
Chronic toxicity to invertebrates: NOEC/Daphnia magna/21 days > 1000 mg/L
Toxicity to microorganisms: EC50/Tetrahymena pyriformis/48h > 1000 mg/L
Effects on terrestrial organisms: No data available
Sediment toxicity: No data available. Readily biodegradable, exposure to sediment is unlikely.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Acute toxicity to fish: LC50/Cyprinus carpio/96h = 1-10 mg/L (OECD 203)
Acute toxicity to invertebrates: EC50/Daphnia/48h = 1-10 mg/L (OECD 202)
Acute toxicity to algae: IC50/Desmodesmus subspicatus/72h = 1-10 mg/L (OECD 201)
Chronic toxicity to fish: No data available
Chronic toxicity to invertebrates: NOEC/Daphnia magna/21 days > 1 mg/L (OECD 202)
Toxicity to microorganisms: EC10/activated sludge/17h > 10000 mg/L (DIN 38412-8)
Effects on terrestrial organisms: No data available
Sediment toxicity: No data available.

Elimination (persistence & degradability):Information on the product as supplied:

Degradation: Not readily biodegradable

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Hydrolysis: Does not hydrolyse.

Photolysis: No data available

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Degradation: Readily biodegradable. 67.6% / 28 days (OECD 301 F) ; 68.8% / 28 days (OECD 306) ; 61.2% / 61 days (OECD 304 A)

Hydrolysis: Does not hydrolyse

Photolysis: No data available

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Degradation: Readily biodegradable. >60% / 28 days (OECD 301 B)

Hydrolysis: Does not hydrolyse

Photolysis: No data available

Bioaccumulative potential:

Information on the product as supplied:

This product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): Not applicable

Bioconcentration factor (BCF): No data available

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Partition co-efficient (Log Pow): 3 - 6

Bioconcentration factor (BCF): No data available

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Partition co-efficient (Log Pow): > 3

Bioconcentration factor (BCF): No data available

Mobility in soil:

Information on the product as supplied:

No data available

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Koc: No data available

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Koc: >5000

Other adverse effects: None known

13**DISPOSAL CONSIDERATIONS**

Waste from residues/unused products: Dispose in accordance with local and national regulations.

Contaminated packaging: Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling: In accordance with local and national regulations.

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14 TRANSPORT INFORMATION

Proper Shipping Name: Non Regulated

15 REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[20-45%] Distillates, petroleum, hydrotreated light (64742-47-8) TSCA

[<5%] Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (69011-36-5) TSCA



WARNING

This product can expose you to chemicals including Acrylamide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Regulatory Code Legend

TSCA = Toxic Substances Control Act

TSCA: All components of this product are listed (or are not required to be listed) in the TSCA inventory

EPA / CERCLA / SARA TITLE III:

CERCLA List: This product does not contain any CERCLA listed hazardous substances.

Toxic Chemical List (SARA 313): This product does not contain any chemicals subject to routine annual toxic chemical release reporting.

Extremely Hazardous Substance (SARA 302/304): This product does not contain any extremely hazardous substances subject to emergency planning requirements.

SARA 312: No data available

RCRA: No data available

This product is formulated to meet "GRAS" (Generally Recognized As Safe) requirements according to sections 201(s) and 409 of the Federal Food, Drug, and Cosmetic Act (the Act). Refer to GRAS certification letter for more specific information

16 OTHER INFORMATION



Author: U.S. Water, a Kurita company

Revision Notes: Updated to GHS format

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular

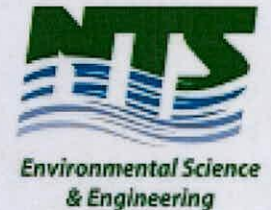
MEGAFLOC 4224 GR

purpose(s). The above information is not claiming characteristics of the product in term of legal claims of performance / guarantee. This information only describes safety measures and no liability may arise from the use or application of the product described herein. This information is given in good faith and based on our current knowledge of the product.

Revision Date: 10/17/2019

July 31, 2020

Attn: Fiscal Services – 6th Floor
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194



RE: Prairie River Minerals, LLC – State Disposal System Permit Application

To Whom It May Concern:

On behalf of Prairie River Minerals, LLC (PRM), Northeast Technical Services, Inc. (NTS) is submitting this State Disposal System Permit Application for a Demonstration Project proposed near Coleraine, Minnesota. Included as part of this application are the following forms:

1. Permit application checklist for industrial process wastewater;
2. Transmittal form (with submittals, including a check for \$10,540 for application fees);
3. Industrial Land Discharge of Process Wastewater Application (with Municipal and Industrial Pond Attachment); and,
4. Industrial Chemical Additives Attachment (with Safety Data Sheets).

Please note that PRM will be obtaining coverage under a General Industrial Stormwater Permit for the Demonstration Project. In addition, there will be no process water/wastewater discharged to surface water from PRM's Demonstration Project, per MPCA Chemical Additive Review Guidance, the chemical additive guidance and associated review is not applicable. Please note that a pond attachment has been included as part of this application, however stormwater from the waste management area will be diverted to an infiltration system instead of a lined pond.

If you have any questions regarding this submittal, please feel free to contact Larry Sutherland at (218) 404-4257 or via email at lsuterhland@prairieriverminerals.com. You may also contact me at (218) 780-7316 or via email at dschubbe@nettechnical.com.

Sincerely,

Dennis Schubbe, P.G.
Northeast Technical Services, Inc.

CC via email: Larry Sutherland, PRM
Johann Grobler, PRM
Marty Halverson, PRM
Stephanie Handeland, MPCA
Jacob Crispo, NTS

526 CHESTNUT STREET • VIRGINIA, MINNESOTA 55792 • (218) 741-4290 • FAX (218) 741-4291
WWW.NETTECHNICAL.COM

EQUAL OPPORTUNITY EMPLOYER

Permit application checklist
for industrial process wastewater

NPDES/SDS Permit Program

National Pollutant Discharge Elimination System (NPDES)/
State Disposal System (SDS)

Doc Type: Permit Application

Industrial process wastewater is wastewater which, during the manufacturing or processing, comes into direct contact with, or is left over from production of a raw material, intermediate product, finished product, byproduct or waste product.

This checklist is intended to help permit applicants determine the correct forms to submit as part of a complete permit application package. The Minnesota Pollution Control Agency (MPCA) will review the application materials for completeness and notify the applicant within 30 business days of receipt whether the application is incomplete or complete enough for processing.

MPCA use only
Permit number
Date received (mm/dd/yyyy)

Print or type application: Before submitting an application, make a photocopy of this form and all other application materials for your records. The MPCA will review the application for completeness and provide an official response to the permittees within 30 days of receipt of all necessary application materials.

Permit application assembly: To expedite the processing and review of your application, put this form and any other applicable permit application checklists for other waste types at the beginning of your submittal package. Please place all other application forms in order as listed on the back of this form. Do not place forms and checklists in an appendix as this makes it difficult and time consuming for staff to locate them.

Completeness instructions: The MPCA will not process an application without properly completed forms. **All sections of required forms must be completed.** If portions do not apply to this facility, please indicate using "n/a" or explain why it doesn't apply. For permit reissuance, all forms information must also be completed in full even if the information requested is not changing from the existing permit. This allows the MPCA to quickly verify that the existing information is correct.

Facility name: Prairie River Minerals, LLC Demonstration Project Permit No.: MN

Reason for application (check all that apply): ☒ New permit ☐ Permit Modification ☐ Permit Reissuance
☐ Resubmittal of an application determined to be incomplete.
(Include copies of all returned forms with a resubmittal.)

Does this action include construction activities: ☐ Construction is proposed as part of the permit action.
☐ No construction is proposed as part of this permit action.

Form submittal

Submit one (1) hard copy of the permit application package, including the permit application fee. **The completed form is to be returned to:**

Attn: Fiscal Services – 6th floor
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Optional: If you know your assigned permit writer, please email the electronic permit application. For reference, permit writer assignments can be located at: <https://www.pca.state.mn.us/water/wastewater-permit-writers>. The hard copy package is still required to be submitted to the address above.

Assistance

If you have any questions regarding the selection of the proper forms or how to complete the required information, contact MPCA staff assigned to your facility. Staff is assigned by regions and a director of regional staff can be located at: <http://www.pca.state.mn.us/index.php/about-mpca/mpca-overview/agency-structure/mpca-offices/mpca-offices.html>

You may also contact the MPCA at:

- In Metro Area 651-296-6300
- Outside Metro Area: 800-657-3864
- Email to: askpca@state.mn.us.

Application forms selection (Check all boxes that apply and include the completed form with the submittal.)

Listed below are application forms and required submittals that may be required for a typical industrial wastewater treatment facility application. All required forms must be completed in-full and included with the submittal. The MPCA cannot process an application that does not include all of the required application forms. All forms, instructions, and additional information can be found on the MPCA's website at <http://www.pca.state.mn.us/enzq915>.

Check all boxes that apply. Include a copy of all completed application forms with the submittal.

	For MPCA use only		
	Received	Incomplete	Complete
Required for all water quality permits			
<input checked="" type="checkbox"/> Transmittal form (wq-wwprm7-03) http://www.pca.state.mn.us/index.php/view-document.html?gid=6275	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Application Fee as specified on the Transmittal form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Certification Signature as specified on Transmittal form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Required for all new permits and modifications with a change in design flow			
<input type="checkbox"/> MPCA Design Flow and Loading Determination Guidelines for Wastewater Treatment Facilities, Table 2, Worksheet (wq-wwtp#5.20) http://www.pca.state.mn.us/index.php/view-document.html?gid=13505	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Major NPDES facilities and/or Categorical NPDES facilities			
<input type="checkbox"/> U.S. Environmental Protection Agency (EPA) Application Form 1 (10 pages of instructions, 16 pages total) http://www.pca.state.mn.us/index.php/view-document.html?gid=7024	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> EPA Application Form 2C (5 pages of instructions, 25 pages total) http://www.pca.state.mn.us/index.php/view-document.html?gid=7025	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discharge to surface water (for major and minor facilities)			
<input type="checkbox"/> Industrial surface water discharge of process wastewater application (wq-wwprm7-20) http://www.pca.state.mn.us/index.php/view-document.html?gid=7027	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discharge to land			
<input checked="" type="checkbox"/> Industrial land discharge of process wastewater (wq-wwprm7-21) http://www.pca.state.mn.us/index.php/view-document.html?gid=7029	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Industrial land application of industrial by-products application (wq-wwprm7-27)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discharge to municipal wastewater treatment facility			
<input type="checkbox"/> Industrial pretreatment discharge to a municipal wastewater treatment facility application (wq-wwprm7-23) http://www.pca.state.mn.us/index.php/view-document.html?gid=7033	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treatment facilities using stabilization ponds			
<input type="checkbox"/> Municipal and industrial pond attachment (wq-wwprm7-11) http://www.pca.state.mn.us/index.php/view-document.html?gid=7002	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater management for wastewater treatment permit holders			
<input type="checkbox"/> Industrial Stormwater Multi-Sector NPDES/SDS Permit application (wq-wwprm7-60a) http://www.pca.state.mn.us/index.php/view-document.html?gid=19364 Instructions for Industrial Stormwater Permit Application Attachment to NPDES/SDS Permit (wq-wwprm7-60b) http://www.pca.state.mn.us/index.php/view-document.html?gid=19368	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional attachments			
<input type="checkbox"/> Additional station location attachment (wq-wwprm7-49) http://www.pca.state.mn.us/index.php/view-document.html?gid=7049	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Additional chemical additives attachment (wq-wwprm7-48) http://www.pca.state.mn.us/index.php/view-document.html?gid=7051	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supplemental information (This information may be information required on one, or more of the forms listed above, such as a map. A single map that provides all the information required from multiple forms may be acceptable. A separate copy of each form is not required.)			
<input checked="" type="checkbox"/> Topographic map.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> A schematic drawing or treatment process flow diagram showing all treatment components, direction of flow, compliance monitoring station locations, and discharge locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> List any additional documents, reports, plans, or attachments included as part of the application package. (Common types of supplemental information may include maps, process flow diagrams, facility plans, engineering reports, plans and specifications, technical checklists and other reports related to the facility or proposed project.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Listed below are application forms and required submittals that may be required for a typical industrial wastewater treatment facility application. All required forms must be completed in-full and included with the submittal. The MPCA cannot process an application that does not include all of the required application forms. All forms, instructions, and additional information can be found on the MPCA's website at <http://www.pca.state.mn.us/enzq915>.

Check all boxes that apply. Include a copy of all completed application forms with the submittal.

Other waste types Some facilities may also include other waste types that are not covered by this checklist. Facilities with multiple types of wastes should review the other permit application checklists to determine if additional forms and attachments may be required.

- ☐ *Permit application checklist for /domestic wastewater (wq-wwprm7-04a)*
- ☐ *Permit application checklist for miscellaneous waste types (wq-wwprm7-04c)*
- ☐ *Permit application checklist for water treatment (wq-wwprm7-04d)*

**For MPCA
use only**

Received	Incomplete	Complete
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>