#### North Dakota Department of Environmental Quality Public Notice Reissue of an NDPDES Permit

Public Notice Date: 5/11/2023 Public Notice Number: ND-2023-012

#### Purpose of Public Notice

The Department intends to reissue the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

#### Permit Information

Application Date: 12/29/2022

Application Number: ND0024791

Applicant Name: Falkirk Mining Co Mailing Address: PO Box 1087, Underwood, ND 58576 Telephone Number: 701.250.2644

Proposed Permit Expiration Date: 6/30/2028

#### Facility Description

The reapplication is for a surface coal mining operation near Underwood, ND. Discharges consist of groundwater and/or surface runoff encountered during mining. Discharges are to Samuelson Slough; Weller Slough; Underwood Coulee; Coal Lake Coulee; Coal Lake; Underwood Legal Drain; a reclaimed wetland; Landenberger Slough; and tributaries to the Missouri River, Turtle Lake, Lake Audubon, and an unnamed slough east of Underwood. The receiving waters are not specifically classified in the State Water Quality Standards and treated as Class III streams.

Discharges covered by this permit are subject to the surface water management conditions and designated locations described in surface mining permits approved following public review. Discharge structures are located within the boundaries of Falkirk Mining Company's approved surface mining permits which include all or part of the following: T144 N, R83W; T144N, R84W; T145N, R82W; T145N, R83W; T145N, R84W; T146N, R81W; T146N, R82W; T146N, R83W; T146N, R84W; T147N, R82W.

# Tentative Determinations

Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCAA will be protected.

# Information Requests and Public Comments

Copies of the application, draft permit, and related documents are available for review. For further information on making public comments/public comment tips please visit: https://deq.nd.gov/ PublicCommentTips.aspx. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 4201 Normandy Street, Bismarck ND 58503-1324 or by calling 701.328.5210.

All comments received by June 09, 2023 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. To request accommodations, contact the NDDEQ Non-discrimination Coordinator at 701-328-5210 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

Permit No:ND0024791Effective Date:July 1, 2023Expiration Date:June 30, 2028

# AUTHORIZATION TO DISCHARGE UNDER THE

#### NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33.1-16-01 of the North Dakota Department of Environmental Quality rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Falkirk Mining Company Underwood, North Dakota

is authorized to discharge from its coal mining operation located near Underwood, ND

from the locations and to the receiving streams specified in this permit

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,

June 30, 2028

Signed this \_\_\_\_\_\_ day of \_\_\_\_\_\_, \_\_\_\_\_,

Karl H. Rockeman, P.E. Director Division of Water Quality

BP 2019.05.29

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# DEFINITIONS Standard Permit BP 2019.05.29

- 1. "Act" means the Clean Water Act.
- 2. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 3. **"Average weekly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- 4. "Best management practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
- 5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 6. "**Composite**" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.
- 7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 8. "Department" means the North Dakota Department of Environmental Quality, Division of Water Quality.
- 9. "DMR" means discharge monitoring report.
- 10. "EPA" means the United States Environmental Protection Agency.
- 11. "Geometric mean" means the n<sup>th</sup> root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
- 12. "**Grab**" for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream.
- 13. "**Instantaneous**" for monitoring requirements, means a single reading, observation, or measurement. If more than one sample is taken during any calendar day, each result obtained shall be considered.
- 14. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
- 15. "**Salmonid**" means of, belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.

- 16. "Sanitary Sewer Overflows (SSO)" means untreated or partially treated sewage overflows from a sanitary sewer collection system.
- 17. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 18. "Total drain" means the total volume of effluent discharged.
- 19. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

# **DEFINITIONS Permit Specific**

- 1. "Active Mining Area" means the area on and beneath land, used or disturbed in activity related to extraction, removal, or recovery of coal from its natural deposits. The definition may include access roads, suitable plant growth material (SPGM), stockpiles, sedimentation ponds, and other related structures.
- 2. "Daily maximum concentration" means the greatest discharge concentration during any calendar day. If more than one sample is taken on a calendar day, the average of all such samples shall be the daily concentration for that day.
- 3. "Monthly Average Concentration" means the average discharge concentration during a 30-consecutive day period (for reporting purposes a calendar month). It shall be determined by the summation of all daily concentrations for 30 days (calendar month) divided by the total number of days on which the values were obtained. If more than one sample is taken on a calendar day, the average of all such samples shall be the daily concentration of the day.
- 4. "NDPDES" means North Dakota Pollutant Discharge Elimination System.
- 5. "**Reclamation Area**" means an area which has been isolated from active mining area drainage and on which the final reclamation contour has been reached and seeding is completed. The definition may include access roads, suitable plant growth material (SPGM), stockpiles, sedimentation ponds, and other related structures.

# FACILITY DESCRIPTION

The discharges regulated by this permit consist of drainage from active mining and reclamation areas subject to effluent limitations under 40 CFR 434. Discharges are from structures or other control features used to manage the quality of the effluent and the hydrologic considerations identified in the surface mining permit(s) issued by the North Dakota Public Service Commission, following interagency review and public comment, in accordance with NDCC Chapter 34-14.1. The current and proposed discharge structures are located within the boundaries of approved surface mining permits which encompass all or part of the following:

- 1. Township 144 North, Range 83 West
- 2. Township 144 North, Range 84 West
- 3. Township 145 North, Range 82 West
- 4. Township 145 North, Range 83 West
- 5. Township 145 North, Range 84 West
- 6. Township 146 North, Range 81 West
- 7. Township 146 North, Range 82 West
- 8. Township 146 North, Range 83 West
- 9. Township 146 North, Range 84 West
- 10. Township 147 North, Range 82 West

and discharge either directly or through unnamed drainages and tributaries to:

- 1. Samuelson Slough, an unclassified lentic water body
- 2. Weller Slough, an unclassified lentic water body
- 3. Underwood Coulee, an unclassified stream
- 4. Coal Lake Coulee, an unclassified stream
- 5. Coal Lake, an unclassified lake
- 6. Unnamed Tributaries to the Missouri River, unclassified streams
- 7. Underwood Legal Drain, an unclassified stream
- 8. Reclaimed Wetland R-26-01, an unclassified lentic water body
- 9. Landenberger Slough, an unclassified lentic water body
- 10. Unnamed Tributaries to Turtle Lake, unclassified streams
- 11. Unnamed Tributaries to Lake Audubon, unclassified streams

12. Unnamed Slough east of the City of Underwood, an unclassified lentic water body

# **OUTFALL DESCRIPTION**

The permittee must request and obtain an NDPDES discharge point number from the department before a structure within a surface mining permit can be used to discharge waters subject to effluent standards. Upon the assignment of the NDPDES discharge point number, discharges may be made in accordance with the limitations, record keeping and reporting requirements outlined in this permit. Once a discharge point is activated it will be subject to reporting under NDPDES until such time it is authorized for removal.

Unless otherwise described in this permit, a discharge point is subject to active mining area requirements until the permittee submits a change of status to the department stating the contributing area has changed from an active mining area to a reclamation area or sedimentation pond removal site. Discharge points assigned to clean water ponds or diversions are not subject to NDPDES requirements.

The permittee and department will maintain an up-to-date list of all discharge points. The list will include the discharge serial number, a description of contributing area (i.e., active mining, reclamation) or wastewater source, a description of the treatment structure, any company designation, the date the discharge point was first regulated by the permit program, the location, and the receiving stream. Discharge points receiving runoff from reclamation areas must include the date the contributing area was designated as a reclamation area. Inactive discharge points will list the date the point was no longer active.

Coverage Point	Submittal	Monitoring Period	Submittal Frequency	First Submittal Date
Active Mining Areas	Discharge Monitoring Report	Monthly	Quarterly	October 31, 2023
Reclamation Areas	Discharge Monitoring Report	Quarterly	Quarterly	October 31, 2023
Watershed Monitoring Sites	Discharge Monitoring Report	Annually	Annual	July 31, 2024
Application Renewal	EPA Form 1 & 2F	None	1/permit cycle	December 31, 2027

#### PERMIT SUBMITTALS SUMMARY

#### SPECIAL CONDITIONS

No special conditions have been determined at this time.

# I. LIMITATIONS AND MONITORING REQUIREMENTS

# A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfalls as specified to the following: Samuelson Slough, Weller Slough, Underwood Coulee, Coal Lake Coulee, Coal Lake, unnamed tributaries to the Missouri River, Underwood Legal Drain, reclaimed wetland R-26-01, Landenberger Slough, unnamed tributaries to Turtle Lake, unnamed tributaries to Lake Audubon, and an unnamed slough east of the City of Underwood.

This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

#### **B. Effluent Limitations and Monitoring**

#### **ACTIVE MINING AREAS:**

Table 1: Effluent Limitations and Monitoring Requirements Active Mining Areas				
	Effluent Limitations		Monitoring Requirements	
Parameter	Average Monthly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Iron <sup>a</sup>	3.5 mg/L	7.0 mg/L	Annual	Grab
Total Suspended Solids (TSS) <sup>a</sup>	35 mg/L	70.0 mg/L	Monthly	Grab
Settleable Solids a,b	N/A	0.5 mL/L	Monthly	Grab
Oil & Grease – Visual °	N/A	N/A	Daily	Visual
Oil & Grease °	rease <sup>c</sup> * 10 mg/L		Conditional/Monthly	Grab
рН	**		Monthly	Instantaneous
Flow Effluent (gpm) d	N/A	N/A	Monthly	Calculated
Drain Total (MG)	N/A	N/A	Monthly	Calculated
Total Days Discharging	N/A	N/A	Monthly	Calculated
Notes:				

Notes:

a. <u>Alternate Limitations:</u> The department may waive the limitations for Total Iron and Total Suspended Solids for overflows caused by a single or series of precipitation or snowmelt events after reviewing all information submitted in response to the Noncompliance Notification conditions (Part III.F). During overflow discharges Total Suspended Solids sampling shall be done in conjunction with Settleable Solids sampling for comparison purposes. Monitoring for Settleable Solids is not required for routine discharges.

The Settleable Solids limit may be waived if there is a precipitation event greater than 2.97 inches in 24 hours. The limit may also be waived for snowmelt events on a case-by-case basis for facilities designed and maintained to contain runoff from a 10-year, 24-hour precipitation event.

	To qualify for these limitations, the facility must be designed, constructed, operated, and maintained to treat the runoff from a 10-year, 24-hour precipitation event (2.97 inches). For sedimentation ponds, any required pond dewatering must have been accomplished within 10 days of the last precipitation event when practicable. Additional time is allowable when dewatering is delayed due to activities or conditions downstream of the facility such as agricultural activities, landowner accessibility, drainage channel stability or capacity. The permittee has the burden of proof that these conditions are met.		
	Precipitation shall be measured by gauged and recorded daily by the permittee.		
b.	The Settleable Solids test procedure shall conform with 40 CFR 434.64.		
C.	There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the department shall be contacted and a grab sample analyzed to ensure compliance with the concentration limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.		
d.	The permittee shall maintain the capability to measure the instantaneous flow rate, daily.		
N/A	Not Applicable		
*.	This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.		
**.	Discharges to classified lakes and reservoirs, and Class I and IA streams shall have an instantaneous pH limitation between 6.5 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of stream and unclassified lakes and other lentic water bodies shall be between 6.0 (s.u) and 9.0 (s.u.).		
Stipu	Ilations:		
	The dates of discharge, frequency of analysis, and number of exceedances shall be included on the DMR.		
	When alternate limitations are granted, the test results for parameters not subject to limitations shall be included as an attachment to the report for the applicable monitoring period.		
	The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards. This may include rate of discharge restrictions or notifying downstream landowners along the receiving stream.		
	Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving company property or entering the receiving stream.		

Table 2: Effluent Limitations and Monitoring Requirements Reclamation Areas				
	Effluent Limitations	Monitoring	Monitoring Requirements	
Parameter	Daily Maximum Limit	Sample Frequency	Sample Type	
Total Suspended Solids (TSS) <sup>a</sup>	70.0 mg/L	Quarterly	Grab	
Settleable Solids b,c	0.5 mL/L	Quarterly	Grab	
pН	*	Quarterly	Instantaneous	
Flow Effluent (gpm) d	N/A	Monthly	Calculated	
Drain Total (MG)	N/A	Monthly	Calculated	
Total Days Discharging	N/A	Monthly	Calculated	
Notes:	Notes:			

N/A Not Applicable

- \*. Discharges to classified lakes and reservoirs, and Class I and IA streams shall have an instantaneous pH limitation between 6.5 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of stream and unclassified lakes and other lentic water bodies shall be between 6.0 (s.u) and 9.0 (s.u.).
- a. The Total Suspended Solids limitation shall apply only to controlled discharges made by mechanical or gravity dewatering devices. During an overflow discharge, sampling for Total Suspended Solids shall be done in conjunction with Settleable Solids sampling for comparison purposes. Monitoring for Settleable Solids is not required for routine discharges.
- b. The Settleable Solids requirement applies to overflows or increases in flow caused by a single or series of precipitation or snowmelt events. The limitation may be waived if the amount of precipitation is greater than 2.97 inches in 24 hours. The limitation may also be waived for snowmelt events on a case-by-case basis for facilities designed and maintained to contain runoff from a 10-year, 24-hour precipitation event. The permittee has the burden of proof that these conditions are met.

Precipitation shall be measured by gauge and recorded daily by the permittee.

- c. The Settleable Solids test procedure shall conform with 40 CFR 434.64.
- d. The permittee shall maintain the capability to measure the instantaneous flow rate, daily.

Stipulations:

All components of the treatment systems and discharge structures shall be maintained to achieve a high-quality discharge and preserve the integrity of structures. If necessary, best management practices shall be used upstream and downstream of a discharge structure to ensure that effluent quality is maximized. As a general practice, sediment ponds should be dewatered by late fall.

**Table 2**: Effluent Limitations and Monitoring Requirements Reclamation Areas

The dates of discharge, frequency of analysis, and number of exceedances shall be included on the DMR.

The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards. This may include rate of discharge restrictions or notifying downstream landowners along the receiving stream.

Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving company property or entering the receiving stream.

The results for Total Suspended Solids obtained during overflow conditions shall be included as an attachment to the report for the applicable monitoring period.

 Table 3: Effluent Limitations and Monitoring Requirements Sediment Pond Removal Sites

 Stipulations:

The discharges from sedimentation pond removal and pond site reclamation operations must be controlled to provide the best quality attainable through the implementation of BMPs.

The permittee must follow the guidelines for sedimentation pond removal and pond site reclamation outlined in Policy Memorandum No. 19 to Mine Operators, issued by the North Dakota Public Service Commission (PSC) and the North Dakota Department of Health, Division of Water Quality – now referred to as the North Dakota Department of Environmental Quality (NDDEQ), Division of Water Quality. The conditions and procedures outlined in the policy accommodate the rules and requirements of both the NDDEQ and the PSC. In summary, the policy contains the following:

The prerequisite discharge water quality history and land reclamation conditions that must be present in the watershed of a structure before removal may be considered;

The content and considerations for a site-specific reclamation plan that must be submitted for review and approval.

A description of the BMP for erosion and sediment control that must be used and maintained.

The timing for designating a discharge point as a sedimentation pond removal site regulated by the use of BMPs and the procedures outlined in the site-specific reclamation plan.

The notifications to the NDDEQ and PSC required during the course of the pond removal activity.

The BMPs and all procedures identified in the approved site-specific reclamation plan must be followed throughout the course of the pond removal activities.

The assignment of a discharge point to pond removal status does not become effective until any final dewatering of the pond is completed, and pond removal activities begin.

The status, stage, or estimated percentage of completion for pond removal activities must be provided in the report for the applicable monitoring period. Once the pond removal activity is completed and the discharge point is released from the NDPDES permit, the reporting for the discharge point in monitoring reports is not required.

The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.

# C. Nutrient Monitoring

Nutrient monitoring shall occur at the following watershed monitoring sites. The department shall be given advance notice of any changes to watershed monitoring sites that result in a new location for a monitoring site, removal of a monitoring site, or addition of a monitoring site. Watershed monitoring sites shall remain active until all NDPDES discharge points are inactivated in the watershed.

Table 4: Nutrient Monitoring Location Watershed Monitoring Sites			
Monitoring Site	Location	Stream	
01E ª	T146N-R82W-08 DDC	Wetland	
06E ª	T146N-R82W-04 ABB	Wetland	
07E ª	T147N-R81W-31 BAA	Tributary to Nygaard Slough	
13R ª	T145N-R84W-02 BBD	Tributary to the Missouri River	
19R	T144N-R83W-08 DDD	Tributary to the Missouri River	
20R <sup>a</sup> T144N-R84W-14 ACA Tributary to the Missouri Rive			
a. Monitoring at these sites is suspended. The sites shall be monitored if mining or reclamation take place up stream during the effective period of this permit.			

Table 5: Nutrient Monitoring Requirements Watershed Monitoring Sites			
Parameter	Monitoring F	Requirements <sup>b</sup>	
Falamelei	Sample Frequency	Sample Type	
Nitrogen, Total, mg/L <sup>a</sup>	2 runoff events annually	Grab	
Nitrogen, Total, Ib/day <sup>a</sup>	2 runoff events annually	Calculated	
Phosphorus, Total (as P), mg/L	2 runoff events annually	Grab	
Phosphorus, Total (as P), lb/day	2 runoff events annually	Calculated	
Flow, cfs	2 runoff events annually	Calculated	
a. Total nitrogen is a combination of nitrate, nitrite, and Total Kjeldahl Nitrogen (TKN).			
b. Samples and measurements shall be representative of the nutrient monitoring activity. Samples shall be collected when a runoff event or standing water at the monitoring site provides a measurable sample volume for analysis.			

# II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2021.09.09

#### A. Representative Sampling (Routine and Non-Routine Discharges)

All samples and measurements taken shall be representative of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited under **Part I Effluent Limitations and Monitoring** requirements of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with <u>B. Test Procedures</u>. The permittee must report all additional monitoring in accordance with <u>D. Additional Monitoring</u>.

#### **B. Test Procedures**

The collection and transportation of all samples shall conform with EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount. The Settleable Solids test procedure shall conform with 40 CFR 434.64.

#### C. Recording of Results

Records of monitoring information shall include:

- 1. the date, exact place and time of sampling or measurements;
- 2. the name(s) of the individual(s) who performed the sampling or measurements;
- 3. the name of the laboratory;
- 4. the date(s) and time(s) analyses were performed;
- 5. the name(s) of the individual(s) who performed the analyses;
- 6. the analytical techniques or methods used; and
- 7. the results of such analyses.

#### D. Additional Monitoring

If the discharge is monitored more frequently than this permit requires, all additional results, if in compliance with <u>B. Test Procedures</u>, shall be included in the summary on the Discharge Monitoring Report.

# E. Reporting of Monitoring Results

 Monitoring results shall be summarized and reported to the department using Discharge Monitoring Reports (DMRs). If no discharge occurs during a reporting period, "No Discharge" shall be reported. The permittee must submit DMRs electronically using the electronic information reporting system unless requirements in subsection 3 are met.

- 2. Prior to December 21, 2025, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2025, the permittee must report the following using the electronic reporting system:
  - a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];
  - b. Municipal separate storm sewer system program reports;
  - c. Pretreatment program reports;
  - d. Sewer overflow/bypass event reports; and
  - e. Clean Water Act 316(b) annual reports
- 3. The permittee may seek a waiver from electronic reporting. To obtain a waiver, the permittee must complete and submit an Application for Temporary Electronic Reporting Waiver form (SFN 60992) to the department. The department will have 120 days to approve or deny the waiver request. Once the waiver is approved, the permittee may submit paper versions of monitoring data and reports to the department.
  - a. One of the following criteria must be met in order to obtain a waiver. The department reserves the right to deny any waiver request, even if they meet one of the criteria below.
    - 1. No internet access,
    - 2. No computer access,
    - 3. Annual DMRs (upon approval of the department),
    - 4. Employee turnover (3-month periods only), or
    - 5. Short duration permits (upon approval of the department)

All reports must be postmarked by the last day of the month following the end of each reporting period. All original documents and reports required herein shall be signed and submitted to the department at the following address:

ND Department of Environmental Quality Division of Water Quality 4201 Normandy Street Bismarck ND 58503-1324

#### F. Records Retention

All records and information (including calibration and maintenance) required by this permit shall be kept for at least three years or longer if requested by the department or EPA.

# **III. COMPLIANCE RESPONSIBILITIES**

# A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and

reissuance, or modification; or for denial of a permit renewal application.

#### **B.** Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

#### C. Planned Changes

The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

#### D. Duty to Provide Information

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

#### E. Signatory Requirements

All applications, reports, or information submitted to the department shall be signed and certified.

All permit applications shall be signed by a responsible corporate officer, a general partner, or a principal executive officer or ranking elected official.

All reports required by the permit and other information requested by the department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

The authorization is made in writing by a person described above and submitted to the department; and

The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

If an authorization under <u>E. Signatory Requirements</u> is no longer accurate for any reason, a new authorization satisfying the above requirements must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

Any person signing a document under this section shall make the following certification:

"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."

#### F. Twenty-four Hour Notice of Noncompliance Reporting

- 1. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The following occurrences of noncompliance shall be included in the oral report to the department at 701.328.5210:
  - a. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit under <u>G. Bypass of Treatment Facilities;</u>
  - b. Any upset which exceeds any effluent limitation in the permit under <u>H. Upset Conditions;</u> or
  - c. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.
- 2. A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
  - d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Reports shall be submitted to the address in <u>Part II.E. Reporting of Monitoring Results.</u> The department may waive the written report on a case by case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

All other instances of noncompliance shall be reported no later than at the time of the next Discharge Monitoring Report submittal. The report shall include the four items listed in this subsection.

#### G. Bypass of Treatment Facilities

- 1. <u>Bypass not exceeding limitations</u>. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to any of the following provisions in this section.
- 2. <u>Bypass exceeding limitations-notification requirements.</u>
  - a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of bypass.
  - b. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under <u>F. Twenty-four Hour Notice of Noncompliance Reporting</u>.
- 3. <u>Prohibition of Bypass.</u> Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This

condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under the <u>1. Anticipated Bypass</u> subsection of this section.

The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three (3) conditions listed above.

#### H. Upset Conditions

An upset constitutes an affirmative defense to an action brought for noncompliance with technologybased permit effluent limitations if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1. An upset occurred and the permittee can identify its cause(s);
- 2. The permitted facility was, at the time being, properly operated;
- 3. The permittee submitted notice of the upset as required under <u>F. Twenty-four Hour Notice of</u> <u>Noncompliance Reporting</u> and
- 4. The permittee complied with any remedial measures required under <u>I. Duty to Mitigate</u>.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

# I. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

#### J. Removed Materials

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the state. The permit issuing authority shall be contacted prior to the disposal of any sewage sludges. At that time, concentration limitations and/or self-monitoring requirements may be established.

# K. Duty to Reapply

Any request to have this permit renewed should be made six months prior to its expiration date.

# IV. GENERAL PROVISIONS

# A. Inspection and Entry

The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the wastewater treatment facilities and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

#### **B.** Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

#### C. Transfers

This permit is not transferable except upon the filing of a Statement of Acceptance by the new party and subsequent department approval. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also notify the department of the possible change.

#### D. New Limitations or Prohibitions

The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

#### E. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

# F. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### G. State Laws

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

#### H. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

# I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

#### J. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

#### FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 1 of 40

#### FACT SHEET FOR NDPDES PERMIT ND0024791

#### PERMIT REISSUANCE

#### FALKIRK MINING COMPANY UNDERWOOD, ND

#### DATE OF THIS FACT SHEET – MAY 2023

#### INTRODUCTION

The Federal Clean Water Act (CWA, 1972, and later amendments in 1977, 1981, and 1987, etc.) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the CWA is the National Pollutant Discharge Elimination System (NPDES), which the US Environmental Protection Agency (EPA) has oversight authority. In 1975, the State of North Dakota was delegated primacy of the NPDES program by EPA. The North Dakota Department of Environmental Quality (NDDEQ), hereafter referred to as "department", has been designated the state water pollution control agency for all purposes of the Federal Water Pollution Control Act, as amended [33 U.S.C. 1251, et seq.], and is hereby authorized to take all action necessary or appropriate to secure to this state the benefits of the act and similar federal acts. The department's authority and obligations for the wastewater discharge permit program is in the NDAC 33.1-16 (North Dakota Century Code). The department uses North Dakota Pollutant Discharge Elimination System (NDPDES) as its permitting title.

The following rules or regulations apply to NDPDES permits:

- Procedures the department follows for issuing NDPDES permits (NDAC chapter 33.1-16-01),
- Standards of Quality for Waters of the State (NDAC chapter 33.1-16-02.1).

These rules require any treatment facility operator to obtain an NDPDES permit before discharging wastewater to state waters. They also define the basis for limits on each discharge and for other requirements imposed by the permit.

According to the North Dakota Administrative Code (NDAC) section 33.1-16-01-08, the department must prepare a draft permit and accompanying fact sheet and make it available for public review. The department must also publish an announcement (public notice) during a period of thirty days, informing the public where a draft permit may be obtained and where comments regarding the draft permit may be sent (NDAC chapter 33.1-16-01-07). For more information regarding preparing and submitting comments about the fact sheet and permit, please see Appendix A - Public Involvement. Following the public comment will summarize the responses to comments and changes to the permit in Appendix D - Response to Comments.

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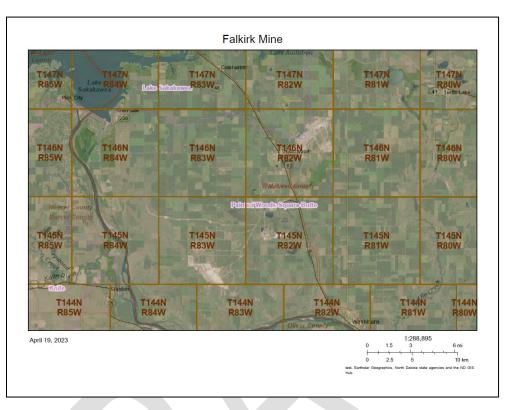
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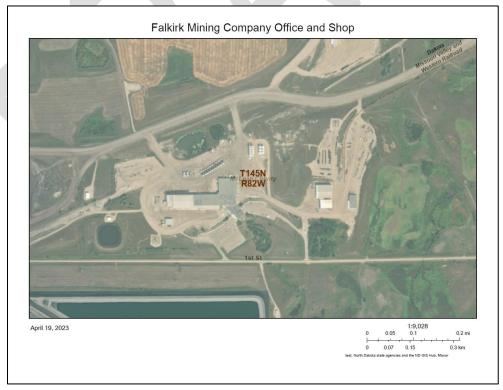
## **BACKGROUND INFORMATION**

Applicant:	Falkirk Mining Company
Facility Name and Address:	Falkirk Mine 2801 1 <sup>st</sup> Street SW, Underwood, ND
Permit Number:	ND0024791
Permit Type:	Minor Industrial, Permit Reissuance
Type of Treatment:	Sedimentation, Coagulation
SIC Code:	1221 (Bituminous Coal and Lignite Surface Mining)
NAICS Code:	212111 (Bituminous Coal and Lignite Surface Mining)
Discharge Location:	Various locations within the permitted mining area: (1) T144N, R83W; (2) T144N, R84W; (3) T145N, R82W; (4) T145N, R83W; (5) T145N, R84W; (6) T146N, R81W; (7) T146N, R82W; (8) T146N, R83W; (9) T146N, 84W; and (10) T147N, R82W
Hydrologic Code:	10130101-Painted Woods-Square Butte Creek 10110101-Lake Sakakawea

#### FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 4 of 40

Figure 1 – Aerial Photograph of Falkirk Mining Co., Underwood, ND (North Dakota Geographic Information System, map generated April 2023)





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#### **FACILITY DESCRIPTION**

Falkirk Mining Company is a lignite coal mining operation located near Underwood, North Dakota. The operation supplies from 7.2 to 8.3 million tons of coal per year to Rainbow Energy Center – Coal Creek Station power plant. All discharges are located within the boundaries of approved surface mining permits (NAFK-8405, NAFK-8705, NAFK-9503, and NAFK-9601) issued by the North Dakota Public Service Commission (PSC), the state's Surface Mining Control and Reclamation Act (SMCRA) authority. These permits are required in the state under North Dakota Century Code (NDCC) Chapter 38-14.1. Mining permit applications show where surface coal mining operations are expected to occur over the life of the mining permit, and the size, sequence, and timing of mining operations. The applications also show the location of proposed water ponds, impoundments, and diversions used for surface water management. All surface drainage from disturbed areas must pass through a sedimentation pond or other sediment control measure. These structures must be constructed prior to the start of mining operations.

Once a pond or measure is constructed, the discharge point is added to the list of discharge points. These structures must be maintained until removal is approved by the PSC. Removal must follow Policy Memorandum No. 19 to Mine Operators, July 12, 2006 (Revised), issued by the PSC. The mine permits and regulated discharge points are located in: (1) T144N, R83W; (2) T144N, R84W; (3) T145N, R82W; (4) T145N, R83W; (5) T145N, R84W; (6) T146N, R81W; (7) T146N, R82W; (8) T146N, R83W; (9) T146N, R84W; and (10) T147N, R82W.

Typically, sedimentation ponds are used, and required under North Dakota Administrative Code (NDAC) 69-05.2-16-04, to control runoff from areas directly involved in the recovery of coal and to provide treatment prior to discharge off site. All surface drainage from disturbed areas must pass through a sedimentation pond or other sediment control measure as required in NDAC 69-05.2-16-04. Discharges from this mining operation, like others in the state, must meet federal standards established for the coal-mining point source category (40 CFR Part 434). The requirements specified in this permit are based on the provisions outlined in the federal requirements consist of separate limitations and monitoring requirements for two phases of mining activity: (1) active mining areas, and (2) reclamation areas. Alternate limitations are provided.

Currently, Falkirk Mining Company has 80 active discharge points under NDPDES reporting requirements. All discharge points are regulated under the coal mining effluent limits.

Sanitary waste from the office building and the shop is pumped through a lift station to a lagoon located at Rainbow Energy Center – Coal Creek Station. This lagoon system is a total containment system. The various out-buildings located at the facility have drain field septic systems. Portable facilities are used to manage sanitary waste in the field. The waste is collected by a septic hauler and transferred off-site.

Runoff outside of active mining and reclamation areas is covered by the NDPDES stormwater discharge general permit associated with mining, extraction, and paving material preparation, NDR32-0000. The general permit coverage number assigned to the mine is NDR320015. The general permit requires facilities to develop a stormwater pollution prevention plant (SWPPP) to minimize pollutants that could be discharged in runoff from areas outside of mining areas as well as routine sampling of stormwater runoff.

# **Discharge Outfall**

Permitted mining areas discharge directly or through unnamed drainages and tributaries to the waterbodies listed in Table 2.

Table 2	– Receiving	Waters
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Wa	iterbody	Classification <sup>a</sup>		
Sai	muelson Slough	Not Classified <sup>b</sup>		
We	Iler Slough	Not Classified <sup>b</sup>		
Un	derwood Coulee	Not Classified <sup>b</sup>		
Co	al Lake Coulee	Not Classified <sup>b</sup>		
Co	al Lake	Not Classified <sup>b</sup>		
Un	named Tributaries to the Missouri River	Not Classified <sup>b</sup>		
Un	derwood Legal Drain	Not Classified <sup>b</sup>		
Reclaimed Wetland R-26-01 Not Classified <sup>b</sup>				
Landenberger Slough Not Classified <sup>b</sup>				
Unnamed Tributaries to Turtle Lake Not Classified b				
Un	named Tributaries to Lake Audubon	Not Classified <sup>b</sup>		
Un	named Slough east of the City of Underwood	Not Classified <sup>b</sup>		
a. Waterbody classifications as found in the State of North Dakota's "Standards of Quality for Waters of the State," (WQS) NDAC Chapter 33.1-16-02.1.				
b.				

Discharges are from structures or other control features used to manage the quality of the effluent and the hydrologic conditions from mine areas. The discharge location, structure description, and hydrologic considerations are identified in the surface mining permit(s) issued by the PSC following interagency review and public comment in accordance with NDCC Chapter 38-14.1. The permittee must request and obtain an NDPDES discharge point number from the department before a structure within a surface mining permit can be used to discharge waters subject to effluent standards. Upon the assignment of the NDPDES discharge point number, discharges may be made in accordance with the limitations, record keeping, and reporting requirements outlined in this permit. Once a discharge point is activated, it will be subject to reporting under the NDPDES until such time it is authorized for removal.

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The department and the permittee maintain an up-to-date list of all discharge points covered by the NDPDES permit and the status of each point. The most up-to-date list of discharge points is provided in Appendix E. Starting with the 2013 permit, the discharge point descriptions include:

- The serial number
- The contributing area (i.e., active mining, reclamation) or wastewater source
- Treatment structure
- Company designation
- Date the point was first regulated under by the NDPDES permit
- Location
- Receiving stream
- Date designated as a reclamation area or sedimentation pond removal site
- Date point was no longer active

The source of runoff to each discharge point depends on the status of the area draining to the point. These areas may be an "Active Mining Area" or "Reclamation Area" (refer to definitions). The types of wastes, fluids and pollutants that could be generated include runoff from suitable plant growth material piles, overburden piles, haul roads, exposed coal seams, and underlying strata. The quantity generated varies based on the amount of precipitation received. However, sedimentation ponds generally provide treatment for a ten-year, twenty-four-hour precipitation event (NDAC 69-05.2-16-09.3). All discharge points are regulated under the coal mining effluent limitations.

# PERMIT STATUS

The department issued the current permit for this facility on July 1, 2018. The permit will expire June 30, 2023. The current permit includes monitoring requirements for total iron (TFe), total suspended solids (TSS), settleable solids (SS), oil and grease, pH, flow, total amount drained, and total days discharging.

The western alkaline coal mining subcategory was added to the federal regulation in 2002. The provisions of the subcategory were discussed between the department, the PSC, and an industry trade group when the provision was first proposed. The consensus being that the western mine provisions have only limited applicability in the state. North Dakota's coal mining activity is on the extreme eastern margin of the area defined as western coal mining operations which is limited to operations west of the 100<sup>th</sup> meridian west longitude. The landscape and mining practices would best be described as transitional, sharing aspects of mid-western and western mining practices rather than the typical western mine conditions considered in the rule development. The mining operations in the state occur on rolling landscapes with deep soils that are primarily used for continuous crop production and to a lesser extent grazing.

The only reasonable application of the western alkaline subcategory in the state would be in reclamation areas where pond removal occurs prior to vegetation reestablishment. In addition to reclamation areas, the subcategory applies to brushing and grubbing areas, topsoil stockpiling areas, and regraded areas. Brushing and grubbing is not practiced or necessary for soil removal in the state. Topsoil as well as subsoil is stockpiled for use in reclamation and the storage areas must be designed to drain to a sediment pond or have erosion and sediment controls that conform to the state's surface mining standards and the stormwater permit for mining activity. Due to the depth of soil that must be replaced on mined land in the state, the definition for a

regraded area cannot be met until the subsoil and topsoil have been replaced which is essentially the definition for a reclamation area. The western mining subcategory does not apply to active mine areas.

During the 2003 renewal of this permit, Falkirk requested and was granted a reduction in the sampling frequency for TSS and TFe from active mine areas. The change in frequency was from weekly to monthly for TSS and from monthly to annual for TFe. The reduction in monitoring was based on a review of discharge data from Falkirk and considered under the EPA Guidance entitled, "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies (April 1996)." There have been no changes in operating procedures that would affect discharge quality since the July 1, 2003, reissuance of the permit.

The following summary from the 2008 renewal fact sheet provides the basis for the reduction in monitoring:

"The discharge performance for Falkirk's mine was summarized by determining the longterm mean (LTM) and mean to limit ratio (LTM / permit limit) for TFe and TSS. The long term mean (LTM) calculated for TFe was 0.38 mg/L (data from 1992 to 2002). The corresponding TFe mean to limit ratio was 10.9%. The long-term mean (LTM) determined for TSS was 11.0 mg/L (data from 1992-2002), which represents a mean to limit ratio of 31%.

Based on the facility's discharge performance (long-term mean and mean to limit ratio), the EPA Guidance suggested a monitoring reduction from weekly to twice per month for TSS and from monthly to semi-annually for TFe. However, the recommended frequencies are based on continuous discharges. The discharges from this facility are intermittent, and generally occur over a few days, at times resulting in only one or two samples during a given month. In regard to discontinuous data, as is the case here, the EPA Guidance states that reduction would need to be considered on a case-by-case basis (Page 6, Special Considerations). Considering the length of sample history reviewed, and compliance history, the Department granted a monthly monitoring frequency for TSS and annual monitoring for TFe."

During the 2018 renewal, the precipitation amount used to determine the 10-year, 24-hour precipitation alternate limitation and subsequent sedimentation pond design was reduced from 3.2 inches to 2.97 inches. The change was based on the release of the *National Oceanographic and Atmospheric Administration Atlas 14 (NOAA Atlas 14)*. Prior to the adoption of *NOAA Atlas 14*, the precipitation-based alternate limitation and sediment pond design was based on the technical paper *Rainfall Frequency Atlas of the United States* (1961). The change did not result in less stringent effluent limitations for ponds designed using *Rainfall Frequency Atlas of the United States 14*.

#### SUMMARY OF COMPLIANCE WITH PREVIOUS PERMIT ISSUED

Department staff conducted one routine, non-sampling compliance inspection since the previous permit was issued July 1, 2013. No deficiencies were noted during the inspection. The department's assessment of compliance is based on review of the facility's Discharge Monitoring Reports (DMRs) and inspections conducted by department staff.

# Past Discharge Data

A review of the DMR information from July 2018 to December 2022 was conducted. Table 3 illustrates the number of discharge days by year, including the total amount drained per year, and number and type of exceedance. Table 4 provides a summary of the reported DMR information.

			Number of Exceedances			
Year	Number of Discharge Days <sup>a</sup>	Total Drain (Mgal)	рН	Iron Total	TSS	Settleable Solids
2018	347	347	0	0	0	-
2019	1123	1123	0	0	0	0
2020	623	623	0	0	0	0
2021	229	229	0	0	0	0
2022	554	554	0	1*	3*	0
Notes:						
<ul> <li>a. Number of discharge days is the cumulative number of days discharged by all discharge points throughout the year.</li> </ul>						

\*. Alternate limitations allowed as provided in Part I(B) of the current permit.

	рН	pН	Iron Total	Iron Total	TSS	TSS	SS	SS	O&Gª	O&Gª
Year	min (S.U.)	max (S.U.)	avg (mg/L)	max (mg/L)	avg (mg/L)	max (mg/L)	avg (mL/L)	max (mL/L)	avg (mg/L)	max (mg/L)
2018	6.91	8.89	0.37	1.18	5	23	-	-	0	0
2019	6.74	8.83	0.98	8.02*	5	68	0.075	0.1	0	0
2020	6.69	8.77	0.30	0.96	5	40	0.1	0.1	-	-
2021	7.33	8.78	0.41	2.35	8	200*	0.1	0.1	-	-
2022	7.01	8.73	0.73	4.39	9	69	0.1	0.1	-	-
Notes	Notes:									
Oil										

# Table 4 – Data Summary by DMR

\*. Alternate limitations allowed as provided in Part I(B) of the current permit.

# PROPOSED EFFLUENT LIMITATIONS

Discharges from mining operations are regulated by national effluent guidelines which establish technology-based effluent limitations. The technology-based effluent limitations may be found in Title 40 of the Code of Federal Regulations, Part 434 – or 40 CFR 434.

Discharges from active mining and reclamation areas caused by a volume of precipitation greater than a 10-year, 24-hour precipitation event (or equivalent volume of snowmelt) may be eligible for alternate effluent limitations in accordance with 40 CFR 434.63(a). In these

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instances, the department may waive the limitations for total iron, TSS, or settleable solids for pond overflows (40 CFR 434.63(a)(2)).

To be eligible, ponds must be designed, constructed, operated, and maintained to treat runoff from a 10-year, 24-hour precipitation event. The 10-year, 24-hour precipitation event volume is incorporated into pond designs. The volume lies between the permanent pool elevation (PPE) and the overflow elevation of the pond. It should be noted that the PPE is always lower than the overflow elevation.

When the water level in a pond is above the PPE, the pond must be managed to regain the capacity for the 10-year, 24-hour precipitation event or equivalent snowmelt. Pond dewatering must be done within 10 days of the last precipitation event when practicable. Instances where it may not be practicable to discharge include times when the quality of the water in the pond exceeds effluent limitations. Additional time is allowed when the permittee can demonstrate that dewatering was delayed due to activities or conditions downstream that can be affected by the discharge (e.g., agricultural activities, landowner accessibility, drainage channel stability/capacity).

The statement "The permittee has the burden of proof that these conditions are met...." was added to the Alternate Limitations footnote in the Reclamation Areas table (Table 5, Footnote 'a'). The statement correlates to similar language in 40 CFR 434.63(e) in regard to effluent limitations for precipitation events.

In the absence of a federal standard, limitations may be generated using Best Professional Judgment (BPJ) to ensure reasonable control technologies are used to prevent potential harmful effects of the discharge. In addition, the department must consider and include limitations necessary to protect water quality standards applicable to the receiving waters.

In the current permit, the lower pH water quality-based effluent limitation applicable to discharges from active mining and reclamation area to lakes, reservoirs, and Class I and IA streams was set at 7.0 standard units (S.U.). The water quality-based limitation was based on the Standards of Quality for Waters of the State in place at the time the 2018 permit took effect. In July 2021, the lower pH water quality standard for lakes, reservoirs, and Class I and IA streams changed from 7.0 S.U. to 6.5 S.U. (NDAC chapter 33.1-16-02.1). Based on a change to the water quality standards, the department changed the lower pH water quality-based effluent limitation for discharges from active mining and reclamation areas to lakes, reservoirs, and Class I and IA streams from 7.0 S.U. to 6.5 S.U. in the proposed permit.

Limitations based on numeric nutrient criteria are not being included in the proposed permit. Numeric nutrient criteria have yet to be developed for the state of North Dakota. Currently, the WQS contain a narrative standard stating that the surface waters must be free from nutrients in concentrations or loadings that cause objectionable growth of vegetation, algae, or other impairments.

The proposed effluent limitations shall take effect upon the effective date of the proposed permit. The effluent limitations and the basis for the limitations are provided in the Tables 5 through 7.

# FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 11 of 40

Effluent Parameter	Units	Monthly Average	Daily Maximum	Basis <sup>c</sup>
Total Iron <sup>a</sup>	mg/L	3.5	7.0	40 CFR 434.42; 40 CFR 434.63(a) & (e)
Total Suspended Solids <sup>a</sup> (TSS)	mg/L	35.0	70.0	40 CFR 434.42; 40 CFR 434.63(a) & (e)
Settleable Solids <sup>a</sup>	mL/L	N/A	0.5	40 CFR 434.63(a)
Oil & Grease <sup>b</sup>	mg/L	*	10	WQS, BPJ
рН	S.U.		**	40 CFR 434.42; 40 CFR 434.63(a); WQS
The permittee shall maintai instantaneous flow rate, da	•	bility to mea	sure the	Previous Permit
The department may speci- restrictions at any time to m may include rate of dischar	fy additiona naintain wa	ter quality st	andards. This	
landowners along the recei <b>Notes:</b>	ving strean	n.		BPJ
<ul> <li><u>Alternate Limitations:</u> The department may waive the limitations for total iron and total suspended solids for overflows caused by a single or series of precipitation or snowmelt events after reviewing all information submitted in response to the Noncompliance Notification conditions of the permit. During overflow discharges total suspended solids sampling shall be done in conjunction with settleable solids sampling for comparison purposes. Monitoring for settleable solids is not required for routine discharges.</li> <li>The settleable solids limit may be waived if there is a precipitation event greater than 2.97 inches in 24 hours. The limit may also be waived for snowmelt events on a case-by-case basis for facilities designed and maintained to contain runoff from a 10-year, 24-hour precipitation event.</li> <li>To qualify for these limitations, the facility must be designed, constructed, operated, and maintained to treat the runoff from a 10-year, 24-hour precipitation event (2.97 inches). For sedimentation ponds, any required pond dewatering must have been accomplished within 10 days of the last precipitation event when practicable. Additional time is allowable when dewatering is delayed due to activities or conditions downstream of the facility such as agricultural activities, landowner accessibility, drainage channel stability or capacity. The permittee has the burden of proof that these conditions are met.</li> </ul>				
visible sheen is dete sample analyzed to	There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the department shall be contacted and a grab sample analyzed to ensure compliance with the concentration limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.			

# Table 5 – Effluent Limitation Basis – Active Mining Areas

# FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 12 of 40

C.	The basis of the effluent limitations is given below:
	"Previous Permit" refers to limitations in the previous permit. The NPDES regulations 40 CFR Part 122.44(1)(1) Reissued permits require that when a permit is renewed or reissued, interim limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit unless the circumstances on which the previous permit was issued have materially and substantially changed since the previous permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR Part 122.62.
	"BPJ" refers to best professional judgment.
	"WQS" refers to effluent limitations based on the State of North Dakota's "Standards of Quality for Waters of the State," NDAC Chapter 33.1-16-02.1.
N/A	Not applicable
*.	This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.
**.	Discharges to classified lakes and reservoirs, and Class I and IA streams shall have an instantaneous pH limitation between 6.5 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of stream and unclassified lakes and other lentic water bodies shall be between 6.0 (s.u) and 9.0 (s.u.).

# Table 6 - Effluent Limitation Basis - Reclamation Areas

Effluent					
Parameter	Units	Daily Maximum	Basis <sup>c</sup>		
			40 CFR 434.52(a); 40 CFR		
Settleable Solids <sup>a</sup>	mL/L	0.5	434.63(a) & (e)		
Total Suspended Solids <sup>b</sup>					
(TSS)	mg/L	70	BPJ; Previous Permit		
			40 CFR 434.52(a); 40 CFR		
рН	S.U.	*	434.63(a) & (d); WQS		
The permittee shall maintain instantaneous flow rate, daily All components of the treatment	Previous Permit				
structures shall be maintained to achieve a high-quality discharge and preserve the integrity of structures. If necessary, best management practices shall be used upstream and downstream of a discharge structure to ensure that effluent quality is maximized. As a general practice, sediment ponds should be					
dewatered by late fall.			Previous Permit		

# FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 13 of 40

restri may i	department may specify additional discharge conditions or ctions at any time to maintain water quality standards. This include rate of discharge restrictions or notifying downstream owners along the receiving stream.	BPJ				
	Notes:					
a.						
b.	The total suspended solids limitation shall apply only to controlled discharges made by mechanical or gravity dewatering devices. During an overflow discharge, sampling for total suspended solids shall be done in conjunction with settleable solids sampling for comparison purposes. Monitoring for settleable solids is not required for routine discharges.					
с.	The basis of the effluent limitations is given below: "Previous Permit" refers to limitations in the previous permit. <b>CFR Part 122.44(1)(1) Reissued permits</b> require that when reissued, interim limitations, standards or conditions must be final effluent limitations, standards, or conditions in the previ circumstances on which the previous permit was issued hav changed since the previous permit was issued and would co modification or revocation and reissuance under <b>40 CFR Pa</b> "BPJ" refers to best professional judgement. "WQS" refers to effluent limitations based on the State of No Quality for Waters of the State," NDAC Chapter 33.1-16-02.	a permit is renewed or e at least as stringent as the ous permit unless the re materially and substantially onstitute cause for permit art 122.62.				
*.	Discharges to classified lakes and reservoirs, and Class I ar instantaneous pH limitation between 6.5 (s.u.) and 9.0 (s.u.) classifications of stream and unclassified lakes and other len between 6.0 (s.u) and 9.0 (s.u.).	. Discharges to all other				

#### FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 14 of 40

# Table 7 – Effluent Limitation Basis – Pond Removal Sites

Discharges from sediment pond removal and pond site reclamation operations must be controlled to provide the best quality attainable through the implementation of best management practices (BMPs).	BPJ
The permittee must follow the guidelines for sedimentation pond removal and pond site reclamation outlined in Policy Memorandum No. 19 to Mine Operators, issued by the North Dakota Public Service Commission (PSC) and the North Dakota Department of Health, Division of Water Quality – now referred to as the North Dakota Department of Environmental Quality (NDDEQ), Division of Water Quality. The conditions and procedures outlined in the policy accommodate the rules and requirements of both the NDDEQ and the PSC. In summary, the policy contains the following:	
The prerequisite discharge water quality history and land reclamation conditions that must be present in the watershed of a structure before removal may be considered;	
The content and considerations for a site-specific reclamation plan that must be submitted for review and approval;	
A description of the BMPs for erosion and sediment control that must be used and maintained;	
The timing for designating a discharge point as a sedimentation pond removal site regulated by the use of BMPs and the procedures outlined in the site-specific reclamation plan;	
The notifications to the NDDEQ and PSC required during the course of the pond removal activity.	BPJ
The BMPs and all procedures identified in the approved site- specific reclamation plan must be followed throughout the course of the pond removal activities.	BPJ
The assignment of a discharge point to pond removal status does not become effective until any final dewatering of the pond is completed, and pond removal activities begin.	BPJ
The status, stage, or estimated percentage of completion for pond removal activities must be provided in the report for the applicable monitoring period. Once the pond removal activity is completed and the discharge point is released from the NDPDES permit, the reporting for the discharge point in monitoring reports is not required	Previous Permit

The department may specify additional discharge conditions or	
restrictions at any time to maintain water quality standards.	BPJ

# **SELF-MONITORING REQUIREMENTS**

Samples obtained from active mining and reclamation areas must be taken prior to the discharge water leaving company property or entering any receiving stream.

Nutrient monitoring is being added to the proposed permit to coincide with the state's finalized "North Dakota Nutrient Reduction Strategy for Surface Waters". Sources of nutrients from coal mining activity are from typical non-point sources of pollution (crop and livestock production, failing septic systems), nitrogen-based explosives, nutrients bound in overburden and coal, and reclamation practices.

Mining progresses in a planned, defined direction from year to year which can result in mining activity (soil removal, coal removal, reclamation) crossing multiple watersheds. Because mining progresses in a defined direction, sources of nutrients can be present upstream or downstream of mining activity.

Surface water is monitored at watershed sites (Table 8) designated in the PSC surface mining permit. These sites are located downstream of NDPDES discharge points which can be at different stages of mining activity within the watershed. The proposed NDPDES permit will include semiannual nutrient monitoring at these watershed sites. A watershed monitoring site will be removed from the NDPDES permit after all NDPDES discharge points upstream of the site have been inactivated.

Effluent Parameter	Frequency	Sample Type <sup>a</sup>
	Active Mining Areas:	
Total Iron	Annual	Grab
TSS	Monthly	Grab
Settleable Solids	Monthly	Grab
Oil & Grease – Visual	Daily	Visual
Oil & Grease	Conditional/Monthly	Grab
рН	Monthly	Instantaneous
Flow, Total <sup>b</sup>	Monthly	Calculated
Drain, Total <sup>b</sup>	Monthly	Calculated
Total Days Discharging	Monthly	Calculated
	Reclamation Areas:	
TSS	Quarterly	Grab
Settleable Solids	Quarterly	Grab
рН	Quarterly	Instantaneous
Flow, Total <sup>b</sup>	Monthly	Calculated
Drain, Total <sup>b</sup>	Monthly	Calculated

# Table 8 – Self-Monitoring Requirements

#### FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 16 of 40

Effluent Parameter		Frequency	Sample Type <sup>a</sup>			
Total Days Discharging		Monthly	Calculated			
Note	Notes:					
a.	Refer to Appendix B for definitions.					
b.	The permittee shall maintain the capability to measure the instantaneous flow rate, daily.					

# Table 9 – Watershed Monitoring Sites

Monitoring Site	Location	Stream	<b>Status</b> <sup>a</sup>	Period of Record
01E	T146N-R82W- 08 DDC	Wetland	Suspended	2023-Present
06E	T146N-R82W- 04 ABB	Wetland	Suspended	2023-Present
07E	T147N-R81W- 31 BAA	Tributary to Nygaard Slough	Suspended	2023-Present
13R	T145N-R84W- 02 BBD	Tributary to the Missouri River	Suspended	2023-Present
19R	T144N-R83W- 08 DDD	Tributary to the Missouri River	Active	2023-Present
20R	T144N-R84W- 14 ACA	Tributary to the Missouri River	Suspended	2023-Present
Notes:				
a. Suspended status refers to monitoring sites that are suspended due to no mining or reclamation activity taking place up stream. Monitoring at these sites is suspended. The sites shall be monitored if mining or reclamation take place up stream during the effective				

period of this permit.

# Table 10 – Nutrient Monitoring Requirements

Parameter	Frequency <sup>a</sup>	a Sample Type <sup>a,b</sup>			
Nitrogen, Total <sup>c</sup>	2 runoff events an	inually Grab			
Phosphorus, Total	2 runoff events an	inually Grab			
Flow, cfs	2 runoff events an	nually Calculated			
Notes:					
<ul> <li>Samples and measurements shall be representative of the nutrient monitoring activity. Samples shall be collected when a runoff event or standing water at the monitoring site provides a measurable sample volume for analysis.</li> </ul>					
b. Refer to Appen	Refer to Appendix B for definitions.				
c. Total nitrogen i	Total nitrogen is a combination of nitrate, nitrite, and Total Kjeldahl Nitrogen (TKN).				

# SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

The North Dakota Standards of Quality for Waters of the State (NDAC Chapter 33.1-16-02.1), or Water Quality Standards (WQS), are designed to protect existing water quality and preserve the beneficial uses of North Dakota's surface waters. Wastewater discharge permits must include conditions that ensure the discharge will meet the surface water quality standards. Water

quality-based effluent limits may be based on an individual waste load allocation or on a waste load allocation developed during a basin wide total maximum daily load (TMDL) study. TMDLs result from a scientific study of the water body and are developed in order to reduce pollution from all sources.

The receiving waters (Table 2) include tributaries, watercourses, creeks, and draws, as well as lakes and other lentic water bodies, that are not classified in the WQS. Tributaries, watercourses, creeks, and draws that are not specifically mentioned in the WQS are classified as class III streams (NDAC 33.1-16-02.1, Appendix I). Class III streams must be suitable for agricultural and industrial uses. These streams generally have low average flows with prolonged periods of no flow. During periods of no flow, they are of limited value for recreation and fish and aquatic biota. Lakes and lentic water bodies that are not listed in the WQS have the same physical and chemical criteria as class III streams (NDAC 33.1-16-02.1, Appendix II). The quality of water in class III streams must be suitable for secondary contact recreation uses (e.g., wading) as well as fish and aquatic biota and wildlife uses.

The receiving waters (Table 2) are not listed as impaired in the 2018 North Dakota Section 303(d) List of Waters Needing Total Maximum Daily Loads (303(d) List). There currently are no TMDLs associated with the receiving waters.

## Numerical Criteria for the Protection of Aquatic Life and Recreation

Numerical water quality criteria are listed in the water quality standards for surface waters (NDAC Chapter 33.1-16-02.1). They specify the maximum levels of pollutants allowed in receiving water to protect aquatic life and recreation in and on the water. The department uses numerical criteria along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limits, the discharge must meet the water quality-based limits.

#### Numerical Criteria for the Protection of Human Health

The U.S. EPA has published numeric water quality criteria for the protection of human health that are applicable to dischargers. These criteria are designed to protect humans from exposure to pollutants linked to cancer and other diseases, based on consuming fish and shellfish and drinking contaminated surface waters. The water quality standards also include radionuclide criteria to protect humans from the effects of radioactive substances.

#### **Narrative Criteria**

Narrative water quality criteria (NDAC Chapter 33.1-16-02.1-08) limit concentrations of pollutants from exceeding applicable standards of the receiving waters. The department adopted a narrative biological goal solely to provide an additional assessment method that can be used to identify impaired surface waters.

# Antidegradation

The purpose of North Dakota's Antidegradation Policy (NDAC Chapter 33.1-16-02 (Appendix IV)) is to:

- Provide all waters of the state one of three levels of antidegradation protection.
- Determine whether authorizing the proposed regulated activity is consistent with antidegradation requirements.

The department's fact sheet demonstrates that the existing and designated uses of the receiving water will be protected under the conditions of the proposed permit.

## **Mixing Zones**

The department's WQS contain a Mixing Zone and Dilution Policy and Implementation Procedure (NDAC Chapter 33.1-16-02.1 (Appendix III)). This policy addresses how mixing and dilution of point source discharges with receiving waters will be addressed in developing chemical-specific and whole effluent toxicity discharge limitations for point source discharges. Depending upon site-specific mixing patterns and environmental concerns, some pollutants/criteria may be allowed a mixing zone or dilution while others may not. In all cases, mixing zone and dilution allowances shall be limited, as necessary, to protect the integrity of the receiving water's ecosystem and designated uses.

# EVALUATION OF SURFACE WATER QUALITY-BASED EFFLUENT LIMITS FOR NUMERIC CRITERIA

## Oil & Grease

The WQS state that waters of the state must be free from oil or grease attributable to wastewater which causes a visible sheen or film upon the water. Using BPJ the department has determined that a daily maximum limitation of 10 mg/L is appropriate for active mining areas if a visible sheen is detected. Other treatment systems in the state have similar limitations.

## рΗ

The WQS state that discharges to classified lakes and reservoirs, and Class I and IA streams shall have an instantaneous pH limitation between 6.5 (S.U.) and 9.0 (S.U.). The lower pH limitation of 6.5 S.U. applies to discharge points that drain to the Missouri River, a Class I stream and Lake Audubon, a Class 2 reservoir. Discharges to all other classifications of stream (Class II and III) shall be between 6.0 (S.U.) and 9.0 (S.U.). Discharges to lakes and other lentic water bodies not listed in the WQS also shall be between 6.0 (S.U.) and 9.0 (S.U.).

Stream classifications may be found in NDAC 33.1-16-02.1, Appendix I. If a stream is not specifically mentioned in Appendix I, then it is considered a Class III stream. Class III streams generally have low average flows with prolonged periods of no flow. Lake and reservoir classifications may be found in NDAC 33.1-16-02.1, Appendix II. If a lake or reservoir is not specifically mentioned in Appendix II, then the physical and chemicals criteria designated for Class III streams apply.

In general, a tributary to a classified lake or reservoir or Class I or Class IA stream would be considered a Class III stream if pools of water are normally present in the tributary; then the lower limitation of 6.0 S.U. would apply to the tributary. If pools of water are not normally present in the tributary, then the lower limitation of 6.5 S.U. would apply to the tributary.

# **Human Health**

North Dakota's water quality standards include numeric human health-based criteria that the department must consider when writing NDPDES permits. These criteria were established in 1992 by the U.S. EPA in its National Toxics Rule (40 CFR 131.36). The National Toxics Rule allows states to use mixing zones to evaluate whether discharges comply with human health criteria. The department has not identified any chemicals in the applicant's discharges for regulation based on the human heath criteria. The department will re-evaluate this discharge for impacts to human health at the next permit reissuance.

# MONITORING REQUIREMENTS

The department requires monitoring, recording, and reporting (NDAC Chapter 33.1-16-01-(21 through 23) and 40 CFR 122.41) to verify that the treatment process is functioning correctly and that the discharge complies with the permit's limits.

# **Discharge Monitoring Report (DMR) Requirements**

The proposed permit requires the permittee to monitor discharges and submit discharge monitoring reports (DMRs) to the department. DMRs summarize monitoring results obtained during specified monitoring periods. If no discharge occurs during a monitoring period, "no discharge" must be reported. The monitoring periods for active mining and reclamation areas are monthly and quarterly, respectively. The monitoring period for nutrient monitoring is annual.

The proposed permit includes specified intervals for submitting DMRs (Table 11). DMRs must be submitted electronically to the department in accordance with 40 CFR 127 unless otherwise waived and in compliance with 40 CFR 3. The requirement to submit DMRs quarterly for active mining and reclamation areas is similar to other mining facilities.

## Table 11 – DMR Submittal Requirements

Coverage Point	Report Designator	Report Type	Report Interval
Active Mining Area	A	Conventional and Non-Conventional Pollutants, Flow and Volume Information	1/quarter
Reclamation Area	R	Conventional and Non-Conventional Pollutants, Flow and Volume Information	1/quarter
Nutrient Monitoring	N	Nutrients, Receiving Stream Flow	1/year

# **Test Procedures**

The collection and transportation of all samples shall conform to EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified or approved by EPA as an alternate test procedure

#### FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 20 of 40

under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount. The Settleable Solids test procedure shall conform with 40 CFR 434.64.

## **OTHER PERMIT CONDITIONS**

There are no other permit conditions included in the proposed permit.

#### PERMIT ISSUANCE PROCEDURES

#### **Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

#### **Proposed Permit Issuance**

This proposed permit meets all statutory requirements for the department to authorize a wastewater discharge. The permit includes limits and conditions to protect human health and aquatic life, and the beneficial uses of waters of the State of North Dakota. The department proposes to issue this permit for a term of five years.

# **APPENDIX A – PUBLIC INVOLVEMENT INFORMATION**

The department proposes to reissue a permit to the Falkirk Mining Company for its coal mining operation. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and the department's reasons for requiring permit conditions.

The department will place a Public Notice of Draft on **May 11, 2023** in the **McLean County Independent** to inform the public and to invite comment on the proposed draft North Dakota Pollutant Discharge Elimination System permit and fact sheet.

The Notice –

- Indicates where copies of the draft Permit and Fact Sheet are available for public evaluation.
- Offers to provide assistance to accommodate special needs.
- Urges individuals to submit their comments before the end of the comment period.
- Informs the public that if there is significant interest, a public hearing will be scheduled.

You may obtain further information from the department by telephone, 701.328.5210, or by writing to the address listed below.

North Dakota Department of Environmental Quality Division of Water Quality 4201 Normandy Street Bismarck, ND 58503

The primary author of this permit and fact sheet is Dallas Grossman.

## FACT SHEET FOR NDPDES PERMIT ND0024791 FALKIRK MINING COMPANY – UNDERWOOD **EXPIRATION DATE: JUNE 30, 2028** Page 22 of 40

North Dakota Department of Environmental Quality Public Notice Reissue of an NDPDES Permit		
Public Notice Date: 5/11/2023	Public Notice Number: ND-2023-012	
	e the following North Dakota Pollutant Discharge Elimination System r the authority of Section 61-28-04 of the North Dakota Century	
Permit Information Application Date: 12/29/2022	Application Number: ND0024791	
Applicant Name: Falkirk Mining Co Mailing Address: PO Box 1087, Un Telephone Number: 701.250.2644	nderwood, ND 58576	
Proposed Permit Expiration Date: 6	6/30/2028	
groundwater and/or surface runoff Weller Slough; Underwood Coulee wetland; Landenberger Slough; an	coal mining operation near Underwood, ND. Discharges consist of i encountered during mining. Discharges are to Samuelson Slough; e; Coal Lake Coulee; Coal Lake; Underwood Legal Drain; a reclaimed id tributaries to the Missouri River, Turtle Lake, Lake Audubon, and wood. The receiving waters are not specifically classified in the d treated as Class III streams.	
designated locations described in s structures are located within the bo permits which include all or part of	are subject to the surface water management conditions and surface mining permits approved following public review. Discharge oundaries of Falkirk Mining Company's approved surface mining the following: T144 N, R83W; T144N, R84W; T145N, R82W; T145N 1W; T146N, R82W; T146N, R83W; T146N, R84W; T147N, R82W.	
	other permit conditions have been made by the Department. They andards and applicable provisions of the FWPCAA will be protected.	
information on making public comm PublicCommentTips.aspx. Comme	<u>c Comments</u> mit, and related documents are available for review. For further ments/public comment tips please visit: https://deq.nd.gov/ ents or requests should be directed to the ND Dept of Env Quality, ndy Street, Bismarck ND 58503-1324 or by calling 701.328.5210.	
	9, 2023 will be considered prior to finalizing the permit. If there is g will be scheduled. Otherwise, the Department will issue the final a notice.	
meeting facility or other accommod	quest for reasonable accommodation to provide an accessible dation for people with disabilities, language interpretation for ency (LEP), and translations of written material necessary to access	

#### **APPENDIX B – DEFINITIONS**

#### DEFINITIONS Standard Permit BP 2019.05.29

- 1. "Act" means the Clean Water Act.
- 2. **"Average monthly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 3. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- 4. "Best management practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
- 5. **"Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.
- 6. "Composite" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.
- 7. "**Daily discharge**" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 8. **"Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.
- 9. "DMR" means discharge monitoring report.
- 10. "EPA" means the United States Environmental Protection Agency.
- 11. "**Geometric mean**" means the n<sup>th</sup> root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

- 12. "**Grab**" for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream.
- 13. "**Instantaneous**" for monitoring requirements, means a single reading, observation, or measurement. If more than one sample is taken during any calendar day, each result obtained shall be considered.
- 14. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
- 15. "**Salmonid**" means of, belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.
- 16. "Sanitary Sewer Overflows (SSO)" means untreated or partially treated sewage overflows from a sanitary sewer collection system.
- 17. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 18. "Total drain" means the total volume of effluent discharged.
- 19. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

## **DEFINITIONS Permit Specific**

- 1. "Active Mining Area" means the area on and beneath land, used or disturbed in activity related to extraction, removal, or recovery of coal from its natural deposits. The definition may include access roads, suitable plant growth material (SPGM), stockpiles, sedimentation ponds, and other related structures.
- 2. "Daily maximum concentration" means the greatest discharge concentration during any calendar day. If more than one sample is taken on a calendar day, the average of all such samples shall be the daily concentration for that day.
- 3. **"Monthly Average Concentration**" means the average discharge concentration during a 30consecutive day period (for reporting purposes a calendar month). It shall be determined by the summation of all daily concentrations for 30 days (calendar month) divided by the total number of days on which the values were obtained. If more than one sample is taken on a calendar day, the average of all such samples shall be the daily concentration of the day.
- 4. "NDPDES" means North Dakota Pollutant Discharge Elimination System.

5. "**Reclamation Area**" means an area which has been isolated from active mining area drainage and on which the final reclamation contour has been reached and seeding is completed. The definition may include access roads, suitable plant growth material (SPGM), stockpiles, sedimentation ponds, and other related structures.

# **APPENDIX C – DATA AND TECHNICAL CALCULATIONS**

The development of the permit did not require technical calculations by the North Dakota Department of Environmental Quality. The department reviewed DMR information and applicable water quality standards for a Class 3 lake or reservoir, and Class I and III streams to determine the appropriate requirements to be placed in the permit.

# **APPENDIX D – RESPONSE TO COMMENTS**

Comments received during the public comment period will be addressed and placed here.

#### **APPENDIX E – DISCHARGE OUTFALLS**

Discharge points as of November 1, 2022, for the Falkirk Mining Company near Underwood, ND 0024791. The discharge serial number is followed by a description of the structure, any company designation, the date the point was first regulated by the permit program, its location, and to where it drains. The points are active mining areas unless otherwise noted.

- Discharge 001 No discharge point; effective 4-15-82
- Discharge 002 Settling pond P-W04-01 (5-77) located in the SW 1/4, NW 1/4 Section 4, Township 145 North, Range 82 West to Samuelson Slough via Underwood Coulee
  - \* Reclamation area; effective 1-28-11
- Discharge 003 Settling pond P-W05-03 (5-77) located in the NE 1/4, SW 1/4 Section 5, Township 145 North, Range 82 West to Samuelson Slough via an unnamed intermittent drainage.
  - \* Reclamation status requested 12-04-14
- Discharge 004 Settling pond P-W06-01 (5-77) located in the SE 1/4, SW 1/4 Section 6, Township 145 North, Range 82 West to Weller Slough via an unnamed intermittent drainage \* Reclamation area; effective 10-1-90
- Discharge 005 No discharge point
- Discharge 006 No discharge point
- Discharge 007 Settling pond P-W08-03 (5-77) located in the NW 1/4, NW 1/4 Section 8, Township 145 North, Range 82 West to Samuelson Slough via an unnamed intermittent drainage
- Discharge 008 No discharge point; effective 3-09-81
- Discharge 009 No discharge point; effective 3-09-81
- Discharge 010 No discharge point; effective 4-15-82
- Discharge 011 Settling pond P-W04-02 (7-01-78) located in the NW 1/4, SW 1/4 Section 4, Township 145 North, Range 82 West to Samuelson Slough via an unnamed intermittent drainage
- Discharge 012 Settling pond P-W08-01 (7-01-78) located in the SE 1/4, NW 1/4 Section 8, Township 145 North, Range 82 West to Samuelson Slough via an unnamed intermittent drainage

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Discharge 013 - Settling pond P-W06-03 (7-01-78) located in the SW 1/4, SW 1/4 Section 6, Township 145 North, Range 82 West to Weller Slough via an unnamed intermittent

- drainage\* Reclamation area; effective 10-1-90
- Discharge 014 No discharge point; effective 4-15-82
- Discharge 015 Settling pond P-W08-04 (1-15-88) located in the NE 1/4, NE 1/4 Section 8, Township 145 North, Range 82 West to Samuelson Slough via an unnamed intermittent drainage
- Discharge 016 No discharge point; effective 10-01-88
- Discharge 017 No discharge point; effective 10-24-02
- Discharge 018 Settling pond P-W06-05 (3-09-81) located in the SW 1/4, SW 1/4 Section 6, Township 145 North, Range 82 West to Weller Slough via an unnamed intermittent drainage
  - \* Reclamation area; effective 10-1-90
  - \* Inactive; effective 2-6-17
- Discharge 019 Settling pond P-W30-03 (07-15-81) located in the NW 1/4, SW 1/4 Section 31, Township 146 North, Range 82 West to Weller Slough via an unnamed intermittent drainage Prior to 1-23-08, discharges were from downstream pond P-W31-01 located in the NW 1/4, SW 1/4 Section 31, Township 146 North, Range 82 West
  - \* Reclamation area; effective 10-1-90
  - \* Inactive; effective 1-07-16
- Discharge 020 No discharge point
- Discharge 021 No discharge point
- Discharge 022 No discharge point
- Discharge 023 No discharge point; effective 11-13-08
- Discharge 024 Settling pond P-W29-02 (1-15-82) located in the NE 1/4, NE 1/4 Section 29, Township 146 North, Range 82 West to Underwood Coulee via an unnamed intermittent drainage
  - \* Reclamation area; effective 1-07-16
  - \* Inactive; effective 2-6-17
- Discharge 025 Settling pond P-W32-01 (1-15-82) located in the SE 1/4, NW 1/4 Section 32, Township 146 North, Range 82 West to Weller Slough via an unnamed intermittent drainage.
  - \* Reclamation status requested 12-04-14

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- Discharge 026 Settling pond P-W32-02 (1-15-82) located in the SW 1/4, NW 1/4 Section 32, Township 146 North, Range 82 West to Weller Slough via an unnamed intermittent drainage
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 1-10-18
- Discharge 027 Settling pond P-W29-04, pit water system (4-15-82) located in the SW 1/4, NW 1/4 Section 29, Township 146 North, Range 82 West to Coal Lake Coulee
- Discharge 028 Settling pond P-W06-04, pit water system pipeline outlet (12-15-82) located in the SW 1/4, NW 1/4 Section 9, Township 145 North, Range 82 West to Underwood Coulee
- Discharge 029 No discharge point; effective 12-01-97
- Discharge 030 No discharge point; effective 1-10-06
- Discharge 031 No discharge point; effective 1-24-07
- Discharge 032 No discharge point; effective 1-24-07
- Discharge 033 No discharge point; effective 07-31-92
- Discharge 034 No discharge point; effective 1-10-06
- Discharge 035 No discharge point; effective 10-24-02
- Discharge 036 No discharge point; effective 10-24-02
- Discharge 037 No discharge point; effective 12-18-02
- Discharge 038 No discharge point; effective 1-24-07
- Discharge 039 No discharge point; effective 12-18-02
- Discharge 040 No discharge point; effective 10-15-97
- Discharge 041 Settling pond P-E34-01 (7-07-86) located in the NE 1/4, SW 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee
  - \* Reclamation area; effective 10-1-90
- Discharge 042 Settling pond P-E34-02 (7-07-86) located in the SW 1/4, NE 1/4 and NW 1/4, SE 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee
  - \* Reclamation area; effective 10-1-90

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- Discharge 043 Settling pond P-E34-05 (7-07-86) located in the SW 1/4, SE 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee
- Discharge 044 Settling pond P-E34-06, pit water system (07-07-86) located in the S 1/2, SE 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee
- Discharge 045 Settling pond P-E34-08 (9-22-86) located in the SE 1/4, NE 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee \* Reclamation area; effective 10-1-90
- Discharge 046 No discharge point; effective 10-15-97
- Discharge 047 Settling pond P-E34-03 (9-01-87) located in the E 1/2, NE 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee
  - \* Reclamation area; effective 10-1-90
  - \* Inactive; effective 1-07-16
- Discharge 048 Settling pond P-E34-04 (9-01-87) located in the S 1/2, SE 1/4 Section 34, Township 146 North, Range 82 West to Coal Lake Coulee
  - \* Reclamation area; effective 9-10-96
- Discharge 049 No discharge point; effective 12-08-04
- Discharge 050 Settling pond P-E35-01 (3-01-88) located in the NW 1/4, NW 1/4 Section 35, Township 146 North, Range 82 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
- Discharge 051 Settling pond P-E35-02 (3-01-88) located in the N 1/2, NW 1/4 Section 35, Township 146 North, Range 82 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
- Discharge 052 Settling pond P-W26-01 (3-01-88) located in the SW 1/4, NW 1/4 Section 26, Township 146 North, Range 83 West to the Missouri River
  - \* Reclamation area; effective 1-28-11
- Discharge 053 Settling pond P-W27-01 (1-01-89) located in the SE 1/4, NE 1/4 Section 27, Township 146 North, Range 83 West to the Missouri River via an unnamed grassed waterway
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 12-04-14
- Discharge 054 Settling pond P-E26-01 (1-01-89) located in the SE1/4, SW 1/4 Section 26, Township 146 North, Range 82 West to Coal Lake via an unnamed grassed waterway
  - Prior to 11/1/2008 discharge was from downstream pond P-E26-02
  - \* Reclamation area; effective 9-10-96

Discharge 055 - No discharge point; effective 1-23-08

- Discharge 056 Settling pond P-W04-03 (09-14-90) located in the SW 1/4, NW 1/4 Section 4, Township 145 North, Range 82 West to Samuelson Slough via Underwood Coulee
  - \* Reclamation area; effective 1-10-18
- Discharge 057 Settling pond P-W04-10, pit water system (10-01-90) located in the NW 1/4, SW 1/4 Section 4, Township 145 North, Range 82 West to Samuelson Slough via Underwood Coulee
  - \* Reclamation area; effective 5-06-16
  - \* Inactive; effective 6-21-16
- Discharge 058 Settling pond P-W22-01 (10-18-91) located in the SW 1/4, SE 1/4 Section 22, Township 146 North, Range 83 West to the Missouri River via an unnamed tributary
  - \* Reclamation area; effective 9-10-96
- Discharge 059 No discharge point; effective 1-10-06
- Discharge 060 No discharge point; effective 1-07-03

Discharge 061 - Settling pond P-E21-01 (11-05-93) located in the NE 1/4, NE 1/4 Section 21, Township 146 North, Range 82 West to an unnamed slough east of Underwood

- \* Reclamation area; effective 1-07-16
- \* Inactive; effective 1-10-18
- Discharge 062 Settling pond P-E24-01, pit water system (1-24-94) ¬located in the NW 1/4, SW 1/4 Section 24, Township 146 North, Range 82 West to Coal Lake
  - \* Inactive; effective 1-10-18
- Discharge 063 Settling pond P-E23-04 (6-10-94) located in the NW 1/4, SE 1/4 Section 23, Township 146 North, Range 82 West to Coal Lake via unnamed drainage.
  - \* Reclamation area; effective 12-04-14
  - \* Inactive; effective 2-6-17
- Discharge 064 Settling pond P-E23-06 (8-08-94) located in the SE 1/4, SE 1/4 Section 23, Township 146 North, Range 82 West to Coal Lake
  - \* Reclaimed area; effective fall of 2014
  - \* Inactive; effective 12-04-14
- Discharge 065 Settling pond P-W04-04 (8-15-94, redesigned 1-04-06) located in the SE 1/4, NW 1/4 Section 4, Township 145 North, Range 82 West to Samuelson Slough via Underwood Coulee.
  - \* Reclamation area; effective 12-04-14

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- Discharge 066 Settling pond P-E23-05 (5-26-95) located in the NE 1/4, SE 1/4 Section 23, Township 146 North, Range 82 West to Coal Lake via unnamed drainage.
  - \* Reclamation area; effective 12-04-14
  - \* Inactive; effective 2-6-17
- Discharge 067 Settling pond P-E24-02 (6-21-95) located in the SE 1/4, NW 1/4 Section 24, Township 146 North, Range 82 West to Coal Lake via unnamed drainage Pond P-E24-02
  - \* Reclamation area; effective fall of 2014
  - \* Inactive; effective 12-04-14
- Discharge 068 Settling pond P-R19-02 (6-20-96) located in the E 1/2, SW 1/4 Section 19, Township 145 North, Range 82 West to Weller Slough via unnamed drainage \* Reclamation area; effective 1-28-11
- Discharge 069 No discharge point; effective 10-01-04
- Discharge 070 No discharge point; effective 10-01-04
- Discharge 071 Settling pond P-R13-01 (7-12-96) located in the N 1/2, SE 1/4 Section 13, Township 145 North, Range 83 West to Weller Slough via unnamed drainage.
   \* Reclamation status requested 12-04-14.
- Discharge 072 Settling pond P-R25-03 (7-12-96) located in the S 1/2, SE 1/4 Section 25, Township 145 North, Range 83 West to an unnamed tributary of the Missouri River
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 1-07-16
- Discharge 073 Settling pond P-R25-04, pit water system (8-09-96) located in the SE 1/4, SE 1/4 Section 25, Township 145 North, Range 83 West to an unnamed tributary of the Missouri River
- Discharge 074 Settling pond P-I35-01 (11-13-96) located in the NE 1/4, NE 1/4 Section 35, Township 146 North, Range 82 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 9-15-16
- Discharge 075 Settling pond P-I36-01 (11-13-96) located in the SW 1/4, SE 1/4 Section 36, Township 146 North, Range 82 West to Buffalo Creek
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 4-09-12
- Discharge 076 No discharge point; effective 1-07-03
- Discharge 077 No discharge point; effective 11-20-00
- Discharge 078 No discharge point; effective 11-13-08

- Discharge 079 No discharge point; effective 8-09-06
- Discharge 080 Settling pond P-I25-03 (10-27-97) located in the SE 1/4, SW 1/4, Section 25, Township 146 North, Range 82 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 4-09-12
- Discharge 081 Settling pond P-W27-02 (1-20-98) located in the NE 1/4, NE 1/4, Section 27, Township 146 North, Range 83 West to the Missouri River via unnamed drainage. \* Reclamation area; effective 12-04-14
- Discharge 082 No discharge point; effective 11-20-00
- Discharge 083 No discharge point; effective 10-27-11
- Discharge 084 Settling pond P-R13-02 (8-05-99) located in the N 1/2, SW 1/4 Section 13, Township 145 North, Range 83 West to Weller Slough via unnamed drainage.
  - \* Reclamation area; effective 12-04-14
  - \* Inactive; effective 1-10-18
- Discharge 085 Settling pond P-I25-04 (9-10-99) located in the NW 1/4, SW 1/4, Section 25, Township 146 North, Range 82 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 9-15-16
- Discharge 086 Settling pond P-I30-02 (10-13-00) located in the SW 1/4, SW 1/4, Section 30, Township 146 North, Range 81 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 4-09-12
- Discharge 087 Settling pond P-R36-01 (11-20-00) located in the W 1/2, NE 1/4, Section 36, Township 145 North, Range 83 West to an unnamed tributary of the Missouri River
  - \* Reclamation area; effective 1-17-2022
- Discharge 088 Settling pond P-R14-01 (11-20-00) located in the NE 1/4, SE 1/4 Section 14, Township 145 North, Range 83 West to Weller Slough via unnamed drainage.
   \* Reclamation area; effective 12-04-14
- Discharge 089 No discharge point; effective 1-10-06
- Discharge 090 Settling pond P I25 05 (7-19-01, redesigned 12-01-05) located in the NE 1/4, NE 1/4 of Section 25, Township 146 North, Range 82 West to Coal Lake
  - \* Reclamation area; effective 1-28-11
  - \* Inactive; effective 4-09-12

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Discharge 091 - Settling pond P I30 01 (7-19-01) located in the N 1/2, NW 1/4 of Section 30, Township 146 North, Range 81 West to Coal Lake

- \* Reclamation area; effective 1-28-11
- \* Inactive; effective 4-09-12

Discharge 092 - Settling pond P-W33-01 (12-18-02) located in the SE 1/4, NW 1/4 of Section 33, Township 146 North, Range 82 West to the Underwood Legal drain

- \* Reclamation area; effective 1-07-16
- \* Sedimentation pond removal site; effective 11-12-2020
- \* Inactive; effective 1-17-2022
- Discharge 093 No discharge point; effective 11-13-08
- Discharge 094 Settling pond P-W28-02 (12-18-02) located in the NE 1/4, SW 1/4 of Section 28, Township 146 North, Range 82 West to the Underwood Legal drain
  - \* Reclamation area; effective 1-07-16
  - \* Inactive; effective 1-10-18
- Discharge 095 Detention pond P-W28-01 (12-18-02) located in the NE 1/4, NW 1/4 of Section 28, Township 146 North, Range 82 West to the Underwood Legal drain. This pond was part of a clean water diversion system and was not regulated by coal mining effluent criteria prior to 2-05-10
  - \* Reclamation area; effective 12-04-14
- Discharge 096 Settling pond P-R14-02 (12-18-02) located in the NW 1/4, NW 1/4 of Section 14, Township 145 North, Range 83 West to Weller Slough
  - \* Reclamation area; effective 1-10-18
- Discharge 097 Settling pond P-R10-01, pit water system (12-03-04) located in the SE 1/4, SE 1/4 Section 10, Township 145 North, Range 83 West to Weller Slough

Discharge 098 - Settling pond P-R15-01 (9-01-05) located in the NW 1/4, NE 1/4 of Section 15, Township 145 North, Range 83 West to Weller Slough

- \* Reclamation area; effective 1-10-18
- Discharge 099 Settling pond P-W26-05 (1-26-07) located in the NW 1/4, NE 1/4 of Section 26, Township 146 North, Range 83 West to reclaimed wetland R-26-01
- Discharge 100 Settling pond P-E15-01 (9-14-07) located in the SE 1/4, SE 1/4 of Section 15, Township 146 North, Range 82 West to Coal Lake
- Discharge 101 Settling Pond P-E13-01 (1-23-08) located in the SW1/4, SW1/4 of Section 13, Township 146 North, Range 82 West to Coal Lake

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Discharge 102 -	Settling Pond P-E13-02 (1-23-08) located in the NW1/4, SE1/4 of Section 13, Township 146 North, Range 82 West to Coal Lake Inactive; effective 2-6-17
Discharge 103 -	Settling Pond P-E13-06 (1-23-08) located in the SE1/4, NE1/4 of Section 13, Township 146 North, Range 82 West to Coal Lake
Discharge 104 -	Settling Pond P-E14-01 (1-23-08) located in the SE1/4, SW1/4 of Section 14, Township 146 North, Range 82 West to Coal Lake
Ū	Settling Pond P-E18-01 (1-23-08) located in the SW1/4, NW1/4 of Section 18, Township 146 North, Range 81 West to Coal Lake Reclamation area; effective 1-07-16 Inactive; effective 2-6-17
Discharge 106 -	Settling Pond P-E13-03 (11-13-08) located in the NW1/4, NE1/4 of Section 13, Township 146 North, Range 82 West to Coal Lake via unnamed drainage
Discharge 107 -	Settling Pond P-E13-04 (11-13-08) located in the NW1/4, NE1/4 of Section 13, Township 146 North, Range 82 West to Coal Lake via unnamed drainage Reclamation area; effective 1-17-2022
Discharge 108 -	Settling Pond P-E18-02 (11-13-08) located in the NW1/4, NW1/4 of Section 18, Township 146 North, Range 81 West to Coal Lake via unnamed drainage Reclamation area; effective 1-17-2022
Discharge 109 -	Settling Pond P-E23-01 (11-13-08) located in the NE1/4, SW1/4 of Section 23, Township 146 North, Range 82 West to Coal Lake via unnamed drainage Reclamation area; effective 1-10-18
Discharge 110 -	Settling Pond P-R22-01 (11-13-08) located in the SW1/4 of Section 22, Township 145 North, Range 83 West to the Missouri River via unnamed drainage Inactive; effective 4-09-12
Discharge 111 -	Settling Pond P-R36-02 (1-20-10) located in the SE1/4 of Section 36, Township 145 North, Range 83 West to the Missouri River via unnamed drainage Reclamation area; effective 1-10-18
Discharge 112 -	Settling Pond P-R04-01 (2-25-11) located in the NE1/4 of Section 4, Township 144 North, Range 83 West to the Missouri River via unnamed drainage Reclamation area; effective 1-17-2022
Discharge 113 -	Settling Pond P-R04-02 (2-25-11) located in the NE1/4 of Section 4, Township 144 North, Range 83 West to the Missouri River via unnamed drainage Reclamation area; effective 1-17-2022

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- Discharge 114 Settling Pond P-R04-03 (2-25-11) located in the SW1/4 of Section 4. Township 144 North, Range 83 West to the Missouri River via unnamed drainage
  - \* Reclamation area; effective 1-10-18
- Discharge 115 Settling Pond P-E12-01 (2-25-11) located in the SE1/4 of Section 12, Township 146 North, Range 82 West to Coal Lake via unnamed drainage \* Reclamation area; effective 1-17-2022
- Discharge 116 Settling Pond P-E12-02 (2-25-11) located in the SE1/4 of Section 12, Township 146 North, Range 82 West to Coal Lake via unnamed drainage
  - \* Reclamation area; effective 1-10-18
- Discharge 117 Settling Pond P-E12-04 (2-25-11) located in the NE1/4 of Section 12, Township 146 North, Range 82 West to Coal Lake via unnamed drainage Prior to P-E12-04 construction, discharge is from upstream wetland basins B-E12-08 in the SW1/4 of Section 12, Township 146 North, Range 82; and B-E13-07 in the NW1/4 of Section 13, Township 146 North, Range 82
  - Reclamation area; effective 1-17-2022
- Discharge 118 Sedimentation Pond P-E12-03 (8-19-11) located in the NE1/4 of the SE1/4 of Section 12, Township 146 North, Range 82 West to Landenberger Slough \* Reclamation area: effective 1-10-18
- Discharge 119 No discharge point; effective 10-27-11
- Discharge 120 Pit-Water (Ground Water) Pond P-E12-07 (8-19-11) located in the NE1/4 of the SE1/4 of Section 12, Township 156 North, Range 82 West to Landenberger Slough
- Discharge 121 Sedimentation Pond P-R-04-04 (10-27-11) located in the SW1/4 of Section 4, Township 144 North, Range 83 West to the Missouri River via an unnamed ephemeral stream
  - \* Reclamation area; effective 1-17-2022
- Discharge 122 Sedimentation Pond P-R21-01 (10-27-11) located in the SW1/4 of Section 21, Township 145 North, Range 83 West to the Missouri River via an unnamed ephemeral stream
  - \* Reclamation area: effective 1-10-18
- Discharge 123 Sedimentation Pond P-R21-02 (10-27-11) located in the NE1/4 of Section 21, Township 145 North, Range 83 West to the Missouri River via an unnamed ephemeral stream
  - \* Reclamation area; effective 1-10-18
  - \* Inactive; effective 1-17-2022
- Discharge 124 Sump S-E01-01 (6-21-12) located in the SE1/4 of Section 1, Township 146 North, Range 82 West to Lake Audubon via unnamed drainage

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- Discharge 125 Pond P-E12-05 (8-21-12) located in the NE1/4 of NE1/4 of Section 12, Township 146 North, Range 82 West to Landenberger's Slough
- Discharge 126 Sedimentation Pond P-R09-01 (2-26-2013) located in the NE¼ of Section 9, T144, R83W
  - \* Reclamation area; effective 1-17-2022
- Discharge 127 Sedimentation Pond P-R09-02 (2-26-2013) located in the NW¼ of Section 9, T144, R83W
  - \* Reclamation area; effective 1-17-2022
- Discharge 128 Sedimentation Pond P-R28-01 (8-01-13) located in the SE¼ of Section 28, T145, R83W to the south via an unnamed ephemeral stream to the Missouri River \* Inactive; effective 2-6-17
- Discharge 129 Sedimentation Pond P-E16-01 (12-04-15) located in the SE¼ of the SE¼ of Section 16, T146, R82W to the south entering Underwood Coulee (via Pryor Slough)
- Discharge 130 Sedimentation Pond P-RW29-01 (12-04-15) located in the NE<sup>1</sup>/<sub>4</sub> of Section 29, T145, R83W to the north via an unnamed ephemeral stream to the Missouri River
- Discharge 131 Sedimentation Pond P-R05-01 (7-28-15) located in the SE¼ of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral stream \* Reclamation area; effective 1-17-2022
- Discharge 132 Sedimentation Pond P-R05-02 (7-28-15) located in the SE<sup>1</sup>/<sub>4</sub> of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral stream \* Reclamation area; effective 1-17-2022
- Discharge 133 Sedimentation Pond P-R05-03 (1-07-2016) located in the NW¼ of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral stream
  - \* Reclamation area; effective 1-17-2022
- Discharge 134 Sedimentation Pond P-R05-04 (1-07-16) located in the NW¼ of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral and intermittent stream
  - \* Reclamation area; effective 1-17-2022
- Discharge 135 Sedimentation Pond P-R05-05 (1-07-16) located in the NW¼ of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral and intermittent stream
  - \* Reclamation area; effective 1-17-2022

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Discharge 136 - Sedimentation Pond P-R06-01 (1-07-16) located in the SW<sup>1</sup>/<sub>4</sub> of Section 6, T144, R83W to the south into the Missouri River via an unnamed ephemeral stream

- Discharge 137 Pit Water Pond (Ground Water) P-R06-05 (1-07-16) located in the SW¼ of Section 6, T144, and R83W to the south into the Missouri River via an unnamed ephemeral stream.
- Discharge 138 Sump S-E13-08 (1-07-16) located in the SE¼ of Section 13, T146, R82W to the south into Coal Lake via an unnamed ephemeral stream
- Discharge 139 Sedimentation Pond P-R05-06 (9-15-16) located in the NW¼ of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral and intermittent stream
- Discharge 140 Sedimentation Pond P-E13-05 (9-15-16) located in the SE¼ of Section 13, T146, R82W to the south into Coal Lake via an unnamed ephemeral stream
- Discharge 141 Sedimentation Pond P-E02-01 (4-29-19) located in the N1/2, SE1/4 of Section 2, Township 146 North, Range 82 West to Turtle Lake via an unnamed drainage
- Discharge 142 Sedimentation Pond P-E16-02 (10-1-20) located in the center of Section 16, Township 146 North, Range 82 West to Underwood Coulee via an unnamed drainage
- Discharge 143 Sedimentation Pond P-E16-03 (11-17-2020) located in the NW1/4, NW1/4 Section 16, T146N, R82W. This pond drains to the south entering Underwood Coulee.
- Discharge 144 Sedimentation Pond P-E15-04 (10-1-2021) located in the S1/2, SW1/4 Section 15, T146N, R82W. This pond drains to the south entering Underwood Coulee.
- Discharge 145 Sedimentation Pond P-R01-01 (1-17-2022) located in the SE1/4 Section 1, T144N, R84W. This pond drains to the south into the Missouri River via an unnamed ephemeral stream.
- Discharge 146 Sedimentation Pond P-R06-03 (1-17-2022) located in the SW1/4 Section 6, T144N, R83W. This pond drains to the south into the Missouri River via an unnamed ephemeral stream.
- Discharge 147 Sump S-E13-07 (1-17-2022) located in the SE1/4 Section 13, T146N, R82W. This sump drains west into Coal Lake.
- Discharge 148 Pond P-E15-02 (4-25-2022) located in the SE1/4 Section 15, T146N, R82W. This pond drains west into Coal Lake.
- Discharge 149 Pond P-R07-01 (11-1-2022) located in the NW1/4 Section 7, T144N, R83W. This pond drains to the south into the Missouri River via an unnamed ephemeral stream.

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Discharge 150 - Pond P-R07-02 (11-1-2022) located in the NW1/4 Section 7, T144N, R83W. This pond drains to the south into the Missouri River via an unnamed ephemeral stream.