

North Dakota Department of Health Public Notice
Reissue of an NDPDES Permit

Public Notice Date: 5/24/2018

Public Notice Number: ND-2018-014

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: 12/27/2017

Application Number: ND0024791

Applicant Name: Falkirk Mining Co

Mailing Address: PO Box 1087, Underwood, ND 58576

Telephone Number: 701.442.5751

Proposed Permit Expiration Date: 6/30/2023

Facility Description

The reapplication is for a surface coal mining facility. Discharges would consist of groundwater and surface runoff from the facility. The discharges covered by this permit are subject to the surface water management conditions and the designated locations described in surface mining permits approved following public review (NDCC 38-14.1). The discharge structures are located within the boundaries of the facility'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. Discharges would be to Samuelson Slough, Weller Slough, Underwood Coulee, Coal Lake Coulee, Coal Lake, Missouri River, Underwood Legal Drain, Reclaimed Wetland R-26-01, Landenberger Slough, Lake Audubon, and an unnamed slough east of the City of Underwood. The Missouri River is a Class I Stream. All other streams are treated as Class 3 Streams. Lake Audubon is a Class 2 Lake. Coal Lake and Reclaimed Wetland R-26-01 are not specifically classified and treated as Class 3 Lakes.

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. Comments or requests should be directed to the ND Dept of Health, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by June 25, 2018 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. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

**FACT SHEET FOR NDPDES PERMIT
ND-0024791**

PERMIT REISSUANCE

FALKIRK MINING COMPANY

DATE OF THIS FACT SHEET – March 2018

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 Health (NDDoH) 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 33-16 (North Dakota Administrative Code) which was promulgated pursuant to NDCC chapter 61-28 (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 33-16-01),
- Standards of Quality for Waters of the State (NDAC chapter 33-16-02.1).

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 33-16-01-08, 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 33-16-01-07). For more information regarding preparing and submitting comments about the fact sheet and permit, please see **Appendix A – Public Involvement**. Following the public comment period, the department may make changes to the draft NDPDES permit. The department will summarize the responses to comments and changes to the permit in **Appendix D - Response to Comments**.

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BACKGROUND INFORMATION

Table 1 – General Facility Information

Applicant:	The Falkirk Mining Company
Facility Name and Address:	Falkirk Underwood 2801 1 st Street SW, Underwood, ND 58576
Permit Number:	ND-0024791
Permit Type:	Minor, Permit Reissuance
Type of Treatment:	Sedimentation Ponds
SIC Code:	1221
Discharge Location:	Various locations within the permitted mining area which include: T144N, R83W; T144N, R84W; T145N, R82W; T145N, R83W; T145N, R84W; T146N, R81W; T146N, R82W; T146N, R83W; and T146N, 84W
Hydrologic Code:	10130101-Painted Woods-Square Butte Creek

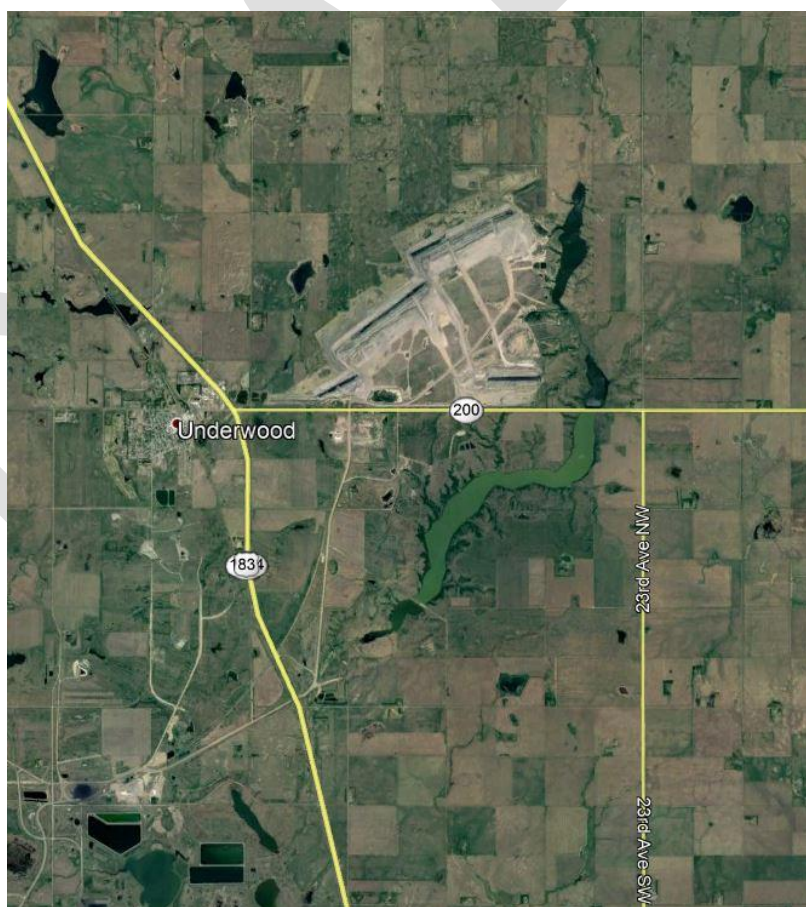


Figure 1 – Aerial Photograph of the northeastern area of Falkirk Mining Company Underwood, ND (Google Earth-6/3/2017)

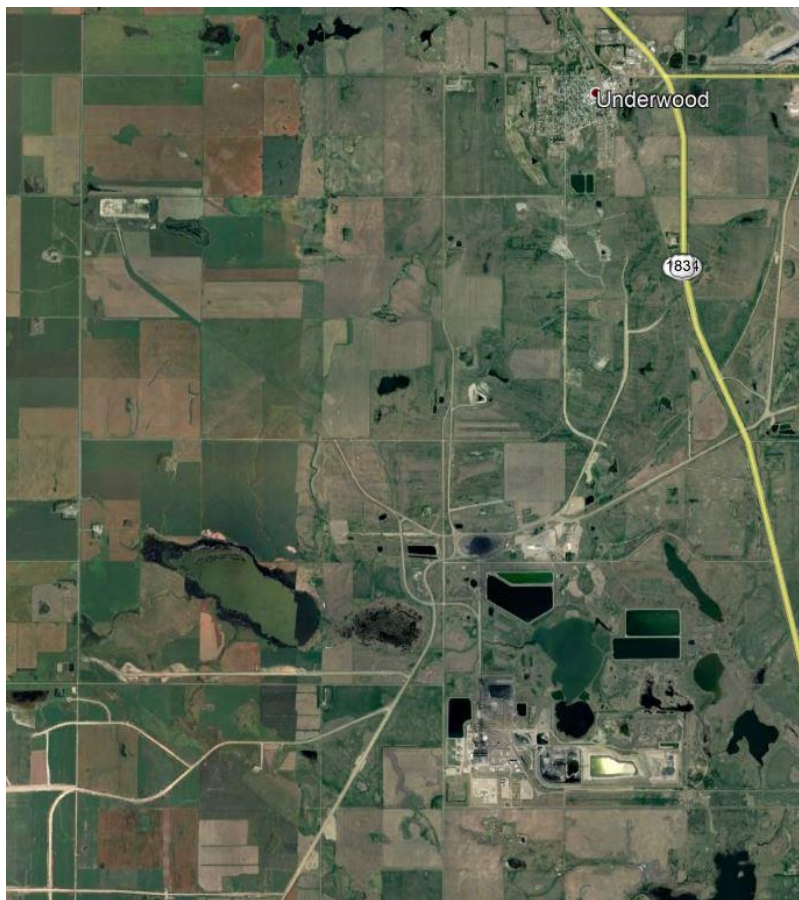


Figure 2 – Aerial Photograph of the central area of Falkirk Mining Company Underwood, ND (Google Earth-6/3/2017)

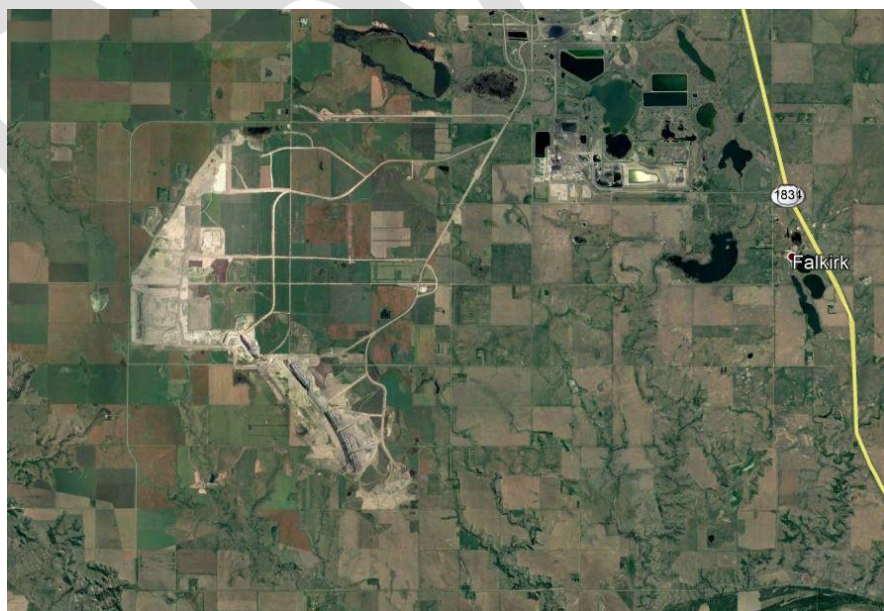


Figure 3 – Aerial Photograph of the southwestern area of Falkirk Mining Company Underwood, ND (Google Earth-6/3/2017)

FACILITY DESCRIPTION

Falkirk Mining Company is a lignite coal mining operation located near Underwood, North Dakota. The operation supplies from 7.5 to 8.1 million tons of coal per year to Great River Energy – Coal Creek Station power plant. All discharge points are located within the boundaries of the approved surface mining permits issued by the North Dakota Public Service Commission (PSC). PSC Surface Coal Mining and Reclamation Operations Permits for Falkirk Mining Company include permit numbers: NAFK-8405, NAFK-8705, NAFK-9503, and NAFK-9601. These permits are required in the state under North Dakota Century Code Chapter 38-14.1. The mine permits and regulated discharge points are located in: T144N, R83W; T144N, R84W; T145N, R82W; T145N, R83W; T145N, R84W; T146N, R81W; T146N, R82W; T146N, R83W; and T146N, 84W in McLean County.

Surface mining permits are required in the state under North Dakota Century Code 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.

Typically, sedimentation ponds are used, and required under 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 applicable to alkaline mine drainage and western alkaline coal mining. The requirements consist of separate limitations and monitoring requirements for two phases of mining activity, active mining areas, and reclamation areas. Alternate limitations and monitoring requirements for discharges attributable to certain precipitation events are provided.

Currently, Falkirk Mining Company has 92 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 Great River Energy, Coal Creek Station. This lagoon system is a total containment system. The various out-buildings located at the facility have drain field septic systems.

Runoff outside of active mining and reclamation areas is covered by the industrial stormwater general permit. The industrial stormwater general permit requires facilities to develop a stormwater pollution prevention plan (SWPPP) to minimize pollutants that could be discharged in runoff from areas outside of mining areas as well as routine sampling of stormwater runoff.

HISTORY

The western alkaline coal mining subcategory was added to the federal regulation in 2002. The provisions of the subcategory have been the subject of discussions between the department, the PSC (the state's Surface Mining Control and Reclamation Act authority) and an industry trade group since it was first proposed. The consensus formed determined that the western mine provisions have only limited applicability in the state. North Dakota's coal mining activity is on the eastern margin of the area defined as western coal mining operations which is limited to operations west of the 100th 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 re-graded 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 storm water permit for mining activity. Due to the depth of soil that must be replaced on mined land in the state, the definition for a re-graded area cannot be met until the subsoil and topsoil has been replaced, meeting the definition for a reclamation area. The western mining subcategory does not apply to active mine areas.

This facility was first permitted on January 1, 1965. During the 2003 renewal of this permit, Falkirk requested and was granted a reduction in the sampling frequency for Total Suspended Solids (TSS) and Total Iron from active mine areas. The change in frequency was from weekly to monthly for TSS and from monthly to annually for Total Iron. The reduction in monitoring was based on a review of Falkirk's discharge data and criteria 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, 2013 reissuance of the permit.

The following summary from the 2008 renewal fact sheet provides the basis for the reduction in monitoring with "TFe" referring to Total Iron:

"The discharge performance for Falkirk's mine was summarized by determining the long-term 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."

OUTFALL DESCRIPTION

Discharges at any location not authorized under a NDPDES permit is a violation of the Clean Water Act (CWA) and could subject the person(s) responsible for such discharge to penalties under section 309 of the CWA. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within the specified timeframe outlined in this permit could subject such person(s) to criminal penalties as provided under the CWA.

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

Table 2 – Discharge Waterbodies

Waterbody		Classification ^a
Samuelson Slough		Class 3 Stream ^b
Weller Slough		Class 3 Stream ^b
Underwood Coulee		Class 3 Stream ^b
Coal Lake Coulee		Class 3 Stream ^b
Coal Lake		Class 3 Lake ^c
Missouri River		Class I Stream
Underwood Legal Drain		Class 3 Stream ^b
Reclaimed Wetland R-26-01		Class 3 Lake ^c
Landenberger Slough		Class 3 Stream ^b
Lake Audubon		Class 2 Lake
Unnamed Slough east of the City of Underwood		Class 3 Stream ^b
a.	Waterbody classifications as found in the State of North Dakota's "Standards of Quality for Waters of the State," (WQS) NDAC Chapter 33-16-02.1.	
b.	These waterbodies and their tributaries are not specifically classified in the WQS and are therefore treated as Class 3 streams.	
c.	These waterbodies are not specifically classified in the WQS and are therefore treated as Class 3 Lakes.	

The list of discharge points as of January 10, 2018 is provided in **Appendix E**.

Discharges occur 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 NDPDES until such time it is authorized for removal.

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**. The description of the discharge points includes:

- 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
- 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). There are no other sources of waste water that require effluent limitations in the proposed permit. 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).

PERMIT STATUS

The department issued the previous permit for this facility on July 1, 2013. The previous permit placed limits on Total Iron, Total Suspended Solids (TSS), Settleable Solids, Oil and Grease, and pH.

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. The department's assessment of compliance is based on a review of the facility's Discharge Monitoring Reports (DMRs) and physical inspections conducted by department staff. No defects were noted at the time of the last inspection, with the facility found to be in compliance with their permit.

Past Discharge Data

According to department records, over the previous permit cycle the facility discharged, collectively from all the ponds, for a total of 466 days, with discharges lasting an average of 12 days. The concentration of pollutants in the discharges was reported through DMRs. The facility only had one exceedance during the previous permit cycle. The effluent is characterized in Table 3.

Table 3 – Falkirk Discharge Data (as of December 2017)

Parameter	Units	Range	Average	Permit Limit	No. of Exceedances	TRC Exceedance
Total Iron	mg/l	0-3.86	0.38	3.5	0	0
TSS	mg/l	1-61	5.87	35	1	0
Settleable Solids	ml/l	0	0	0.5 ml/l	0	0
Oil & Grease	mg/l	0	0	10	0	0
pH	SU	6.26-8.96	N/A	6.0-9.0	0	N/A
Flow	gpm	0.84-8626	848.61	N/A	N/A	N/A
Drain, Total	MG	0.03-251	9.2	N/A	N/A	N/A
Days, Total	Day	3-21	12	N/A	N/A	N/A

PROPOSED PERMIT LIMITS

EFFLUENT LIMITATIONS

The following limitations are based on promulgated guidelines as outlined in the Code of Federal Regulations (40 CFR), the North Dakota Standards of Quality for Waters of the State (WQS), and Best Professional Judgment (BPJ), as determined by the department.

Discharge from mining operations are regulated by national effluent guidelines which establish technology based effluent limitations. These can be found in 40 CFR, Part 434. The department may generate additional limitations using BPJ to ensure reasonable control technologies are used to prevent potential harmful effects from the discharge. The department also must consider and include limitations necessary to protect water quality standards applicable to receiving waters.

The previous permit issued contained language about the use of the nearest National Weather Service recording station to measure precipitation amounts to qualify for overflow waivers. Since precipitation monitoring sites have been established throughout the mine, the department determined this language was not necessary and removed it from the proposed permit.

As provided in 40 CFR 434.63, the facility may be allowed alternate limitations based on a 10-year, 24-hour precipitation event; however, 40 CFR 434.63 does not specify the precipitation amount. The department intends to reduce the 10-year, 24-hour precipitation amount in the proposed permit from 3.2 inches to 2.97 inches based on updated precipitation frequency estimates. In 2013, the U.S. Department of Commerce, National Oceanographic and Atmospheric Administration (NOAA) released *NOAA Atlas 14*, which updated the precipitation amount for the 10-year, 24-hour precipitation event. According to *Atlas 14*, the precipitation amount for the area covered by the facility is 2.97 inches of rainfall. Prior to the release of *Atlas 14*, the 10-year, 24-hour precipitation amount used for pond design was 3.2 inches. This amount was based on the U.S. Department of Commerce, Weather Bureau Technical Paper 40, *Rainfall Frequency Atlas of the United States*, released in 1961.

The release of *NOAA Atlas 14* is a substantial change in selecting the 10-year, 24-hour precipitation amount, which was not available when the previous permit was issued. In addition, sedimentation ponds constructed prior to the change were designed to meet the larger 3.2 inch overflow requirement. The department determined that lowering the 10-year, 24-hour precipitation amount is an allowable exception to 40 CFR 122.44(l)(2) which allows a permit to be issued with less stringent effluent limitations when information is available that would justify less stringent effluent limitations.

The proposed effluent limitations shall take effect once the permit becomes active. The proposed effluent limitations and the basis for the limitations are provided in the Tables 4 through 6.

Table 4 – Effluent Limitation Basis – Active Mining Areas

Effluent Parameter	Monthly Average	Daily Maximum	Basis ^c
Total Iron ^a	3.5 mg/l	7.0 mg/l	40 CFR 434.42
Total Suspended Solids ^a (TSS)	35.0 mg/l	70.0 mg/l	40 CFR 434.42
Settleable Solids ^a	*	0.5 ml/l	40 CFR 434.63(a)
Oil & Grease – Visual ^b	*	*	WQS
Oil & Grease ^b	*	10 mg/l	BPJ Previous Permit
pH	**		40 CFR 434.42 WQS
The permittee shall maintain the capability to measure the instantaneous flow rate, daily.			Previous Permit
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.			BPJ
Notes:			
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.			
** Discharges to lakes and reservoirs, and Class I and IA streams shall have an instantaneous pH limitation between 7.0 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of stream shall be between 6.0 (s.u) and 9.0 (s.u.).			
a. <u>Alternate Limitations:</u> The department may waive the limitations for total iron and TSS 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 TSS 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 gauge and recorded daily by the permittee.

- b. 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.

- 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 judgement.

"WQS" refers to effluent limitations based on the State of North Dakota's "Standards of Quality for Waters of the State," NDAC Chapter 33-16-02.1.

Table 5 - Effluent Limitation Basis - Reclamation Areas

Effluent Parameter	Daily Maximum	Basis ^c
Total Suspended Solids (TSS) ^a	70 mg/l	BPJ Previous Permit
Settleable Solids ^b	0.5 ml/l	40 CFR 434.52(a) 40 CFR 434.63(a)
pH	*	40 CFR 434.52(a) 40 CFR 434.62(a) 40 CFR 434.62(d)(2) WQS

The permittee shall maintain the capability to measure the instantaneous flow rate, daily.	Previous Permit
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.	Previous Permit
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.	BPJ
Notes:	
* Discharges to lakes and reservoirs, and Class I and Class IA streams shall have an instantaneous pH limitation between 7.0 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of stream 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 conjunctions with settleable solids sampling for comparison purposes. <u>Monitoring for settleable solids is not required for routine discharges.</u>	
b. The settleable solids requirements apply 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. Precipitation shall be measured by gauge and recorded daily by the permittee.	
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 judgement. "WQS" refers to effluent limitations based on the State of North Dakota's "Standards of Quality for Waters of the State," NDAC Chapter 33-16-02.1.	

Table 6 – Effluent Limitation Basis – Reclamation Areas

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
<p>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 (NDDoH). The conditions and procedures outlined in the policy accommodate the rules and requirements of both the NDDoH and the PSC. In summary, the policy contains the following:</p> <p>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;</p> <p>The content and considerations for a site-specific reclamation plan that must be submitted for review and approval;</p> <p>A description of the BMPs for erosion and sediment control that must be used and maintained;</p> <p>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;</p> <p>The notifications to the NDDoH and PSC required during the course of the pond removal activity.</p>	Previous Permit
The BMPs and all procedures identified in the approved site-specific reclamation plan must be followed throughout the course of the pond removal activities.	Previous Permit
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.	Previous Permit
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.

Table 7 – Self-Monitoring Requirements

Effluent Parameter	Frequency	Sample Type ^a
<i>Active Mining Areas:</i>		
Total Iron	Annual	Grab
TSS	Monthly	Grab
Settleable Solids	Monthly	Grab
Oil & Grease – Visual	Daily	Visual
Oil & Grease	Conditional/Monthly	Grab
pH	Monthly	Instantaneous
Flow, Total ^b	Monthly	Calculated
Drain, Total ^b	Monthly	Calculated
Total Days Discharging	Monthly	Calculated
<i>Reclamation Areas:</i>		
TSS	Quarterly	Grab
Settleable Solids	Quarterly	Grab
pH	Quarterly	Instantaneous
Flow, Total ^b	Monthly	Calculated
Drain, Total ^b	Monthly	Calculated
Total Days Discharging	Monthly	Calculated
Notes:		
a.	Refer to Appendix B for definitions.	
b.	The permittee shall maintain the capability to measure the instantaneous flow rate, daily.	

SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

The North Dakota State Water Quality Standards (NDAC Chapter 33-16-02.1) 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.

There are currently no TMDL's or 303(d) listings for the classified waterbodies that Falkirk Mining Company discharges into.

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 33-16-02.1). 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 33-16-02.1-08) 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 33-16-02(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 33-16-02.1 (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.

pH

The past permit had a pH range dependent on the classification of the waterbody receiving the discharge. Discharges to lakes and reservoirs, and Class I and Class IA streams shall have an instantaneous pH limitation between 7.0 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of stream shall be between 6.0 (s.u.) and 9.0 (s.u.).

Coal Lake is not specifically classified in the WQS and therefore is treated as a Class 3 lake. The beneficial uses and parameter limitations designated for Class I streams shall apply to all classified lakes or reservoirs. Thus, Coal lake is to meet standards of a Class 1 stream.

The lower pH limitation of 6.0 s.u. applies to discharge points that drain to Class III streams. The lower pH limitation of 7.0 s.u. applies to discharge points that drain to the Missouri River, a Class 1 stream, and Coal Lake, a Class 3 lake. Stream classifications may be found in NDAC 33-16-02.1, 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. If a lake is not specifically mentioned in Appendix I, then it is considered a Class III lake. Class III lakes have waters capable of supporting natural reproduction and growth of warm water fishes and associated aquatic biota. Some cool water species may also be present.

In general, a tributary to a 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 7.0 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 determined the applicant's discharge is unlikely to contain chemicals regulated to protect human health. 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 33-16-01-(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.

TEST PROCEDURES

The collection and transportation of all samples shall comply with the 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 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.

OTHER PERMIT CONDITIONS

There are not other permit conditions at this time.

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 (5) 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 24, 2018** 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 Health
Division of Water Quality
918 East Divide Avenue, 4th Floor
Bismarck, ND 58501

The primary author of this permit and fact sheet is Sarah Waldron Feld.

**North Dakota Department of Health Public Notice
Reissue of an NDPDES Permit**

Public Notice Date: 5/24/2018

Public Notice Number: ND-2018-014

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: 12/27/2017

Application Number: ND0024791

Applicant Name: Falkirk Mining Co

Mailing Address: PO Box 1087, Underwood, ND 58576

Telephone Number: 701.442.5751

Proposed Permit Expiration Date: 6/30/2023

Facility Description

The reapplication is for a surface coal mining facility. Discharges would consist of groundwater and surface runoff from the facility. The discharges covered by this permit are subject to the surface water management conditions and the designated locations described in surface mining permits approved following public review (NDCC 38-14.1). The discharge structures are located within the boundaries of the facility'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. Discharges would be to Samuelson Slough, Weller Slough, Underwood Coulee, Coal Lake Coulee, Coal Lake, Missouri River, Underwood Legal Drain, Reclaimed Wetland R-26-01, Landenberger Slough, Lake Audubon, and an unnamed slough east of the City of Underwood. The Missouri River is a Class I Stream. All other streams are treated as Class 3 Streams. Lake Audubon is a Class 2 Lake. Coal Lake and Reclaimed Wetland R-26-01 are not specifically classified and treated as Class 3 Lakes.

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. Comments or requests should be directed to the ND Dept of Health, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by June 25, 2018 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. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

APPENDIX B – DEFINITIONS

DEFINITIONS Standard Permit BP 2013.12.31

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 Health, 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^{th} 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

20. **"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.
21. **"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.
22. **"Monthly Average Concentration"** means the average discharge concentration during 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.

23. **“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 Health. 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 January 10, 2018 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

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

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

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

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

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

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

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

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

Discharge 105 - 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

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

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

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

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

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

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

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

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

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

Discharge 127 – Sedimentation Pond P-R09-02 (2-26-2013) located in the NW¼ of Section 9, T144, R83W

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-R29-01 (12-04-15) located in the NE¼ 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

Discharge 132 – Sedimentation Pond P-R05-02 (7-28-15) located in the SE¼ of Section 5, T144, R83W to the south into the Missouri River via an unnamed ephemeral stream

- 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
- 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
- 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
- Discharge 136 – Sedimentation Pond P-R06-01 (1-07-16) located in the SW¼ 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

Permit No: ND0024791
Effective Date: July 1, 2018
Expiration Date: June 30, 2023

AUTHORIZATION TO DISCHARGE UNDER THE
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33-16-01 of the North Dakota Department of Health 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, 2023

Signed this _____ day of _____, _____.

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

BP 2014.06.12

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DEFINITIONS Standard Permit BP 2013.12.31

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 Health, 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^{th} 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

20. **“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.
21. **“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.
22. **“Monthly Average Concentration”** means the average discharge concentration during 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.
23. **“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 limits under 40 CFR 434. The discharges are from structures or other control features used to manage the quality of the effluent and the hydrologic consideration identified in the surface mining permits(s) issued by the North Dakota Public Service Commission, following interagency review and public comment, in accordance with North Dakota Century Code (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

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

1. Samuelson Slough, an unclassified stream
2. Weller Slough, an unclassified stream
3. Underwood Coulee, an unclassified stream
4. Coal Lake Coulee, an unclassified stream
5. Coal Lake, an unclassified lake
6. Missouri River, a Class I stream
7. Underwood Legal Drain, an unclassified stream
8. Reclaimed Wetland R-26-01, and unclassified wetland
9. Landenberger Slough, an unclassified stream
10. Lake Audubon, a Class II lake
11. Unnamed Slough east of the City of Underwood, an unclassified stream

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. The department establishes whether the points are active mining areas or reclamation areas.

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.

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Monitoring Period	Submittal Frequency	First Submittal Date
Active Mining Areas	Discharge Monitoring Report	Monthly	Quarterly	October 31, 2018
Reclamation Areas	Discharge Monitoring Report	Quarterly	Quarterly	October 31, 2018
Application Renewal	NDPDES Application Renewal	None	1/permit cycle	December 31, 2022

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, Missouri River, Underwood Legal Drain, Reclaimed wetland R-26-01, Landenberger Slough, 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

- The permittee must limit and monitor all discharges as specified below:

Table 1: Effluent Limitations and Monitoring Requirements Active Mining Areas				
Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Iron ^a	3.5 mg/l	7.0 mg/l	Annual	Grab
Total Suspended Solids (TSS) ^a	35 mg/l	70.0 mg/l	Monthly	Grab
Settleable Solids ^a	*	0.5 ml/l	Monthly	Grab
Oil & Grease – Visual ^b	*	*	Daily	Visual
Oil & Grease ^b	*	10 mg/l	Conditional/Monthly	Grab
pH	**		Monthly	Instantaneous
Flow Effluent (gpm) ^c	Report	Report	Monthly	Calculated
Drain Total (MG)	Report	*	Monthly	Calculated
Total Days Discharging	Report	*	Monthly	Calculated
Notes:				
<p>* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.</p> <p>Discharges to lakes and reservoirs, and Class I and Class IA streams shall have an instantaneous pH limitation between 7.0 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of streams shall be between 6.0 (s.u.) and 9.0 (s.u.).</p>				
**				

Table 1: Effluent Limitations and Monitoring Requirements Active Mining Areas

- a. Alternate Limitations: The department may waive the limitation for Total Iron and TSS 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 TSS sampling shall be done in conjunction with Settleable Solids sampling for comparison purposes. Monitoring of 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 allowed 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. There is to be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is observed at the discharge point, the department shall be contacted, and a grab sample analyzed to ensure compliance with the limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.
- c. The permittee shall maintain the capability to measure the instantaneous flow rate daily.

Stipulations:

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			
Parameter	Effluent Limitations	Monitoring Requirements	
	Daily Maximum Limit	Sample Frequency	Sample Type
Total Suspended Solids (TSS) ^a	70.0 mg/l	Quarterly	Grab
Settleable Solids ^b	0.5 ml/l	Quarterly	Grab
pH	*	Quarterly	Instantaneous
Flow Effluent (gpm) ^c	Report	Monthly	Calculated
Drain Total (MG)	Report	Monthly	Calculated
Total Days Discharging	Report	Monthly	Calculated
<p>Notes:</p> <p>* Discharges to lakes and reservoirs, and Class I and Class IA streams shall have an instantaneous pH limitation between 7.0 (s.u.) and 9.0 (s.u.). Discharges to all other classifications of streams shall be between 6.0 (s.u.) and 9.0 (s.u.).</p> <p>a. The TSS limitation shall apply only to controlled discharges made by mechanical or gravity dewatering devices. During an overflow discharge, sampling for TSS shall be done in conjunction with Settleable Solids sampling for comparison purposes. Monitoring for Settleable Solids is not required for routine discharges.</p> <p>b. The Settleable Solids requirements apply 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 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.</p> <p>Precipitation shall be measured by gauge and recorded daily by the permittee.</p> <p>c. The permittee shall maintain the capability to measure the instantaneous flow rate daily.</p> <p>Stipulations:</p> <p>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, BMPs 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.</p> <p>The dates of discharge, frequency of analysis, and number of exceedances shall be included on the DMR.</p> <p>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.</p> <p>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.</p>			

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 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 department. The conditions and procedures outlined in the policy accommodate the rules and requirements of both the department 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 procedures outlined in the site-specific reclamation plan.
- The notification to the department 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.

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2017.08.21

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 **B. Test Procedures**. The permittee must report all additional monitoring in accordance with **D. Additional Monitoring**.

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.

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 **B. Test Procedures**, shall be included in the summary on the Discharge Monitoring Report.

E. Reporting of Monitoring Results

1. 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, 2020, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2020, 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 Health
Division of Water Quality
918 East Divide Ave
Bismarck ND 58501-1947

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 E. Signatory Requirements 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 G. Bypass of Treatment Facilities;
 - b. Any upset which exceeds any effluent limitation in the permit under H. Upset Conditions; 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 **Part II.E. Reporting of Monitoring Results**. 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. Bypass not exceeding limitations. 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. Bypass exceeding limitations-notification requirements.
 - 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 F. Twenty-four Hour Notice of Noncompliance Reporting.
3. Prohibition of Bypass. 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 1. Anticipated Bypass 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 technology-based 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 F. Twenty-Four Hour Notice of Noncompliance Reporting and
4. The permittee complied with any remedial measures required under I. Duty to Mitigate.

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.

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