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

Public Notice Date: 2/7/2024 Public Notice Number: ND-2024-005

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: 10/6/2023 Application Number: ND0025836

Applicant Name: Hess Tioga Gas Plant LLC

Mailing Address: 10340 68th St. NW, Tioga, ND 58852

Telephone Number: 701.664.6200

Proposed Permit Expiration Date: 3/31/2029

Facility Description

The reapplication is for a natural gas processing plant located in the NE1/4 Section 26, Township 157 North, Range 95 West. Discharges consist of facility stormwater runoff to an unnamed tributary of Paulsen Creek, a Class III stream.

Tentative Determinations

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

Information Requests and Public Comments

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

All comments received by March 07, 2024 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

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

Permit No: ND0025836
Effective Date: April 01, 2024
Expiration Date: March 31, 2029

AUTHORIZATION TO DISCHARGE UNDER THE

NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

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

Hess Tioga Gas Plant LLC
Tioga, North Dakota

is authorized to discharge from its natural gas processing plant (Tioga Gas Plant) located near Tioga, North Dakota

to an unnamed tributary of Paulsen Creek

provided all the conditions of this permit are met.

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

March 31, 2029.

Signed this _____ day of _____, _____.

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

BP 2019.05.29

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DEFINITIONS

DEFINITIONS Standard Permit BP 2019.05.29

1. "**Act**" means the Clean Water Act.

2. "**Average monthly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

3. "**Average weekly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

4. "**Best management practices**" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

5. "**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.

6. "**Composite**" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

7. "**Daily discharge**" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

8. "**Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.

9. "**DMR**" means discharge monitoring report.

10. "**EPA**" means the United States Environmental Protection Agency.

11. "**Geometric mean**" means the n^{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."

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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.

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OUTFALL DESCRIPTION

Outfall 001. Active. East Pond			
Latitude: 48.3955	Longitude: -102.9133	County: Williams	
Township: 157 North	Range: 95 West	Section: 26	QQ: ACD
Receiving Stream: Unnamed tributary of Paulsen Creek		Classification: Class III Stream	
The East Pond is a 1.72-million-gallon pond. Runoff from the processing, storage, and sulfur loading areas flows to the pond. The pond was designed to collect and treat runoff from a 100-year, 1-hour rainfall event. The pond has an overflow designed to manage sizably larger amounts of runoff. Any discharge is to an unnamed tributary of Paulsen Creek.			

Outfall 002. Active. West Pond			
Latitude: 48.3947	Longitude: -102.9165	County: Williams	
Township: 157 North	Range: 95 West	Section: 26	QQ: ACC
Receiving Stream: Unnamed tributary of Paulsen Creek		Classification: Class III Stream	
The West Pond is a 0.45-million-gallon pond. Runoff from the truck and railcar loading, sulfur loading, laydown yard, warehouse, and cold storage areas flows to the pond. The pond was designed to collect and treat runoff from a 100-year, 1-hour rainfall event. The pond has an overflow designed to manage sizably larger amounts of runoff. Any discharge is to an unnamed tributary of Paulsen Creek.			

Outfall 003. Active. Northeast Pond			
Latitude: 48.3974	Longitude: -102.9089	County: Williams	
Township: 157 North	Range: 95 West	Section: 26	QQ: AAC
Receiving Stream: Unnamed tributary of Paulsen Creek		Classification: Class III Stream	
The Northeast Pond is a 1.58-million-gallon pond. Runoff from the northeastern portion of the plant flows to the pond. The pond was designed to collect and treat runoff from a 100-year, 1-hour rainfall event. The pond has an overflow designed to manage sizably larger amounts of runoff. Any discharge is to an unnamed tributary of Paulsen Creek.			

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Monitoring Period	Submittal Frequency	First Submittal Date
001A	Discharge Monitoring Report	Monthly	Quarterly	July 31, 2024
002A	Discharge Monitoring Report	Monthly	Quarterly	July 31, 2024
003A	Discharge Monitoring Report	Monthly	Quarterly	July 31, 2024
Application Renewal	EPA Form 1, 2F, & 2E	Not applicable	1/permit cycle	September 30, 2028

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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: **Unnamed tributary to Paulsen Creek**

This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations 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 **001, 002, 003**

Parameter	Effluent Limitations		Monitoring Requirements	
	Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Total Suspended Solids, mg/L [a]	35.0	70.0	1/Week	Grab
Chemical Oxygen Demand, mg/L	*	*	1/Week	Grab
pH, S.U. [b]	Shall remain between 6.0 and 9.0		1/Week	Instantaneous
Oil and Grease [c] – Visual	N/A	N/A	1/Day	Visual
Oil and Grease, mg/L [c]	N/A	10.0	Conditional 1/Week	Grab
Sulfates, Total, mg/L	750	N/A	1/Week	Grab
Chlorine, Total Residual (TRC), mg/L [d,e,f]	Report Monthly Average	Report Maximum Daily Value	1/Week	Grab
Total Days Discharging	Report Monthly Total		1/Month	Calculated
Drain, Total, MG	Report Monthly Total		1/Month	Calculated
Flow, Total, MGD	Report Monthly Average	Report Maximum Daily Value	1/Day	Calculated

Notes:

a. Alternate Limitations: The department may waive the limitations for TSS for overflows caused by a single or series of precipitation or snowmelt events after reviewing all information submitted in response to the Notice of Noncompliance conditions of the permit.

To qualify for this limitation, the facility must be designed, constructed, operated, and maintained to contain the runoff from a 100-year, 1-hour precipitation event (2.42 inches). 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. If the permittee

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Table 1: Effluent Limitations and Monitoring Requirements **001, 002, 003**
elects, the results from the nearest National Weather Station may be used.
b. pH shall remain within the range of 6.0 to 9.0 S.U.
c. There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the department shall be contacted and a grab sample be analyzed to ensure compliance with the concentration limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.
d. Applicable to Outfall 003, only. Testing required only when municipal/rural water is used for cooling purposes. Not applicable to Outfall 001 or 002 unless municipal/rural water used for cooling purposes is directed to the East or West Pond.
e. The minimum limit of analytical reliability for TRC is considered to be 0.05 mg/L. The analysis for TRC shall be conducted using reliable devices equivalent to EPA Method 4500-Cl G, Spectrophotometric, DPD. The method achieves a method detection limit of less than 0.05 mg/L. For purposes of this permit and reporting on the DMR form, analytical values less than 0.05 mg/L shall be considered in compliance with this permit.
f. In the calculation of average TRC concentrations, analytical results that are less than the method detection limit shall be considered the value of the detection limit for calculation purposes. If all analytical results used in the calculation are below the method detection limit, then the method detection limit shall be reported on the DMR; otherwise report the calculated average value.
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.
N/A Not Applicable
Stipulations:
BMPs are to be utilized so that there shall be no discharge of floating debris, oil, scum and other floating materials in sufficient amounts to be unsightly or deleterious, or oily wastes that produce a visible sheen on the surface of the receiving water.
Samples obtained for permit compliance shall be taken prior to the discharge water leaving company property or entering any receiving stream.
TSS, COD, pH, and total sulfate samples shall be collected and analyzed prior to the start (within ten days) of a planned discharge. Sample analyses shall be done in accordance with hold times specified in 40 CFR 136. The results shall be used for the first week of discharge. A visual Oil and Grease inspection shall be conducted prior to the start of a planned discharge. A sample of the actual discharge shall be collected and analyzed on a weekly basis for each additional week of discharge. Pre-discharge samples are not required for pond overflows. Pond overflow samples must be representative of the overflow.

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Table 1: Effluent Limitations and Monitoring Requirements **001, 002, 003**
Dates of discharges, frequency of monitoring and number of exceedances shall also be included on the Discharge Monitoring Reports.
There shall be no discharge of any waters other than stormwater runoff. Sedimentation ponds, spill containment structures, and diversions shall be inspected and maintained to preserve their integrity and efficient operation.
Any pesticides shall be handled and applied according to the manufacturers' instructions. A record of pesticide application at the plant shall be maintained on-site. Additional monitoring may be required, if needed, to evaluate the effects the discharge may have on the receiving stream.

II. SPECIAL CONDITIONS

A stormwater pollution prevention plan (SWPPP) shall be developed and implemented for all areas of the plant which do not drain to the East Pond, West Pond, or Northeast Pond. The objective of the plan is to identify potential sources of stormwater pollution and ensure that practices are implemented to minimize the contribution of pollutants to the receiving water. Stormwater management measures developed under other regulatory programs can be included in the plan or incorporated by reference. The stormwater pollution prevention plan shall include the following:

A. Site Description

1. Provide a description of the area and activity covered by the plan.

2. Provide a site map showing stormwater drainage patterns; stormwater outfalls along with a unique identification code for each outfall (e.g., Outfall 004, 005); drainage area for each stormwater outfall; potential pollutant sources; and any existing or planned structures to reduce stormwater contamination. Clearly identify property boundaries, natural drainage ways that receive stormwater discharges, and section, township, and range or lines of latitude and longitude. The map or drawing must be of suitable scale and quality to show the required information.

3. Identify the individual(s) responsible for implementing, maintaining, and revising the plan.

B. Description of Potential Pollutant Sources

1. Identify materials that are processed, handled, stored, or disposed of at the facility that have the potential to be released with stormwater.

2. Provide an assessment of the various sources at the facility that could contribute pollutants to stormwater runoff. Each of the following shall be evaluated for the reasonable potential to contribute pollutants to stormwater runoff: material handling equipment or operations; industrial machinery; industrial production and processes; significant dust generating activities; disturbed area vulnerable to erosion; and the storage, loading and unloading, transportation, disposal, and conveyance of any raw material, intermediate products, by-products, final products, and waste products.

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Factors to consider in assessing potential sources are: the nature and quantity of material, degree of exposure to stormwater, history of spills or leaks, and any measures in place to control stormwater.

3. Identify sources of non-stormwater discharges that may be present and controls used to minimize the impact of the source. Allowable non-stormwater discharges include: discharges or flows from fire-fighting activities, fire hydrant flushing, building and equipment wash down without detergents or hazardous cleaning products, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, uncontaminated foundation drains, springs, lawn watering, potable water line flushing, and air conditioning condensate.

4. If the facility is subject to the requirements of the Emergency Planning and Community Right-to-Know Act Section 313 (EPCRA 313), the potential pollutant sources which the facility reports under EPCRA 313 shall be identified in the description of potential pollutant sources.

C. Stormwater Controls

The plan shall describe the existing or planned controls for each source or operation that may contribute pollutants to stormwater runoff. A combination of Best Management Practices and structural controls shall be implemented as appropriate to reduce the contribution of pollutant to stormwater runoff. Such practices include:

1. Good housekeeping practices to maintain a clean and orderly facility. Litter, debris, chemicals, and parts shall be handled properly to minimize their exposure to stormwater. This includes measures to reduce and clean up vehicle tracking of sediment off-site and generation of dust.

2. Preventive maintenance practices for inspection and maintenance necessary to ensure the proper operation of stormwater management devices (oil/water separators, catch basins, and silt fences) as well as equipment used or stored at a site.

3. Spill prevention and response procedures where potential spills can occur. Where appropriate, specific handling procedures, storage requirements, spill containment, and cleanup procedures shall be identified in the plan.

4. Employee training to inform personnel of their responsibility in implementing the practices and controls included in the plan such as spill response, good housekeeping, preventive maintenance, and sediment control practices. Training shall be provided at least annually. The plan shall detail the content and frequency of training and retain a log of the dates employees received training.

5. Erosion and sediment controls implemented in areas of the facility vulnerable to erosion. Areas vulnerable to erosion include those with little or no vegetation, sloped areas, or those with concentrated runoff flows such as ditches and culverts. The plan shall identify the control measures that will be used to minimize the release of sediment from the site (such as sediment basins, rock check dams, silt fences, vegetative buffers, permanent seeding, grassed swales, etc.), as well as methods to recover off-site sediment accumulations.

6. Minimizing the exposure of industrial materials and activities to stormwater. Identify practices or site feature such as storm resilient shelters which limit the exposure or contact of stormwater with materials or activities.

7. Stormwater Management. The plan shall include a description of practices to control pollutants in stormwater discharges. Such practices may include stormwater ponds, flow reduction by use of

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open vegetated swales and natural depressions, infiltration of runoff onsite, and sequential systems which combine several practices.

D. Maintenance

All stormwater pollution prevention control measures identified in the plan must be maintained in effective operating condition. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. The plan shall identify the maintenance or clean out interval for sediment controls. If site inspections, required in this permit, identify best management practices that are not operating effectively, maintenance shall be arranged and accomplished as soon as practicable.

E. Inspections

The plan must provide for site inspections to monitor the condition of stormwater discharge outfalls and the effectiveness of best management practices. The permittee shall ensure that personnel conducting site inspections are familiar with permit conditions, the stormwater pollution prevention plan, and the proper installation and operation of control measures. A comprehensive inspection of the facility shall be made at least once during a six-month period.

F. Plan Review and Revisions

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to waters of the state. The plan also shall be amended if it is found to be ineffective in controlling pollutants present in stormwater.

III. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2021.09.09

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

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

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

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with 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;

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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, 2025, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2025, the permittee must report the following using the electronic reporting system:

   a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];

   b. Municipal separate storm sewer system program reports;

   c. Pretreatment program reports;

   d. Sewer overflow/bypass event reports; and

   e. Clean Water Act 316(b) annual reports

3. The permittee may seek a waiver from electronic reporting. To obtain a waiver, the permittee must complete and submit an Application for Temporary Electronic Reporting Waiver form (SFN 60992) to the department. The department will have 120 days to approve or deny the waiver request. Once the waiver is approved, the permittee may submit paper versions of monitoring data and reports to the department.

   a. One of the following criteria must be met in order to obtain a waiver. The department reserves the right to deny any waiver request, even if they meet one of the criteria below.

      1. No internet access,

      2. No computer access,

      3. Annual DMRs (upon approval of the department),

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4. Employee turnover (3-month periods only), or

5. Short duration permits (upon approval of the department)

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

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

F. Records Retention

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

IV. 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:

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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

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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

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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.

V. 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 filing a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee and subsequent department approval. The written agreement shall be filed with the department at least thirty days in advance of the proposed transfer date. The current permit holder must inform the new controller, operator, or owner of the existence of this permit and 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

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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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FACT SHEET FOR NDPDES PERMIT ND0025836

PERMIT REISSUANCE

HESS TIOGA GAS PLANT LLC

DATE OF THIS FACT SHEET – FEBRUARY 2024

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) oversees. In 1975, the State of North Dakota was delegated primacy of the NPDES program by EPA. The North Dakota Department of Environmental Quality, hereafter referred to as "department", has been designated the state water pollution control agency for all purposes of the Federal Water Pollution Control Act, as amended [33 U.S.C. 1251, et seq.], and is 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 North Dakota Administrative Code (NDAC) 33.1-16 which was adopted under North Dakota Century Code (NDCC) chapter 61-28. In North Dakota, these permits are referred to as North Dakota Pollutant Discharge Elimination System (NDPDES) permits.

The following rules or regulations apply to NDPDES permits:

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

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

According to NDAC section 33.1-16-01-08, the department must prepare a draft permit and accompanying fact sheet and make it available for public review. The department must also publish an announcement (public notice) during a period of thirty days, informing the public where a draft permit may be obtained and where comments regarding the draft permit may be sent (NDAC chapter 33.1-16-01-07). For more information regarding preparing and submitting comments about the fact sheet and permit, please see Appendix A - Public Involvement. Following the public comment 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:	Hess Tioga Gas Plant LLC
Facility Name and Address:	Hess Tioga Gas Plant LLC 10384 68th St. NW Tioga, ND 58852
Permit Number:	ND0025836
Permit Type:	Minor Industrial, Permit Reissuance
Type of Treatment:	Evaporation, Sedimentation Ponds, Best Management Practices
SIC Code:	1321 – Natural Gas Processing Plant, Natural Gas Liquids
NAICS Code:	211130 – Natural Gas Extraction
Discharge Location:	Unnamed tributary to Paulsen Creek, Class III Stream Outfall 001 Latitude: 48.3955 Longitude: -102.9133 Outfall 002 Latitude: 48.3947 Longitude: -102.9165 Outfall 003 Latitude: 48.3974 Longitude: -102.9089
Hydrologic Code:	10110101 - Lake Sakakawea

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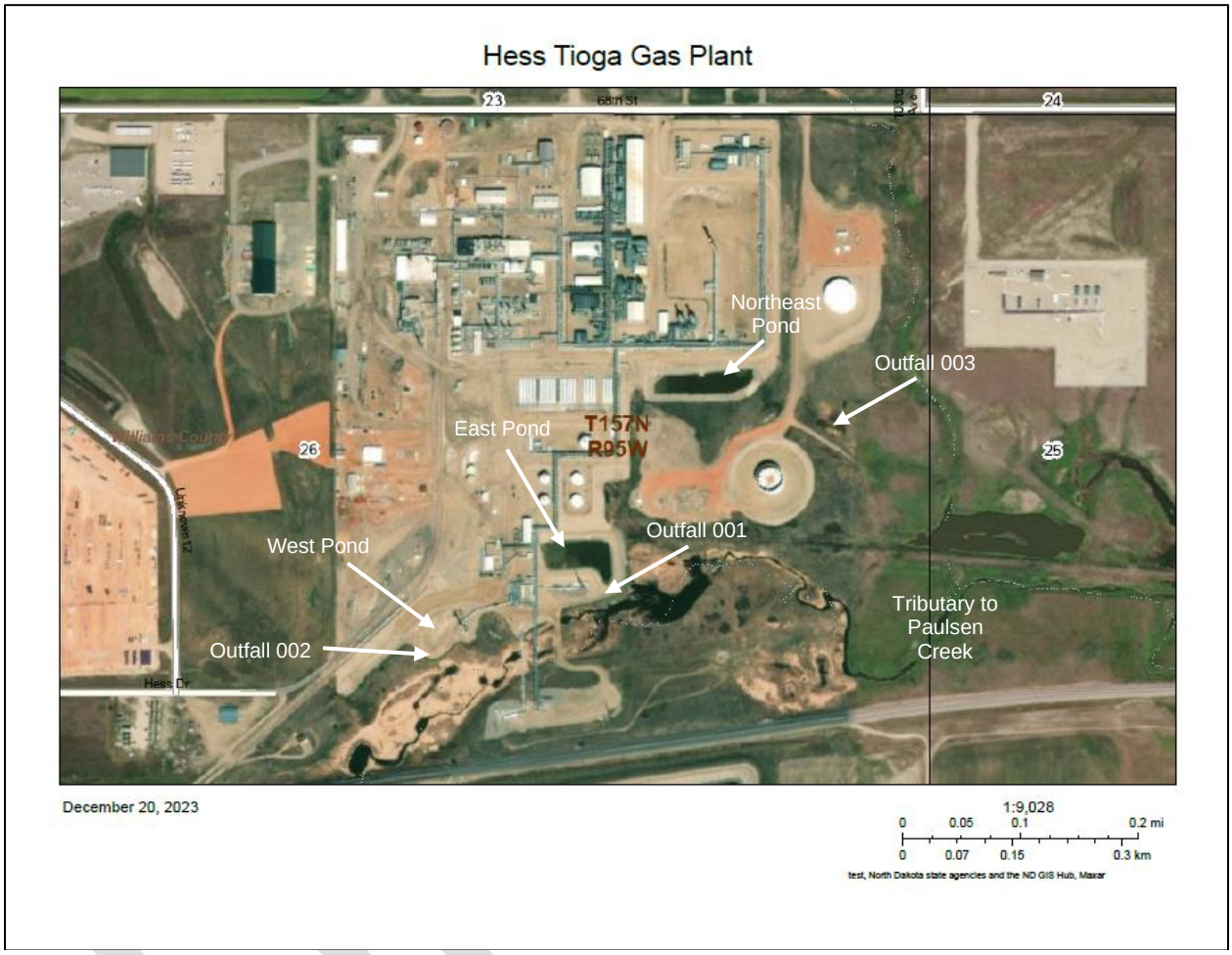
Figure 1 – Aerial photograph of Hess Tioga Gas Plant LLC, Tioga, North Dakota (North Dakota Geographic Information System, Map Generated December 2023)



FACILITY DESCRIPTION

Hess Tioga Gas Plant (TGP) is a natural gas processing plant with an amine treatment and sulfur recovery unit. TGP processes raw natural gas into conditioned natural gas, propane, butane, natural gasoline, and sulfur. The facility is located east of Tioga, North Dakota in the NE1/4 Section 26, Township 157 North, Range 95 West in Williams County.

TGP is kept vegetation-free with the use of pesticides to reduce the threat of fire. This results in exposed gravel and soil throughout the facility. Stormwater runoff from TGP (including processing, storage, and transportation areas) is collected in three separate sedimentation ponds (East, West, and Northeast Ponds) that are discharge intermittently. The three ponds were designed to collect and treat runoff from a 100-year, 1-hour rain event (2.75 inches). The

rain event 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 East Pond has an approximate operating capacity of 1.72 million gallons. Stormwater discharges through a 12-inch pipe located in the southeast corner of the East Pond. The discharge valve for the pond was reconstructed in 2023. The West Pond has an approximate operating capacity of 0.45 million gallons. Stormwater discharges through a gated 12-inch pipe located in the southwest corner of the West Pond. In 2013, construction of the Northeast Pond was completed with an approximate operating capacity of 1.58 million gallons. Stormwater discharges through a 12-inch pipe located in the southeast corner of the pond. Areas of the facility that do not drain to the ponds also are addressed by this permit.

TGP utilizes potable water from the City of Tioga to cool compressed gas in the aftercooler. The water is typically used when the process gas reaches a temperature of 115° F. The water is sprayed externally over the top of the aftercooler tubes for approximately two months during the summer (July, August) and does not touch any internal components. The water is used almost daily for 12 hours per day, shutting off at night. Water that makes it to the ground drains to the Northeast Pond where the majority of the water is lost to evaporation. The estimated water usage from 2019 to 2022 was 3.5 million gallons per year during the summer. Estimated water usage in 2023 was 1.4 million gallons per year during the summer after efficiency improvements were made to the refrigeration units. TGP is expected to continue using 1.4 million gallons per year or less moving forward.

All discharges of stormwater are covered by the proposed permit, coverage under an industrial stormwater general permit is not required for TGP. Additionally, coverage under a pesticide application general permit is not required as the proposed permit includes effluent limitations that address the application of pesticides.

Process wastewater generated at TGP is sent to two onsite Class II injection wells for disposal. The injection wells and disposal operations are permitted through the North Dakota Department of Mineral Resources, Oil and Gas Division (Plant Disposal 1 – File #1078; Plant Disposal 2 – File #90051). Sanitary waste is sent to the City of Tioga publicly owned treatment works.

Outfall Description

There are three active discharge outfalls associated with the facility. The description of the active outfalls is provided below. There are no inactive outfalls at the facility.

Outfall 001. Active. East Pond			
Latitude: 48.3955	Longitude: -102.9133	County: Williams	
Township: 157 North	Range: 95 West	Section: 26	QQ: ACD
Receiving Stream: Unnamed tributary of Paulsen Creek		Classification: Class III Stream	
The East Pond is a 1.72-million-gallon pond. Runoff from the processing, storage, and sulfur loading areas flows to the pond. The pond was designed to collect and treat runoff from a 100-year, 1-hour rainfall event. The pond has an overflow designed to manage sizably larger amounts of runoff. Any discharge is to an unnamed tributary of Paulsen Creek.			

Outfall 002. Active. West Pond			
Latitude: 48.3947	Longitude: -102.9165	County: Williams	
Township: 157 North	Range: 95 West	Section: 26	QQ: ACC
Receiving Stream: Unnamed tributary of Paulsen Creek		Classification: Class III Stream	
The West Pond is a 0.45-million-gallon pond. Runoff from the truck and railcar loading, sulfur loading, laydown yard, warehouse, and cold storage areas flows to the pond. The pond was designed to collect and treat runoff from a 100-year, 1-hour rainfall event. The pond has an overflow designed to manage sizably larger amounts of runoff. Any discharge is to an unnamed tributary of Paulsen Creek.			

Outfall 003. Active. Northeast Pond			
Latitude: 48.3974	Longitude: -102.9089	County: Williams	
Township: 157 North	Range: 95 West	Section: 26	QQ: AAC
Receiving Stream: Unnamed tributary of Paulsen Creek		Classification: Class III Stream	
The Northeast Pond is a 1.58-million-gallon pond. Runoff from the northeastern portion of the plant flows to the pond. The pond was designed to collect and treat runoff from a 100-year, 1-hour rainfall event. The pond has an overflow designed to manage sizably larger amounts of runoff. Any discharge is to an unnamed tributary of Paulsen Creek.			

PREVIOUS PERMIT STATUS

The department issued the previous permit for this facility on April 1, 2019. The current permit includes monitoring requirements for total suspended solids (TSS), chemical oxygen demand (COD), pH, oil & grease, total sulfate, flow, and total drain. The permit is scheduled to expire at midnight on March 31, 2024.

The department has been in contact with TGP to obtain information to reissue the permit. The department received EPA application Form 1, Form 2E, and Form 2F on October 06, 2023. The application was accepted by the department December 26, 2023. Effluent sample data has been provided to the department through official laboratory reports, discharge monitoring reports, and permit application Form 2E and Form 2F.

SUMMARY OF COMPLIANCE WITH PREVIOUS PERMIT ISSUED

Department staff conducted a non-sampling compliance inspection on December 13, 2023. The department noted pH certification was not current and needed to be addressed. The department's assessment of compliance is based on review of the facility's Discharge Monitoring Reports (DMRs) and inspections conducted by department staff.

Past Discharge Data

A review of the DMR information from July 2018 to September 2023 was conducted. Table 2 provides a summary of the reported DMR information including number and type of exceedance. Table 3 illustrates the number of discharge days by year, including the total amount drained per year.

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Table 2 – Hess Tioga Gas Plant (July 2018 to September 2023)

Parameter	Units	Range	Average	Permit Limit	Number of Excursions
Outfall 001:					
Total Suspended Solids (TSS)	mg/L	0 – 54.3	6.1	70 Daily max 35 30-day avg	0 0
Chemical Oxygen Demand (COD)	mg/L	0 – 84.6	18.6	N/A	N/A
pH	S.U.	7.456 – 9.078	N/A	6.0 – 9.0	1
Oil & Grease - Visual	N/A	0 or 1	N/A	0 = No Visible Sheen 1 = Visible Sheen	0
Oil & Grease	mg/L	0.099 – 6.8	3.5	10 Daily max	0
Total Sulfates	mg/L	78 – 742	423	750 30-day avg	0
Flow	MGD	3.12 (max)	1.16	N/A	N/A
Drain	Mgal	0.597 – 8.726	2.453	N/A	N/A
Outfall 002:					
Total Suspended Solids (TSS)	mg/L	0 – 197	18.2	70 Daily max 35 30-day avg	1 2
Chemical Oxygen Demand (COD)	mg/L	0 – 58	21.4	N/A	N/A
pH	S.U.	6.917 – 8.71	N/A	6.0 – 9.0	0
Oil & Grease - Visual	N/A	0 or 1	N/A	0 = No Visible Sheen 1 = Visible Sheen	0
Oil & Grease	mg/L	0 – 0.76	0.3	10 Daily max	0
Total Sulfates	mg/L	107 – 584	329	750 30-day avg	0
Flow	MGD	2.7 (max)	0.7	N/A	N/A
Drain	Mgal	0.085 – 4.39	1.491	N/A	N/A

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Table 2 – Hess Tioga Gas Plant (July 2018 to September 2023)

Parameter	Units	Range	Average	Permit Limit	Number of Excursions
Outfall 003:					
Total Suspended Solids (TSS)	mg/L	0 – 111	12.7	70 Daily max 35 30-day avg	0* 1
Chemical Oxygen Demand (COD)	mg/L	0 – 492	43	N/A	N/A
pH**	S.U.	7.36 – 9.84	N/A	6.0 – 9.0	9*
Oil & Grease - Visual	N/A	0 or 1	N/A	0 = No Visible Sheen 1 = Visible Sheen	0
Oil & Grease	mg/L	0.14 – 0.15	0.15	10 Daily max	0
Total Sulfates	mg/L	158 – 668	389	750 30-day avg	0
Flow	MGD	3.3 (max)	1.50	N/A	N/A
Drain	Mgal	0.371 – 12.368	3.486	N/A	N/A

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

** Facility began experiencing elevated pH levels in 2019 following construction within the drainage area. Alkali material exposed during construction and depositing in the pond may be the possible source of the alkalinity.

Table 3 – Discharge Summary by Year (July 2018-September 2023)

Year	Total Days of Facility Discharge [a]	Total Drain (Mgal)
2018	4	6.360
2019	36	40.166
2020	6	5.640
2021	22	12.726
2022	27	27.574
2023	17	10.567

a. Total days of facility discharge is the cumulative number of days discharged by all discharge points throughout the year.

PROPOSED EFFLUENT LIMITATIONS

The discharge of industrial stormwater runoff from plant areas is not subject to national effluent guidelines. In the absence of a federal standard, limitations may be generated using Best

Professional Judgment (BPJ) to ensure reasonable control technologies are used to prevent potential harmful effects of the discharge. In addition, the department must consider and include limitations necessary to protect water quality standards applicable to the receiving water. The effluent limitations in the proposed permit are based on BPJ, best management practices (BMPs), and the Standards of Quality for Waters of the State (Chapter 33.1-16-02.1).

The limitations for TSS, oil and grease, and pH applied to TGP are similar to the requirements for coal mining facilities in the state (Table 4) where sedimentation ponds are widely used to treat runoff. It is the department's best professional judgment that the ponds at TGP serve a similar purpose and are capable of achieving equivalent discharge quality. BMPs have been specified to ensure that the ponds and other structures at the site are operated efficiently. In the event of any spill, the permittee would be responsible for reporting to the appropriate agencies and the department.

Table 4 – Similar Limits Applied to Coal Mining Facilities

Parameter	30-Day Average	Daily Maximum
TSS	35 mg/L	70 mg/L
O&G	--	10 mg/L
pH	Remain between 6.0 to 9.0	--

Discharges caused by a volume of precipitation greater than a 100-year, 1-hour precipitation event (or equivalent volume of snowmelt) may be eligible for alternate TSS limitations. In these instances, the department may waive the limitation for TSS for pond overflows. To be eligible, ponds must be designed, constructed, operated, and maintained to treat runoff from a 100-year, 1-hour precipitation event and managed to hold the 100-year, 1-hour precipitation event volume or equivalent snowmelt. Discharges must be done within 10 days of the last precipitation event when practicable. Instances where it may not be practicable to discharge include times when the quality of the water in the pond exceeds effluent limitations. Additional time is allowed when the permittee can demonstrate that discharging was delayed due to activities or conditions downstream that can be affected by the discharge. The 100-year, 1-hour precipitation event amount of 2.75 inches was based on the U.S. Department of Commerce, Weather Bureau Technical Paper 40, *Rainfall Frequency Atlas of the United States*, released in 1961.

As part of this permit renewal, Hess Corporation requested that the alternate limitations for TSS be amended to allow efforts to prevent an overflow of surface water from the ponds by opening the drain valves as necessary, to be closed again when the danger of overflow passes. Hess Corporation cited the release of hydrocarbons on the surface of the ponds as the potential pollutant in any overflow. The department considered the request and determined no change to the alternate TSS limitations will be made. The alternate TSS limitation is based on the design, construction, operation, and maintenance of the ponds to contain the runoff from a 100-year, 1-hour storm event. If the ponds did not meet the criteria set forth in the permit, then TGP would not be eligible for the alternate TSS limitation. The release of hydrocarbons from the ponds (whether as an overflow or through the discharge pipe) is already limited in the permit by a narrative and numerical standard for oil and grease. Allowing a pond to be drained to prevent an overflow could allow the discharge of TSS without some level of sedimentation (i.e., treatment), whereas an overflow allows some level of sedimentation and reduction in TSS. The department determined allowing the discharge of TSS with less treatment would be less stringent than

effluent limitations in the current and past permits and would be against the anti-backsliding requirements found in 40 CFR 122.44(l).

The department intends to reduce the 100-year, 1-hour precipitation amount in the proposed permit from 2.75 inches to 2.42 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 100-year, 1-hour precipitation event. According to *Atlas 14*, the precipitation amount for the area covered by the facility is 2.42 inches. Prior to the release of *Atlas 14*, the 100-year, 1-hour precipitation amount was 2.75 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 department determined the release of *NOAA Atlas 14* is a substantial change in selecting the 100-year, 1-hour precipitation amount. Sedimentation ponds constructed prior to the change were designed to meet a larger 2.75-inch overflow requirement. The department determined lowering the 100-year, 1-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.

A water quality-based effluent limitation for sulfate was added to the permit in 2014 after discharge monitoring results collected during the previous permit (2009 – 2014) indicated sulfate concentrations could exceed the WQS for Class III streams (750 mg/L). Because the generation of sulfate occurs at TGP and sulfate concentrations can increase in stormwater ponds as water evaporates and more sulfate-laden runoff is added, it is the department's best professional judgment that the sulfate effluent limitation be continued in the proposed permit.

The facility is required to develop and implement a stormwater pollution prevention plan (SWPPP) for all areas of the plant where runoff does not drain to a sediment pond. The SWPPP requires the use and maintenance of BMPs to minimize the discharge of pollutants from these areas. As allowed by 40 CFR 122.44(k)(2) & (4), BMPs may be used for the control of stormwater discharges and when they are reasonably necessary to achieve effluent limitations and standards.

The proposed permit contains stipulations and BMPs related to the use and application of pesticides at TGP.

Process wastewater and sanitary waste are not allowed to be discharged under the proposed permit.

Limitations based on numeric nutrient criteria are not being included in the proposed permit. Narrative nutrient criteria have been developed for the state of North Dakota that require discharges to be free from nutrients that cause objectionable growth of aquatic vegetation or algae or threaten public health, welfare, or impair beneficial uses.

The proposed effluent limitations shall take effect upon the effective date of the proposed permit. The effluent limitations and the basis for the limitations are provided in the Table 5. The notations used in the table for the basis of the effluent limitations are as follows:

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"BMP" refers to best management practice.

"BPJ" refers to best professional judgment.

"Previous Permit" refers to limitations in the previous permit. The NPDES regulations 40 CFR Part 122.44(l)(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.

"WQS" refers to effluent limitations based on the State of North Dakota's "Standards of Quality for Waters of the State", NDAC Chapter 33.1-16-02.1.

"CFR" refers to the Code of Federal Regulations.

Table 5 – Effluent Limitations for Outfalls 001, 002, and 003

Effluent Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Basis
Total Suspended Solids [a]	mg/L	35.0	70.0	Previous Permit; BPJ
Chemical Oxygen Demand	mg/L	*	*	Previous Permit, BPJ
pH [b]	S.U.	Shall remain between 6.0 and 9.0		Previous Permit; BPJ; WQS
Oil & Grease [c]	mg/L	N/A	10.0	WQS
Sulfate, Total [d]	mg/L	750	N/A	WQS

Notes:

a. Alternate Limitations: The department may waive the limitations for TSS for overflows caused by a single or series of precipitation or snowmelt events after reviewing all information submitted in response to the Notice of Noncompliance conditions of the permit.

To qualify for this limitation, the facility must be designed, constructed, operated, and maintained to contain the runoff from a 100-year, 1-hour precipitation event (2.42 inches). 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. If the

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Table 5 – Effluent Limitations for Outfalls 001, 002, and 003

permittee elects, the results from the nearest National Weather Station may be used.
b. pH shall remain within the range of 6.0 to 9.0 S.U.
c. There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the department shall be contacted and a grab sample be analyzed to ensure compliance with the concentration limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.
d. The total sulfate limitation is based on the WQS.
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.
BMPs are to be utilized so that there shall be no discharge of floating debris, oil, scum and other floating materials in sufficient amounts to be unsightly or deleterious, or oily wastes that produce a visible sheen on the surface of the receiving water.
There shall be no discharge of any waters other than stormwater runoff. Sedimentation ponds, spill containment structures, and diversions shall be inspected and maintained to preserve their integrity and efficient operation.
Any pesticides shall be handled and applied according to the manufacturers' instructions. A record of pesticide application at the plant shall be maintained on-site. Additional monitoring may be required, if needed, to evaluate the effects the discharge may have on the receiving stream.

SELF-MONITORING REQUIREMENTS

Effluent parameters are sampled prior to leaving company property and entering waters of the state. The facility collects and analyzes TSS, COD, and sulfates prior to any planned discharge. The facility also collects and analyzes a pH sample and conducts a visual oil and grease inspection prior to any planned discharge. Language was added to the proposed permit allowing a pre-discharge sample to be used as the first-week sample since discharges typically last one to two days and there is time in between when the ponds must collect water.

During the initial Phase 1 stormwater permitting rules (1993 and 1994), the facility conducted testing for nitrates, Total Kjeldahl Nitrogen, and total phosphorus. Based on the results, the department did not propose routine monitoring for nutrients in past permits. The facility does “sweeten” or use amine treatment to remove hydrogen sulfide and carbon dioxide from natural gas. The process is an enclosed system that reuses amine and is not expected to contribute nitrogen to stormwater runoff during normal operation. No other industrial sources are known to contribute either nitrogen or phosphorus to stormwater runoff at the facility. The department determined stormwater runoff from the facility will not contribute to nutrient loading and will not require nutrient monitoring in the proposed permit.

Monitoring for total residual chlorine when potable water is used for cooling purposes is being added to the proposed permit for Outfall 003. The potable water used for cooling is disinfected with chlorine-containing compounds. Some of the chlorine compounds are readily degradable while other are more persistent. The renewal application information for Outfall 003 (Northeast Pond) showed a residual chlorine concentration (0.18 mg/L) above the laboratory report detection level (0.10 mg/L). Additionally, the acute and chronic water quality standards for total residual chlorine are 0.019 mg/L and 0.011 mg/L, respectively (NDAC 33.1-16-02.1, Table 1).

Table 6 – Self-Monitoring Requirements, Outfalls 001, 002, and 003

Effluent Parameter	**Frequency**	**Sample Type [a]**
Total Suspended Solids (TSS) [e]	1/Week	Grab
Chemical Oxygen Demand (COD) [e]	1/Week	Grab
pH [e]	1/Week	Instantaneous
Oil & Grease Visual [e]	1/Day	Visual
Oil & Grease	Conditional 1/Week	Grab
Sulfate, Total [e]	1/Week	Grab
Chlorine, Total Residual (TRC) [b,c,d]	1/Week	Grab
Total Days Discharging	1/Month	Calculated
Drain, Total	1/Month	Calculated
Flow, Total	1/Day	Calculated

Notes:

a. Refer to Appendix B for definitions.

b. Applicable to Outfall 003, only. Testing required only when municipal/rural water is used for cooling purposes. Not applicable to Outfall 001 or 002 unless municipal/rural water used for cooling purposes is directed to the East or West Pond.

c. The minimum limit of analytical reliability for TRC is considered to be 0.05 mg/L. The analysis for TRC shall be conducted using reliable devices equivalent to EPA Method 4500-Cl G, Spectrophotometric, DPD. The method achieves a method detection limit of less than 0.05 mg/L. For purposes of this permit and reporting on the DMR form, analytical values less than 0.05 mg/L shall be considered in compliance with this permit.

d. In the calculation of average TRC concentrations, analytical results that are less than the method detection limit shall be considered the value of the detection limit for calculation purposes. If all analytical results used in the calculation are below the method detection limit, then the method detection limit shall be reported on the DMR; otherwise report the calculated average value.

e. TSS, COD, pH, and total sulfate samples shall be collected and analyzed prior to the start (within ten days) of a planned discharge. Sample analyses shall be done in accordance with hold times specified in 40 CFR 136. The results shall be used for the first week of discharge. A visual Oil and Grease inspection shall be conducted prior to the start of a planned discharge. A sample of the actual discharge shall be collected and analyzed on a

Table 6 – Self-Monitoring Requirements, Outfalls 001, 002, and 003

weekly basis for each additional week of discharge. Pre-discharge samples are not required for pond overflows. Pond overflow samples must be representative of the overflow.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

The North Dakota Standards of Quality for Waters of the State (NDAC Chapter 33.1-16-02.1), or Water Quality Standards (WQS), are designed to protect existing water quality and preserve the beneficial uses of North Dakota's surface waters. Stormwater and wastewater discharge permits must include conditions that ensure the discharge will meet the surface water quality standards. Water quality-based effluent limits may be based on an individual waste load allocation or on a waste load allocation developed during a basin wide total maximum daily load (TMDL) study. TMDLs result from a scientific study of the water body and are developed in order to reduce pollution from all sources.

The unnamed tributary of Paulsen Creek is not specifically mentioned in the Standards of Quality for Waters of the State (NDAC 33.1-16-02.1, Appendix I) and is considered a class III stream. The quality of water in class III streams must be suitable for agricultural and industrial uses. Streams in this class generally have low average flows with prolonged periods of no flow. During periods of no flow, class III streams are of limited value for recreation and fish and aquatic biota. The quality of these waters must be maintained to protect secondary contact recreation uses, such as wading, and fish and aquatic biota, and wildlife uses.

The unnamed tributary of Paulsen Creek is not listed as impaired in the 2020-2022 North Dakota Section 303(d) List of Waters Needing Total Maximum Daily Loads (303(d) List). A TMDL is not required for the tributary.

Numerical Criteria for the Protection of Aquatic Life and Recreation

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

Numerical Criteria for the Protection of Human Health

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

Narrative Criteria

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

Antidegradation

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

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

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

Mixing Zones

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

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

pH

Discharges to Class III streams shall have an instantaneous limitation between 6.0 (s.u.) and 9.0 (s.u.) in accordance with the water quality standards.

Oil & Grease

The WQS state that waters of the state must be free from oil or grease attributable to industrial stormwater 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 industrial areas if a visible sheen is detected. Other treatment systems in the state have similar limitations.

Total Sulfate

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The WQS state that Class III streams shall have a maximum 30-day arithmetic average total sulfate concentration of 750 mg/L.

Human Health

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

MONITORING REQUIREMENTS

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

Discharge Monitoring Report (DMR) Requirements

The proposed permit requires the permittee to monitor discharges and submit discharge monitoring reports (DMRs) to the department. DMRs summarize monitoring results obtained during specified monitoring periods. If no discharge occurs during a monitoring period, "no discharge" must be reported. The monitoring periods for 001, 002, and 003 are monthly.

The proposed permit includes specified intervals for submitting DMRs (Table 7). DMRs must be submitted electronically to the department in accordance with 40 CFR 127 unless otherwise waived and in compliance with 40 CFR 3. The requirement to submit DMRs quarterly is similar to other minor facilities.

Table 7 – DMR Submittal Requirements

Coverage Point	Report Designator	Report Type	Report Interval
001	A	Conventional and Non-Conventional Pollutants, Flow and Volume Information	1/quarter
002	A	Conventional and Non-Conventional Pollutants, Flow and Volume Information	1/quarter
003	A	Conventional and Non-Conventional Pollutants, Flow and Volume Information	1/quarter

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 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

Stormwater Pollution Prevention Plan

A stormwater pollution prevention plan (SWPPP) shall be implemented and maintained for all areas of the plant which do not drain to the East Pond, West Pond, or Northeast Pond. The objectives of the SWPPP are to identify potential sources of stormwater pollution and ensure that practices are implemented to minimize the contribution of pollutants to the receiving water. Stormwater management measures developed under other regulatory programs can be included in the SWPPP or incorporated by reference.

The SWPPP requirements reflect a combination of control measures and BMPs comparable to other stormwater discharges associated with industrial activity. The required SWPPP items in the proposed permit are similar to those in the current permit. At a minimum, the SWPPP must include the following:

- Site Description: Include a description of activity and site-specific map(s) detailing items such as outfalls, potential pollutant sources, and existing or planned structures to reduce stormwater contamination.

- Stormwater Pollution Prevention Team: Identify who will be responsible for SWPPP compliance.

- Description of Potential Pollutant Sources: Include a narrative description of potential pollution sources associated with industrial activity and material handling at the facility. Each description shall include a source assessment, a pollutant list, and identify non-stormwater discharges.

- Stormwater Controls: Describe the existing and planned controls for each source or activity that could contribute pollutants to stormwater runoff. This section includes good housekeeping, dust control, preventative maintenance, spill prevention and response, employee training, erosion and sediment controls, exposure limitations, and stormwater management.

- Maintenance: A description of the maintenance schedule for all stormwater pollution prevention control measures identified in the SWPPP.

- Inspections: Procedures for performing inspections such as person or position responsible, schedule, area of inspection, and information to record.

- Plan Review and Revisions: Amendments to the SWPPP when there is a change that affects the SWPPP or to achieve compliance with the proposed permit.

PERMIT ISSUANCE PROCEDURES

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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 sludge. 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 stormwater discharge associated with industrial activity and non-process wastewater. The permit includes limits and conditions to protect human health and aquatic life, and the beneficial uses of waters of the State of North Dakota. The department proposes to issue this permit for a term of five years.

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APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The department proposes to reissue a permit to **Hess Tioga Gas Plant LLC** located near Tioga, ND. The permit includes stormwater 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 **February 7, 2024** in the **Williston Daily Herald** to inform the public and to invite comment on the proposed draft North Dakota Pollutant Discharge Elimination System permit and fact sheet.

The Notice –

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

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

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

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

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

Public Notice Date: 2/7/2024 Public Notice Number: ND-2024-005

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: 10/6/2023 Application Number: ND0025836

Applicant Name: Hess Tioga Gas Plant LLC
Mailing Address: 10340 68th St. NW, Tioga, ND 58852
Telephone Number: 701.664.6200

Proposed Permit Expiration Date: 3/31/2029

Facility Description
The reapplication is for a natural gas processing plant located in the NE1/4 Section 26, Township 157 North, Range 95 West. Discharges consist of facility stormwater runoff to an unnamed tributary of Paulsen Creek, a Class III stream.

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

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

All comments received by March 07, 2024 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

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

APPENDIX B – GLOSSARY

DEFINITIONS Standard Permit BP 2019.05.29

1. "**Act**" means the Clean Water Act.

2. "**Average monthly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

3. "**Average weekly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

4. "**Best management practices**" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

5. "**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.

6. "**Composite**" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

7. "**Daily discharge**" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

8. "**Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.

9. "**DMR**" means discharge monitoring report.

10. "**EPA**" means the United States Environmental Protection Agency.

11. "**Geometric mean**" means the n^{th} root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

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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.

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APPENDIX C – DATA AND TECHNICAL CALCULATIONS

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

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APPENDIX D – RESPONSE TO COMMENTS

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

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