

**North Dakota Department of Environmental Quality Public Notice
Issue of an NDPDES Permit**

Public Notice Date: 5/15/2024

Public Notice Number: ND-2024-009

Purpose of Public Notice

The Department intends to issue 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: 11/1/2023

Application Number: ND0027073

Applicant Name: APLD Jamestown Datacenter

Mailing Address: 3811 Turtle Creek Blvd., Dallas, TX 75219

Telephone Number: 774.280.6832

Proposed Permit Expiration Date: 6/30/2029

Facility Description

This application is for a high-performance computing data center near Jamestown, ND. The facility will utilize cooling water and discharge 0.00486 million gallons per day on a seasonal basis. All discharges are to an unnamed roadside ditch along North Dakota State Highway 20, 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 June 15, 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.

**FACT SHEET FOR NDPDES PERMIT
ND0027073**

Applied Digital (APLD) Jamestown Datacenter

DATE OF THIS FACT SHEET – March 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 section 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:	Applied Digital Corporation
Facility Name and Address:	APLD Jamestown Datacenter 2671 HWY 20 SE Jamestown, ND 58401
Permit Number:	ND0027073
Permit Type:	Minor, Non-POTW, Issuance
Type of Treatment:	Mechanical; Reverse Osmosis
SIC Code:	7374 – Computer Processing and Data Preparation and Processing Services
NAICS Code:	518210 – Data Processing, Hosting, and Related Services
Discharge Location:	Unnamed Roadside Ditch Latitude: 47.027314 Longitude: -98.679253
Hydrologic Code:	10160003 – Upper James

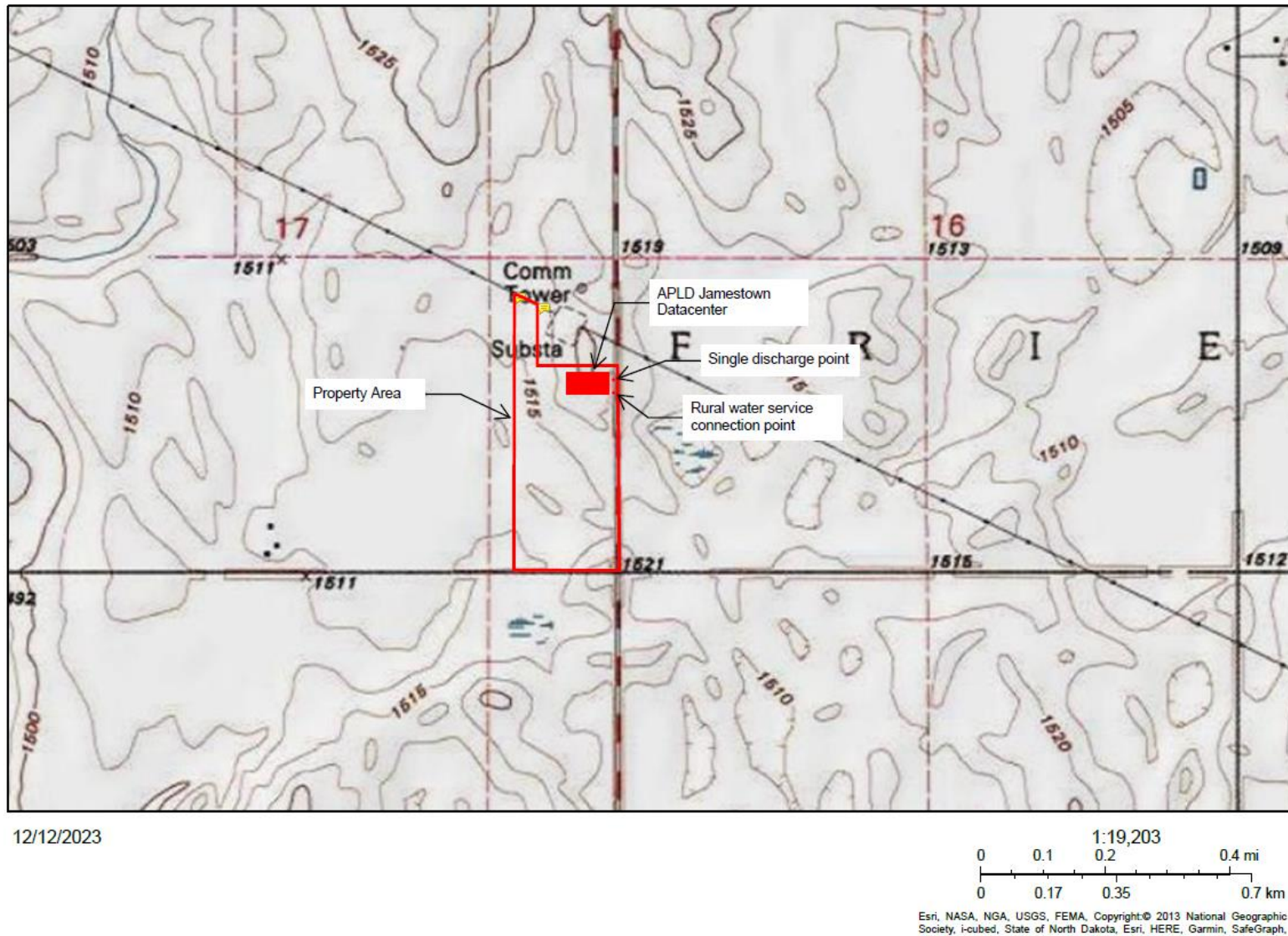


Figure 1 – APLD Jamestown Datacenter Facility Topographic Map (Permit Application December 14, 2023)

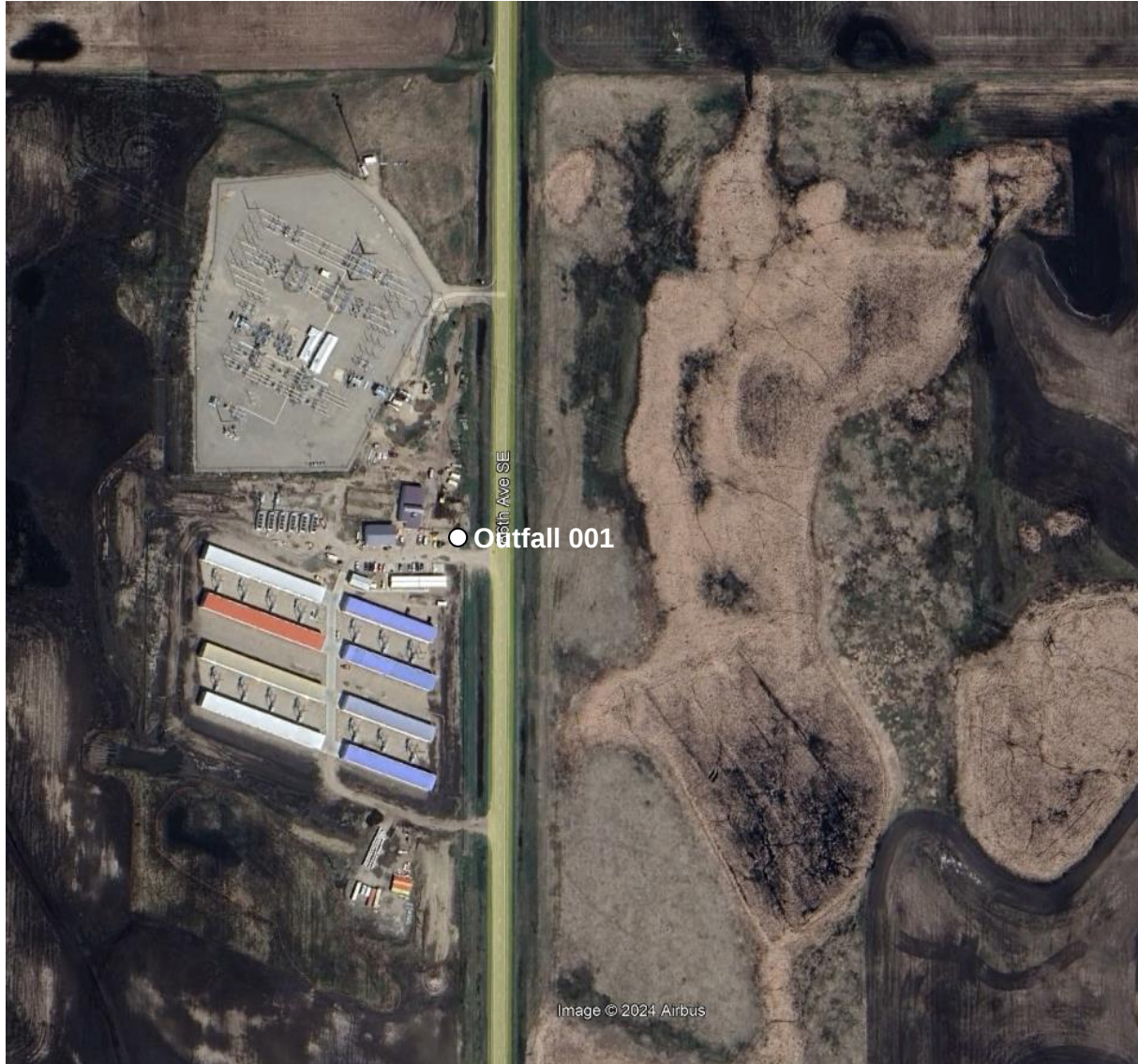


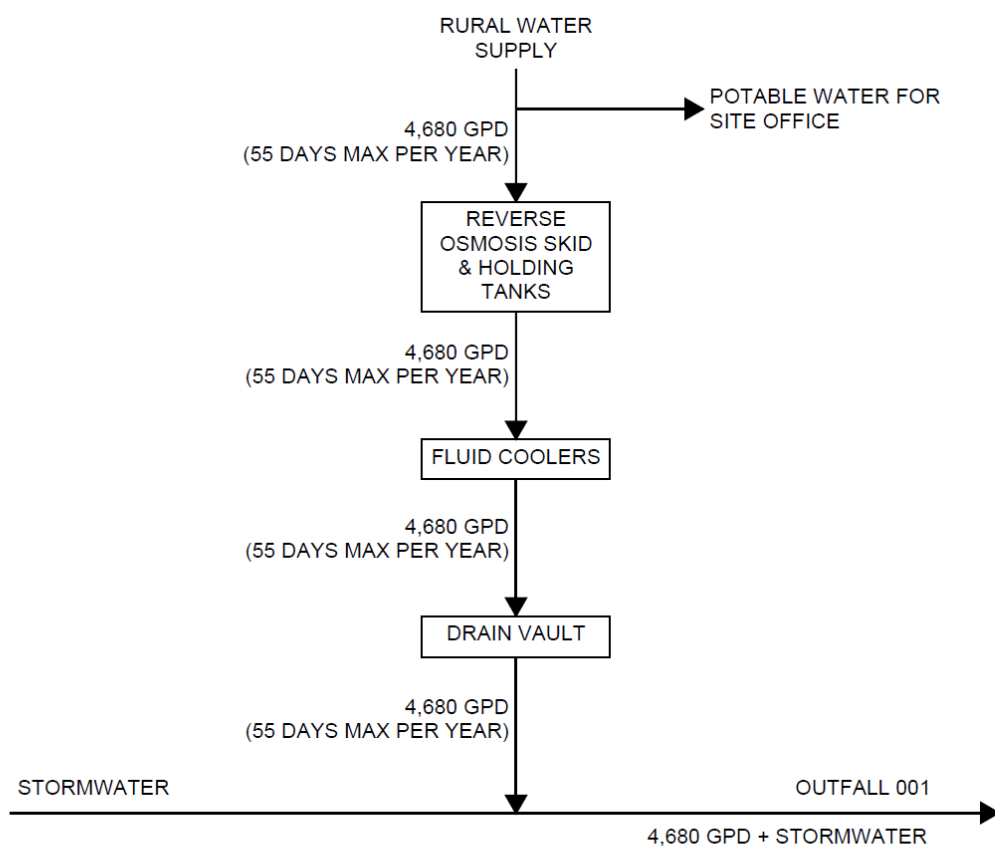
Figure 2 - APLD Jamestown Datacenter Facility Aerial Photo (Google Earth May 14, 2023)

FACILITY DESCRIPTION

Applied Digital (APLD) is the operator of next-generation digital infrastructure, providing solutions to the fields of High-Performance Computing (HPC) and Artificial Intelligence (AI). The facility in Jamestown, ND is a purpose-built data center focused on hosting HPC applications, making use of North Dakota's beneficial climate to provide cooling throughout the majority of the year. When environmental cooling is not available, mainly during the summer months, cooling water is utilized.

The facility receives rural water, which is treated in a reverse osmosis (RO) system to remove any impurities, prior to being utilized in the cooling towers. All RO reject water, from drain downs and backwash, will be collected and hauled offsite. Once treated, the cooling water is

pumped to an array of cooling towers to provide supplemental cooling to the datacenter. The cooling water is used in the cooling towers evaporative process and is collected in the cooling water tower basins. As water evaporates, fresh water will be added to the process. The water is then drained to a collection vault, where it will be sampled prior to being discharged. The cooling water is expected to be discharged through the facility's storm water drainage system. The discharge will flow through the storm water drains and then south down the drainage ditch along ND State Highway 20.



APLD JAMESTOWN HPC DATACENTER

Figure 3 - APLD Jamestown Datacenter Facility Flow Diagram (Permit Application December 14, 2023)

Outfall Description

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a NDPDES permit is a violation of the 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 penalties as provided under the CWA. There is one active outfall for this facility as described below:

Outfall 001. Active. Final Outfall. Industrial Wastewater							
Latitude: 47.027314		Longitude: -98.679253		County: Stutsman			
Township: 141N		Range: 63W		Section: 17		QQ: DA	
Receiving Stream: Unnamed Roadside Ditch					Classification: III		
Outfall Description: This is the final outfall for cooling water. Compliance samples are collected from a collection vault prior to combining with storm water and flowing down the drainage ditch along North Dakota State Highway 20, which flows to an unnamed tributary to the Jamestown Reservoir.							

PERMIT STATUS

This is the first issuance of this permit. The department received EPA application Form 1 on December 14, 2023 and EPA application Form 2D on November 1, 2023. The signed copies were received on April 9, 2024. The application was accepted as complete on April 18, 2024.

PROPOSED PERMIT LIMITS

The discharge of process wastewater generated from the cooling towers is not regulated under a specific section of the CFR, therefore the department utilized best professional judgement (BPJ) to determine appropriate permit limitations.

Effluent Limitations

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

Table 2 - Proposed Effluent Limitations for Outfall 001

Parameter	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Basis ^a
Total Suspended Solids (TSS)	*	*	100 mg/l	BPJ
pH ^b	Shall remain between 6.0 and 9.0 s.u.			WQS
Temperature	*	*	29.44 °C	WQS
Total Residual Chlorine, mg/l ^{c,d}	0.011 mg/l	*	0.019 mg/l	WQS
Sulfates, Total mg/l	750 mg/l	*	*	WQS
Best Management Practices (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 oil wastes that produce a visible sheen on the surface of the receiving water.				WQS

Notes:	
Explanations of the basis for proposed limitations can be found under “Evaluation of Surface Water Quality-Based Effluent Limits for Numeric Criteria”	
*	This parameter is not limited. However, the department may impose limitations based on sample history to protect receiving waters.
a.	The basis of the effluent limitations is given below: “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. “BPJ” refers to best professional judgement.
b.	The pH, an instantaneous limitation, shall be between 6.0 s.u. and 9.0 s.u. Any single analysis and/or measurement outside this limitation shall be considered a violation of the conditions of this permit.
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. This 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.

SELF-MONITORING REQUIREMENTS

Monitoring Requirements

The department requires monitoring, recording, and reporting (NDAC 33.1-16-01(21-23) and 40 CFR 122.41) to verify that the discharge complies with permit limits.

All effluent samples shall be collected from the collection vault prior to combining with stormwater.

Table 3 - Self Monitoring Requirements for Outfall 001

Parameter	Frequency	Sample Type ^a
Total Suspended Solids (TSS), mg/l	Weekly	Grab
pH, s.u.	Weekly	Instantaneous
Temperature, °C	Daily	Instantaneous
Total Residual Chlorine, mg/l	Weekly	Grab
Sulfates, Total mg/l	Weekly	Grab

Parameter	Frequency	Sample Type ^a
Flow Effluent, GPD	Daily	Instantaneous
Total Drain, MGAL	Quarterly	Calculated
Notes:		
a.	Refer to Appendix B for definitions unless otherwise specified.	
Stipulations:		
The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rate, and number of exceedances shall also be included on the Discharge Monitoring Report (DMR).		
Samples taken in compliance with the monitoring requirements specified in the permit shall be taken prior to the wastestream combining with stormwater.		

SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

The North Dakota State Water Quality Standards (NDAC Chapter 33.1-16-02.1) are designed to protect existing water quality and preserve the beneficial uses of North Dakota's surface water. 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 a waste load allocation developed during a basin-wide total maximum daily load (TMDL) study. TMDLs result from the scientific study of the water body and are developed in order to reduce pollution from all sources.

The unnamed roadside ditch that the discharge flows to is classified as a Class III stream. The quality of waters in this class shall 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, they 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 (e.g., wading), fish and aquatic biota, and wildlife uses.

The unnamed roadside ditch that the discharge flows to is not listed in the 2020-2022 North Dakota Section 303(d) List of Waters Needing Total Maximum Daily Loads as impaired.

Numerical Criteria for the Protection of Aquatic Life and Recreation

Numerical water quality criteria are listed in the water quality standards for surface water (NDAC Chapter 33.1-16-02.1). They specify the maximum pollutants allowed in the 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 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 33.1-16-02.1 (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 water quality standards contain a Mixing Zone and Dilution Policy and Implementation Procedure, NDAC Chapter 33.1-16-02.1 (Appendix III). This policy address 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 dilutions allowances should 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

Total Suspended Solids (TSS)

The department proposes a TSS concentration limitations of 100 mg/l daily maximum with a sampling frequency of weekly. This limitation was developed using BPJ and comparing like permits.

pH

The proposed limitations range of 6.0 s.u. to 9.0 s.u. for pH are based on the state water quality standards applicable to this receiving stream classification. In accordance with NDAC 33.1-16-02.1, the pH of Class III water bodies shall remain between 6.0 and 9.0 s.u.

Temperature

Monitoring for temperature has been included in this permit. The WQS list a temperature limit of 29.44 °C. Therefore the department proposes a temperature limitation of 29.44 °C with a sample frequency of daily.

Total Residual Chlorine (TRC)

Monitoring for TRC has been included in this permit. The WQS list an acute standard of 0.019 mg/l and a chronic standard of 0.011 mg/l. 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, 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 of less than 0.05 mg/l shall be considered in compliance with the permit. Therefore, the department proposes a monthly average limit of 0.011 mg/l with a daily maximum limit of 0.019 mg/l with a sample frequency of weekly.

Sulfates

Monitoring for sulfates has been included in this permit based on the potential for sulfates to be present in the discharge. This parameter was identified in the permit application as believed present in the intake water. The WQS list an 30-day arithmetic average limit of 750 mg/l for Class III streams. Therefore, the department proposes a monthly average of 750 mg/l with a sample frequency of weekly.

Nutrients (Phosphorus and Nitrogen)

Nutrient monitoring was not included in this permit. According to the interdepartmental memo *Incorporation of Nutrient Reduction Strategy into Minor Individual Industrial NDPDES Permits* (December 8, 2022), this facility is not expected to contribute nutrient loading to the receiving watershed, and therefore will not require nutrient monitoring in their discharge permit.

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 Toxic 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.

Test Procedures

The collection and transportation of all samples shall conform to EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified or approved by EPA as an alternate test procedure under 40 CFR 436.5. The method for determining the total amount of water discharged shall provide results within ten (10) percent of the actual amount.

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 the 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 wastewater discharge. The permit includes limits and conditions to protect human health, 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 issue a NDPDES permit to **APLD Jamestown Datacenter**. 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 placed a Public Notice of Draft on **May 15, 2020** in the **Jamestown Sun** 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 people 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, 3rd Floor
Bismarck, ND 58503

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

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APPENDIX B – DEFINITIONS

DEFINITIONS Standard Permit BP 2019.05.29

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

APPENDIX C – DATA AND TECHNICAL CALCULATIONS

The development of this permit did not require technical calculations by the department. The department the permit application and applicable water quality standards for Class III waters of the state to determine appropriate requirements to be placed in the permit. The department also reviewed like permits to assist in determining appropriate requirements for the permit.

DRAFT

APPENDIX D – RESPONSE TO COMMENTS

Any comments received during the public comment period will be addressed here.

DRAFT

Permit No: ND0027073
Effective Date: July 1, 2024
Expiration Date: June 30, 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,

Applied Digital (APLD) Jamestown Datacenter
Jamestown, ND

is authorized to discharge from its high-performance computing data center

to an unnamed roadside ditch, a Class III stream

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,
June 30, 2029.

Signed this _____ day of _____, _____.

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

BP 2019.05.29

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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."
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.

OUTFALL DESCRIPTION

Outfall 001. Active. Final Outfall. Industrial Wastewater			
Latitude: 47.027314	Longitude: -98.679253	County: Stutsman	
Township: 141N	Range: 63W	Section: 17	QQ: DA
Receiving Stream: Unnamed Roadside Ditch		Classification: III	
Outfall Description: This is the final outfall for cooling water. Compliance samples are collected from a collection vault prior to combining with storm water and flowing down the drainage ditch along North Dakota State Highway 20, which flows to an unnamed tributary to the Jamestown Reservoir.			

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Frequency	First Submittal Date
001A	Discharge Monitoring Report	Quarterly	October 31, 2024
Application Renewal	NPDES Application Renewal	1/permit cycle	January 1, 2029

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 outfall as specified to the following: **Unnamed Roadside Ditch, a Class III stream.**

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

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

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Table 1: Effluent Limitations and Monitoring Requirements Outfall 001

Parameter	Effluent Limitations					Monitoring Requirements	
	Quantity ^a		Concentration			Sample Frequency	Sample Type
	Maximum Avg. Monthly Limit	Daily Maximum Limit	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Suspended Solids (TSS)	*	*	*	*	100 mg/l	Weekly	Grab
pH ^a	Shall remain between 6.0 and 9.0 s.u.					Weekly	Instantaneous
Temperature	*	*	*	*	29.44 °C	Daily	Instantaneous
Total Residual Chlorine (TRC), ^{b, c}	*	*	0.011 mg/l	*	0.019 mg/l	Weekly	Grab
Sulfates, Total	*	*	750 mg/l	*	*	Weekly	Grab
Flow Effluent, GPD	Report Avg. Monthly Value	Report Max Daily Value	*	*	*	Daily	Instantaneous
Total Drain, MGAL	*	Report Total	*	*	*	Quarterly	Calculated

Notes:

- * This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.
- a. The pH, an instantaneous limitation, shall be between 6.0 s.u. and 9.0 s.u. Any single analysis and/or measurement outside this limitation shall be considered a violation of the conditions of the permit.
- b. 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. This 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.
- c. 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.

Stipulations:

The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rate, and number of exceedances shall also be included on the DMR.

Best Management Practices (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 oil wastes that produce a visible sheen on the surface of the receiving water.

Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to the wastestream combining with stormwater.

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2021.09.09

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

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

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

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

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),
 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

E. 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.
r of this permit shall not be affected thereby.