

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

Public Notice Date: 1/16/2020

Public Notice Number: ND-2020-002

**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: 8/5/2019

Application Number: ND0026361

Applicant Name: Minnesota Power HVDC

Mailing Address: 30 West Superior St, Duluth, MN 55802

Telephone Number: 218.722.5642

Proposed Permit Expiration Date: 3/31/2025

**Facility Description**

The reissuance is for a high voltage direct current (HVDC) conversion facility. The discharges include once-through cooling water, pumphouse blowdown, floor drains, and drain tile. The facility is located in the SE ¼ section 33, T142N, R83W. All discharges are from outfall 001, 002 and 003 to Nelson Lake, a class 3 lake.

**Tentative Determinations**

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

**Information Requests and Public Comments**

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by February 17, 2020 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

Permit No: ND0026361  
Effective Date: April 1, 2019  
Expiration Date: March 31, 2025

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 Health rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Minnesota Power, a Division of Allete, Inc.  
30 West Superior Street  
Duluth MN 55802

is authorized to discharge from the HVDC Conversion Facility

to Nelson Lake

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,  
March 31, 2025.

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

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

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**DEFINITIONS Standard Permit BP 2019.05.29**

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

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## OUTFALL DESCRIPTION

<b>Outfall 001. Active. Final Outfall. Pumphouse Blowdown</b>			
Latitude: 47.071939	Longitude: -101.205092	County: Oliver	
Township: 142	Range: 83	Section: 33	QQ: BD
Receiving Stream: Nelson Lake		Classification: Class III Lake	
Outfall Description: This is an intermittent discharge consisting of blowdown from the automatic strainer on the cooling water intake for the HVDC terminal. Any discharge is to Nelson Lake, a class III lake via a submerged pipe.			

<b>Outfall 002. Active. Final Outfall. Once-Through Cooling Water</b>			
Latitude: 47.072144	Longitude: -101.205442	County: Oliver	
Township: 142	Range: 83	Section: 33	QQ: DD
Receiving Stream: Nelson Lake		Classification: Class III Lake	
Outfall Description: This is a continuous discharge consisting of once-through cooling water from the HVDC conversion facility. Any discharge is to Nelson Lake, a class III lake via a submerged pipe.			

<b>Outfall 003. Active. Final Outfall. HVDC Terminal Floor Drains and Sump Pump</b>			
Latitude: 47.072214	Longitude: -101.196314	County: Oliver	
Township: 142	Range: 83	Section: 33	QQ: AD
Receiving Stream: Nelson Lake		Classification: Class III Lake	
Outfall Description: This is an intermittent discharge consisting of the basement floor drains in the HVDC conversion facility. Any discharge goes through an oil-water separator prior to going to Nelson Lake, a class III lake via an unnamed drainage.			

## PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Frequency	First Submittal Date
002	Discharge Monitoring Report	Quarterly	July 31, 2015
Application Renewal	NPDES Application Renewal	1/permit cycle	September 30, 2024

## SPECIAL CONDITIONS

There are no special conditions.

## 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: **Nelson Lake**.

**B. Effluent Limitations and Monitoring**

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.

Effluent Limitations and Monitoring Requirements **Outfalls 001**

Discharge of pumphouse blowdown from the outfall shall utilize best management practices (BMPs) at all times.

Stipulations:

No fuel, lubricating oils, chemicals nor process wastewater shall be discharged through this point.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

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

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

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Effluent Limitations and Monitoring Requirements <b>Outfall 002</b>							
Parameter	Effluent Limitations					Monitoring Requirements	
	Quantity		Concentration			Sample Frequency	Sample Type
	Avg. Monthly Limit	Daily Maximum Limit	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit		
Total Residual Chlorine (TRC), mg/l 1/	0.19 lb/day	0.11 lb/day	*	*	*	Weekly	Grab
Temperature, °C 2/	*	*	*	*	*	Weekly	Instantaneous
pH 3/	Shall remain between 7.0 to 9.0 S.U.					Weekly	Instantaneous
Flow Effluent, MGD	Report Avg. Monthly Value	*	*	*	*	Monthly	Instantaneous
<p>*. This item is not limited or not applicable for the stated parameter. However, the Department may impose limitations based on sample history and to protect the receiving waters.</p>							
<p>1/ Total residual chlorine limits only apply during periods of chlorination. Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that the discharge for more than two hours is required for macroinvertebrate control.</p>							
<p>2/ The temperature of any discharge to Nelson Lake shall not have an adverse effect on fish, aquatic biota, recreation, and wildlife.</p>							
<p>3/ The pH, an instantaneous limitation, shall be between 7.0 s.u. and 9.0 s.u. Any single analysis and or measurement beyond this limitation shall be considered a violation of the conditions of this permit.</p>							
<p>Stipulations:</p> <p>The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rates, and number of exceedances shall also be included on the Discharge Monitoring Reports (DMR).</p> <p>Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.</p> <p>There shall be no discharge of polychlorinated biphenyl compounds (PCBs).</p> <p>There shall be no discharge of floating solids or visible foam in other than trace amounts.</p> <p>The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.</p>							

Effluent Limitations and Monitoring Requirements <b>Outfalls 003</b>
Discharge of the HVDC basement floor drains from the outfall shall utilize best management practices (BMPs) at all times.
Stipulations:
No fuel, lubricating oils, chemicals nor process wastewater shall be discharged through this point.
There shall be no discharge of floating solids or visible foam in other than trace amounts.
The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.
Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.

### Facility Stormwater Runoff

Effluent Limitations and Monitoring Requirements <b>Stormwater Runoff</b>
1. The quality of the stormwater discharge shall utilize best management practices (BMPs) at all times.
2. Spill prevention and response procedures must be employed to minimize the potential for spilled material to discharge with stormwater.
3. The facility areas must be operated and maintained to minimize, to the extent reasonably practicable, stormwater contact with raw materials, intermediate products, finished products, byproducts, or waste materials.
4. The facility yard and adjacent drainage ditches should be inspected annually for evidence of material spillage, erosion, sedimentation, and deterioration or ineffectiveness of any structural controls. If necessary, the stormwater pollution prevention practices shall be revised based on the inspections.
Stipulations:
No fuel, lubricating oils, chemicals nor process wastewater shall be discharged through this point.
There shall be no discharge of floating solids or visible foam in other than trace amounts.
The department may specify additional discharge conditions, restrictions, or BMPs at any time to maintain water quality standards.
Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.

## II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2019.05.29

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

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

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

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

**B. Test Procedures**

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

**C. Recording of Results**

Records of monitoring information shall include:

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

**D. Additional Monitoring**

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

**E. Reporting of Monitoring Results**

1. Monitoring results shall be summarized and reported to the department using Discharge Monitoring Reports (DMRs). If no discharge occurs during a reporting period, "No Discharge" shall be reported. The permittee must submit DMRs electronically using the electronic information reporting system unless requirements in subsection 3 are met.
2. Prior to December 21, 2020, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2020, the permittee must report the following using the electronic reporting system:
  - a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];
  - b. Municipal separate storm sewer system program reports;
  - c. Pretreatment program reports;
  - d. Sewer overflow/bypass event reports; and

- e. Clean Water Act 316(b) annual reports
- 3. The permittee may seek a waiver from electronic reporting. To obtain a waiver, the permittee must complete and submit an Application for Temporary Electronic Reporting Waiver form (SFN 60992) to the department. The department will have 120 days to approve or deny the waiver request. Once the waiver is approved, the permittee may submit paper versions of monitoring data and reports to the department.
  - a. One of the following criteria must be met in order to obtain a waiver. The department reserves the right to deny any waiver request, even if they meet one of the criteria below.
    - 1. No internet access,
    - 2. No computer access,
    - 3. Annual DMRs (upon approval of the department),
    - 4. Employee turnover (3-month periods only), or
    - 5. Short duration permits (upon approval of the department)

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

ND Department of Environmental Quality  
Division of Water Quality  
918 East Divide Ave  
Bismarck ND 58501-1947

**F. Records Retention**

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

**III. COMPLIANCE RESPONSIBILITIES**

**A. Duty to Comply**

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

**B. Proper Operation and Maintenance**

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

**C. Planned Changes**

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

**D. Duty to Provide Information**

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

**E. Signatory Requirements**

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

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

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

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

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

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

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

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

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

1. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The following occurrences of noncompliance shall be included in the oral report to the department at 701.328.5210:

- a. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit under G. Bypass of Treatment Facilities;
  - b. Any upset which exceeds any effluent limitation in the permit under H. Upset Conditions;  
or
  - c. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.
2. A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:
- a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected;  
and
  - d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

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

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

#### **G. Bypass of Treatment Facilities**

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

prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- c. The permittee submitted notices as required under the 1. Anticipated Bypass subsection of this section.

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

#### **H. Upset Conditions**

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

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

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

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

#### **I. Duty to Mitigate**

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

#### **J. Removed Materials**

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

#### **K. Duty to Reapply**

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

### **IV. GENERAL PROVISIONS**

#### **A. Inspection and Entry**

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

**B. Availability of Reports**

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

**C. Transfers**

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

**D. New Limitations or Prohibitions**

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

**E. Permit Actions**

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

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

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

**G. State Laws**

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

**H. Oil and Hazardous Substance Liability**

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

**I. Property Rights**

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

**J. Severability**

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



**FACT SHEET FOR NDPDES PERMIT  
ND0026361**

**MINNESOTA POWER, A DIVISION OF ALLETE, INC  
HVDC CONVERSION FACILITY**

**DATE OF THE FACT SHEET – January 2020**

**INTRODUCTION**

The Federal Clean Water Act (CWA, 1972, and later amendments in 1977, 1981, and 1987, etc.) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the CWA is the National Pollutant Discharge Elimination System (NPDES), which the US Environmental Protection Agency (EPA) has oversight authority. In 1975, the State of North Dakota was delegated primacy of the NPDES program by EPA. The North Dakota Department of Environmental Quality (NDDEQ), hereafter referred to as “department”, has been designated the state water pollution control agency for all purposes of the Federal Water Pollution Control Act, as amended [33 U.S.C. 1251, et seq.], and is hereby authorized to take all action necessary or appropriate to secure to this state the benefits of the act and similar federal acts. The department’s authority and obligations for the wastewater discharge permit program is in the NDAC 33.1-16 (North Dakota Administrative Code) which was promulgated pursuant to NDCC chapter 61-28 (North Dakota Century Code). The department uses North Dakota Pollutant Discharge Elimination System (NDPDES) as its permitting title.

The following rules or regulations apply to NDPDES permits:

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

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

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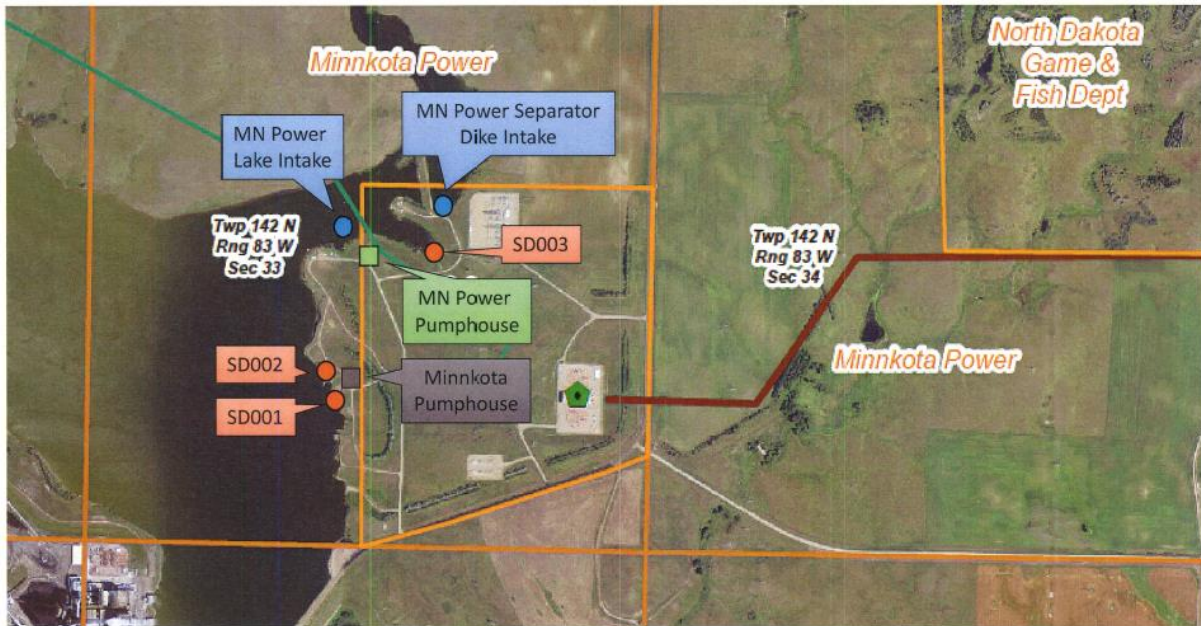
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**BACKGROUND INFORMATION**

<b>Table 1: General Facility Information</b>	
Permittee:	Minnesota Power, a Division of Allete, Inc 30 West Superior Street Duluth, MN 55802
Facility Name and Address:	Minnesota Power Center North Dakota HVDC Terminal 2375 33 <sup>rd</sup> Ave SW Center, ND 58530
Permit Number:	ND0026361
Permit Type:	Minor, Non POTW
Type of Treatment:	Direct discharge and BMPs
SIC Code:	4911
Discharge Location:	001: Nelson Lake, Class 3 Lake Latitude: 47.071939 Longitude: -101.205092  002: Nelson Lake, Class 3 Lake Latitude: 47.072144 Longitude: -101.205442  003: Nelson Lake, Class 3 Lake Latitude: 47.072214 Longitude: -101.196314
Hydrologic Code:	10130101- Painted Woods-Square Butte Creek

The following map was provided by the facility in the permit application:

Center HVDC Terminal Inlet/Outlet Locations



## FACILITY DESCRIPTION

### History

The Minnesota Power High Voltage Direct Current (HVDC) Conversion Facility is an existing facility which used to be operated by Minnkota Power Cooperative. Minnesota Power purchased the facility from Minnkota Power Cooperative in 2010. The applicant has indicated that there will be no change in operation for the discharge points. The discharge points for this facility were identified in the NDPDES permit for Minnkota Power Cooperative's power plant (#ND0000370) as: 002, Once-Through cooling; 023, Pumphouse Blowdown; and 030 HVDC Terminal Floor Drains.

### Treatment System

There are water two intake pipes for the facility that draw in once-through cooling water, one located in Nelson Lake and one in Minnkota's holding pond. Only one intake pipe can be operated at a time. The maximum designed capacity of the intakes is 1.7 mgd.

Both intakes flow to Minnesota Power's pumphouse where the water is screened. The screens are cleaned with high pressure water approximately every six weeks. The pumphouse blowdown consists of backwash water used to clean out any particles that are collected by the pump. The pumphouse blowdown system is operated once every hour. Any potential discharge from the blowdown process flows through outfall 001 located on the west side of the pumphouse building. Wastewater is then discharged to Nelson Lake via a submerged pipe.

After the initial screening the water is piped from the pumphouse to the HVDC facility as once-through cooling water. After heat exchange in the facility, the once-through cooling water is piped to a second pumphouse operated by Minnkota. In this second pumphouse, Minnkota can either use Minnesota Power's once-through cooling water at Minnkota's facility or discharge it to Nelson Lake through outfall 002. The sampling point for outfall 002 is in Minnkota's pumphouse.

FACT SHEET FOR NDPDES PERMIT ND0026361

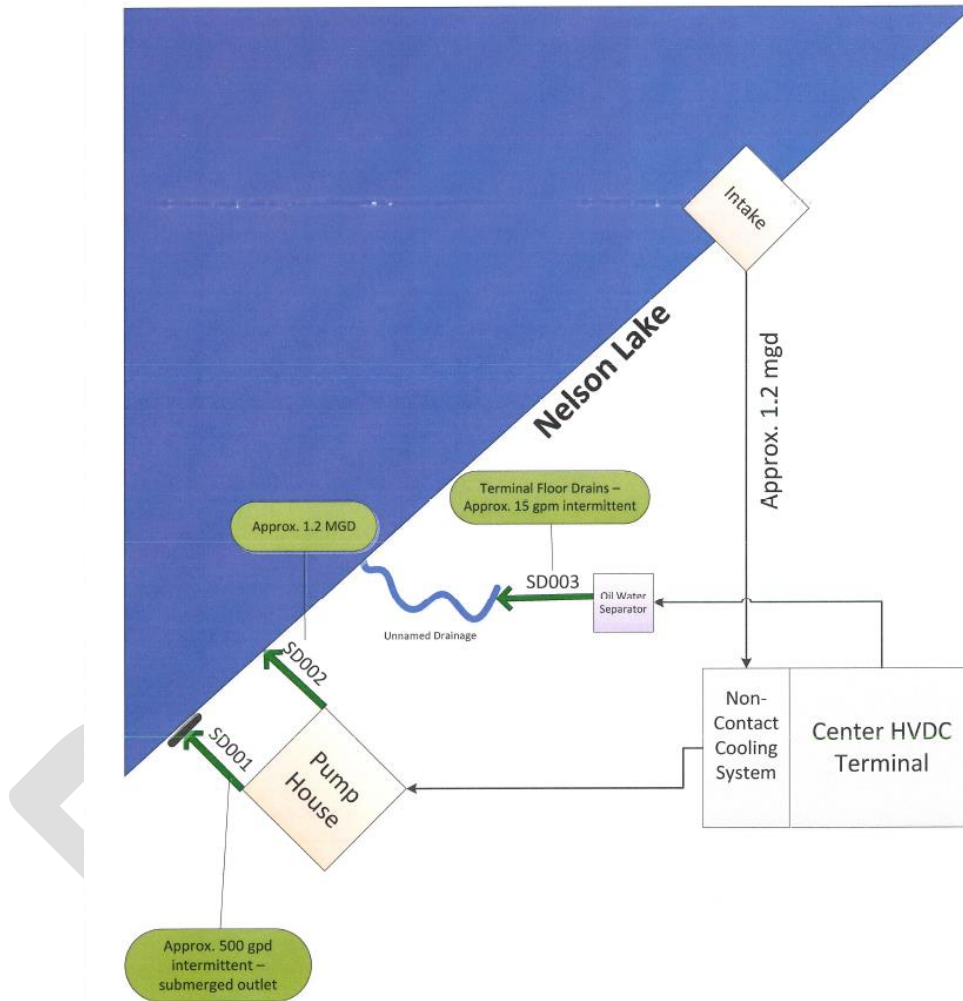
Minnesota Power HVDC Conversion Facility

**EXPIRATION DATE: March 31, 2025**

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In the HVDC facility, the floor drains collect water from the floor of the heat exchange fan access room. If maintenance is being performed on the heat exchange system, then any once-through cooling water is drained from the system to the floor drains. The floor drain water flows past an oil-stop valve that was added in 2012. The exterior tile drain system also flows through this oil-stop valve. This valve is checked weekly for oil sheen. The floor drain water then flows through an oil-water separator that was added in 2014. From the separator the flow is discharged from outfall 003, flows through a vegetated drainage swale into Nelson Lake.

The following flow diagram was provided in the permit application:



Note: Use of two different intake structures is alternated, they cannot be used at the same time or exceed water withdrawal >2MGD

**Discharge Point Descriptions**

<b>Outfall 001. Active. Final Outfall. Pumphouse Blowdown</b>			
Latitude: 47.071939	Longitude: -101.205092	County: Oliver	
Township: 142	Range: 83	Section: 33	QQ: BD
Receiving Stream: Nelson Lake		Classification: Class III Lake	
Outfall Description: This is an intermittent discharge of approximately 500 gpd consisting of blowdown from the automatic strainer on the cooling water intake for the HVDC terminal. Any discharge is to Nelson Lake, a class III lake via a submerged pipe.			

<b>Outfall 002. Active. Final Outfall. Once-Through Cooling Water</b>			
Latitude: 47.072144	Longitude: -101.205442	County: Oliver	
Township: 142	Range: 83	Section: 33	QQ: DD
Receiving Stream: Nelson Lake		Classification: Class III Lake	
Outfall Description: This is a continuous discharge of approximately 1.2 mgd consisting of once-through cooling water from the HVDC conversion facility. Any discharge is to Nelson Lake, a class III lake via a submerged pipe.			

<b>Outfall 003. Active. Final Outfall. HVDC Terminal Floor Drains and Sump Pump</b>			
Latitude: 47.072214	Longitude: -101.196314	County: Oliver	
Township: 142	Range: 83	Section: 33	QQ: AD
Receiving Stream: Nelson Lake		Classification: Class III Lake	
Outfall Description: This is an intermittent discharge of approximately 15 gpm consisting of the basement floor drains in the HVDC conversion facility. Any discharge goes through an oil-water separator prior to going to Nelson Lake, a class III lake via an unnamed drainage.			

**PREVIOUS PERMIT STATUS**

The department issued the current permit for this facility on April 1, 2015. The previous permit had effluent limits on the following parameters: total residual chlorine (TRC) and pH.

The department has been in contact with Minnesota Power to obtain information to reissue their permit. The department received EPA applications Form 1 and Form 2C on August 05, 2019. The application was accepted by the department August 06, 2019. Effluent sample data has been provided to the department through official laboratory reports, discharge monitoring reports, and the permit application Form 2C.

**SUMMARY OF COMPLIANCE WITH PREVIOUS PERMIT ISSUED**

The department's assessment of compliance is based on review of the facility's Discharge Monitoring Report (DMR) forms and inspections conducted by department staff. One (1) inspection of the facility has been conducted from April 1, 2015 to July 31, 2019. No excursions have occurred from April 01, 2014 to June 30, 2019.

The facility is a continuous discharger. A summary of the data follows:

Table 2: DMR Data Summary from 04/01/2014 – 06/30/2019

Name	Disch Pt	Location	Parameter	Ave Conc	Range	Units	Ave Load	Max Load	Max Load Units
Minnesota Power HVDC	002A	Effluent	Discharge Flow in Million Gals	N/A	N/A	N/A	0.88	1.47	MGD
Minnesota Power HVDC	002A	Effluent	pH	N/A	N/A	N/A	N/A	N/A	N/A
Minnesota Power HVDC	002A	Effluent	Temperature in Celsius	17.47	2.8 - 43.3	deg C	N/A	N/A	N/A
Minnesota Power HVDC	002A	Effluent	Total Residual Chlorine	N/A	N/A	N/A	N/A	N/A	N/A

### PROPOSED PERMIT LIMITS AND SELF MONITORING REQUIREMENTS

The discharge of wastewater from this electric transmission facility is not regulated by national effluent limitations guidelines, which establish technology-based effluent limitations for various industries. In the absence of a federal standard, limitations may be determined using Best Professional Judgment (BPJ) to ensure reasonable control technologies are used to prevent potential harmful effects of the discharge.

For the control of the once-through cooling water discharge the limitations in the steam electric point source category (40 CFR 423) have been applied based on Best Professional Judgment (BPJ) due to similar discharges from other facilities which have similar wastewater streams.

The effluent guidelines are summarized in the table below:

Table 3: Best Practicable Technology 40 CFR 423.12: General/Narrative requirements	
Parameter	Federal Requirements
pH	Within the range of 6.0 – 9.0
Polychlorinated biphenyl compounds (PCBs)	There shall be no discharge of PCBs
Free Available Chlorine	May not be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine at any one time unless the utility can demonstrate that the units in a particular location cannot operate at or below this level of chlorination.
Total Residual Chlorine	May not be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge total residual chlorine at any one time unless the utility can demonstrate that the units in a particular location cannot operate at or below this level of chlorination.
At the permitting authority's discretion, the quantity of pollutant allowed to be discharged may be expressed as a concentration limitation instead of the mass-based limitations specified in paragraphs (b)(3) through (b)(7), and (b)(11) of this section. Concentration limitations shall be those concentrations specified in this section.	
In the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled in paragraphs (b)(1) through (b)(12) of this section attributable to each controlled waste source shall not exceed the specified limitations for that waste source.	

Table 4: Best Practicable Technology 40 CFR 423.12: Low Volume Wastes		
Parameter	Federal Requirements	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and Grease	20.0	15.0
The quantity of pollutants discharge from low volume flow waste sources shall not exceed the quantity determined by multiplying the flow of low volume waste sources times the concentration listed in this table.		

Table 5: Best Available Technology 40 CFR 423.13: Once Through Cooling	
Parameter	Federal Requirements
	Maximum concentration (mg/l)
Total Residual Chlorine	0.5
The quantity of pollutants discharge from once through cooling sources shall not exceed the quantity determined by multiplying the once through cooling sources times the concentration listed in this table.	

Though the facility does discharge low volume wastes, the department has determined to continue the requirement for the use of BMPs in lieu of effluent limitations. The facility discharges a small amount of floor drain wastewater (approximately 12,960 gallons/year). The permit application indicates that floor drain wastewater is discharged at 360 gpd, 36 days out of the year. Under 40 CFR 122.44(k)(4) BMPs may be utilized if the practices are reasonably necessary to achieve effluent limitations and standards to carry out the purposes and intent of the CWA.

In addition to technology-based limits, the department must consider and include limitations necessary to protect water quality standards (WQS) applicable to the receiving waters. The proposed permit limitations are based on BPJ and the WQS.

**Effluent Limitations**

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

Table 6: Effluent Limitations and Monitoring Requirements <b>Outfalls 001</b>
Discharge of pumphouse blowdown from the outfall shall utilize best management practices (BMPs) at all times.
Stipulations:
No fuel, lubricating oils, chemicals nor process wastewater shall be discharged through this point.
There shall be no discharge of floating solids or visible foam in other than trace amounts.
The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.
Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.



Table 7: Effluent Limitations and Monitoring Requirements <b>Outfall 002</b>					
Parameter	Effluent Limitations				
	Quantity		Concentration		
	Avg. Monthly Limit	Daily Maximum Limit	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit
Total Residual Chlorine (TRC), mg/l 1/	0.19 lbs/day	0.11 lbs/day	*	*	*
Temperature, °C 2/	*	*	*	*	*
pH 3/	Between 7.0 to 9.0 S.U.				
Flow Effluent, MGD	Report Avg. Monthly Value	*	*	*	*
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.					
1/ Total residual chlorine limits only apply during periods of chlorination. Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that the discharge for more than two hours is required for macroinvertebrate control.					
2/ The temperature of any discharge to Nelson Lake shall not have an adverse effect on fish, aquatic biota, recreation, and wildlife.					
3/ The pH, an instantaneous limitation, shall be between 7.0 s.u. and 9.0 s.u. Any single analysis and or measurement beyond this limitation shall be considered a violation of the conditions of this permit.					
Stipulations:					
The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rates, and number of exceedances shall also be included on the Discharge Monitoring Reports (DMR).					
Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.					
There shall be no discharge of polychlorinated biphenyl compounds (PCBs).					
There shall be no discharge of floating solids or visible foam in other than trace amounts.					
The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.					

Table 8: Effluent Limitations and Monitoring Requirements <b>Outfalls 003</b>
Discharge of the HVDC basement floor drains from the outfall shall utilize best management practices (BMPs) at all times.

Table 8: Effluent Limitations and Monitoring Requirements **Outfalls 003**

## Stipulations:

No fuel, lubricating oils, chemicals nor process wastewater shall be discharged through this point.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

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

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

**SELF-MONITORING REQUIREMENTS**

All effluent samples shall be collected at a point following the addition of all waste streams prior to entering Nelson Lake.

Table 9: Self-Monitoring Requirements for **Outfall 002**

Effluent Parameter	Frequency	Sample Type
Total Residual Chlorine (TRC), mg/l	Weekly	Grab
Temperature, °C 2/	Weekly	Instantaneous
pH	Weekly	Instantaneous
Flow Effluent, MGD	Monthly	Instantaneous

**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 waters. Wastewater discharge permits must include conditions that ensure the discharge will meet the surface water quality standards. Water quality-based effluent limits may be based on an individual waste load allocation or on a waste load allocation developed during a basin wide total maximum daily load (TMDL) study. TMDLs result from a scientific study of the water body and are developed in order to reduce pollution from all sources.

Currently, a TMDL has not been developed for the receiving water body, nor is it listed as impaired under Section 303(d).

**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**

**Outfall 001:** This is the final outfall for the pump house blowdown. This is an intermittent discharge point.

**Outfall 002:** This is the final outfall for the once-through cooling water. This is a continuous discharge point.

**Outfall 003:** This is the final outfall for the flood drains and sump pump of the HVDC facility and the drain tile system sump. This is an intermittent discharge point.

### **pH**

#### Outfall 002:

The department proposes a pH limitation of shall be between 7.0 and 9.0 S.U. with a sampling frequency of weekly. This is based upon NDAC 33.1-16-02.1, Appendix II which states: "The physical and chemical criteria for class I streams shall apply to all classified lakes and reservoirs listed." In accordance with NDAC 33.1-16-02.1, Table 1, the pH of class I streams is 7.0 – 9.0 S.U.

## **Temperature**

### Outfall 002:

The department has reviewed the temperature data and monitoring frequency. The previous permit contains monitoring for temperature. The department proposes to continue monitoring temperature with a monitoring frequency of weekly.

Under NDAC 33.1-16-02.1, "The temperature standard for class I streams does not apply to Nelson Lake in Oliver County. The temperature of any discharge to Nelson Lake shall not have an adverse effect on fish, aquatic biota, recreation, and wildlife."

The department proposes to continue to have this language included in the effluent limitations for temperature.

## **Total Residual Chlorine**

### Outfall 002:

The department has reviewed the total residual chlorine data and monitoring frequency. No chlorinated discharges have occurred from April 1, 2015 to June 30, 2019. The department conducted loading calculations based upon 40 CFR 423 and the WQS and compared the two calculations (**Appendix C**). Based upon the calculations, the WQS calculations were more stringent than 40 CFR 423. The department proposes a loading limit of 0.11 lbs/day (Daily Maximum) and 0.19 lbs/day (Monthly Average) with a sampling frequency of conditional/weekly. The effluent limitation only applies during periods of chlorination.

The department proposes to remove the 0.2 mg/l daily maximum effluent limitation and replace it with the quantity daily maximum effluent limitation. The department calculated the concentration based off the loading limitation (0.11 lbs/day) to be 0.0078 mg/l, which is below the acute WQS of 0.011 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 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.

## **OTHER PERMIT CONDITIONS**

### **Stormwater Runoff**

The facility is not required to have a permit for stormwater discharges under the definition for stormwater associated with industrial activity (40 CFR 122.26(b)(14)). The Standard Industrial Classification (SIC) code for the facility is 4911, Electric Services. Even though the facility is not required to obtain a permit for stormwater discharges the department has determined that basic BMPs should be followed to minimize potential offsite impacts due to stormwater runoff.

The facility is within a drainage area covered by Minnesota's industrial stormwater general permit (NDR050012). The department has determined to continue the implementation of BMPs for stormwater runoff at the facility so that it does not cause interference with Minnesota's industrial stormwater permit. This is based upon BPJ and the previous permit.

The requirements included in the proposed permit are outlined below:

Table 10: Effluent Limitations and Monitoring Requirements <b>Stormwater Runoff</b>
1. The quality of the stormwater discharge shall utilize best management practices (BMPs) at all times.
2. Spill prevention and response procedures must be employed to minimize the potential for spilled material to discharge with stormwater.
3. The facility areas must be operated and maintained to minimize, to the extent reasonably practicable, stormwater contact with raw materials, intermediate products, finished products, byproducts, or waste materials.
4. The facility yard and adjacent drainage ditches should be inspected annually for evidence of material spillage, erosion, sedimentation, and deterioration or ineffectiveness of any structural controls. If necessary, the stormwater pollution prevention practices shall be revised based on the inspections.
Stipulations:  No fuel, lubricating oils, chemicals nor process wastewater shall be discharged through this point.  There shall be no discharge of floating solids or visible foam in other than trace amounts.  The department may specify additional discharge conditions, restrictions, or BMPs at any time to maintain water quality standards.  Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.

**CWA Section 316(b)**

Section 316(b) requires that any permitted point source which uses or proposes to use a cooling water intake structure and meet certain criteria are subject to the regulation. Facilities which are point sources, use or propose to use one or more cooling water intake structure with a cumulative design intake flow of greater than 2 million gallons per day, and 25 percent or more of the water is used exclusively used for cooling purposes. The facility has a design intake flow of 1.7 mgd with an actual intake flow of 1.2 mgd. Based upon the design intake flow of 1.7 mgd, the facility is not subject to Section 316(b) of the CWA.

**PERMIT ISSUANCE PROCEDURES**

**Permit Modifications**

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

**Proposed Permit Issuance**

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

**APPENDIX A – PUBLIC INVOLVEMENT INFORMATION**

The department proposes to reissue a permit for Minnesota Power HVDC. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and the department's reasons for requiring permit conditions.

The department will place a Public Notice of Draft on **January 16, 2020** in the **Center Republican** 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  
918 East Divide Avenue, 4<sup>th</sup> Floor  
Bismarck, ND 58501

The primary author of this permit and fact sheet is Patrick Schuett.

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

Public Notice Date: 1/16/2020

Public Notice Number: ND-2020-002

**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: 8/5/2019

Application Number: ND0026361

Applicant Name: Minnesota Power HVDC

Mailing Address: 30 West Superior St, Duluth, MN 55802

Telephone Number: 218.722.5642

Proposed Permit Expiration Date: 3/31/2025

**Facility Description**

The reissuance is for a high voltage direct current (HVDC) conversion facility. The discharges include once-through cooling water, pumphouse blowdown, floor drains, and drain tile. The facility is located in the SE ¼ section 33, T142N, R83W. All discharges are from outfall 001, 002 and 003 to Nelson Lake, a class 3 lake.

**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 FWPCA will be protected.

**Information Requests and Public Comments**

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by February 17, 2020 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

**APPENDIX B – 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  $n^{\text{th}}$  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.

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**APPENDIX C – TECHNICAL CALCULATIONS**

**Total Residual Chlorine**

Quantity per day	1.2	Units: MGD	Design Discharge Rate (MGD)	1.70				
Parameter	Maximum for any 1 day (mg/l)	Average of dail values for 30 consecutive days shall not exceed (mg/l)	Limit Max (lbs/day)	Limit Average(lbs/day)	Limit Max (mg/L)	Limit Average (mg/L)	Max Daily Q based on [ ]	Limit Avg based on [ ]
Total Residual Chlorine		0.2		2.0		0.1	0.0	2.8
Total Residual Chlorine WQS	0.011	0.019	0.11	0.19	0.0078	0.0134	0.16	0.27

Concentration Effluent Limits	
Tot Residual Cl Max Daily	
Tot Residual Cl 30-day Avg	0.2
Tot Residual Cl Acute	0.011
Tot Residual Cl Chronic	0.019

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**APPENDIX D – RESPONSE TO COMMENTS**

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

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