



**NORTH DAKOTA**  
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION  
Gold Seal Center, 918 E. Divide Ave.  
Bismarck, ND 58501-1947  
701.328.5200 (fax)  
www.ndhealth.gov



RECEIVED SEP 29 2014

September 25, 2014

Basin Electric Power Cooperative  
Kevin Solie  
1717 E Interstate Ave  
Bismarck, ND 58501

**Issuance of an NDPDES Permit**

**NDPDES Permit No: ND0026662 Name: Lonesome Creek Station**

Enclosed is your North Dakota Pollutant Discharge Elimination System (NDPDES) wastewater discharge permit which has been issued to your facility. This letter serves as notice that your facility is covered by and is authorized to discharge wastewater under the conditions as described in the above-referenced permit.

Should you have any questions, please contact Daniel Weber at 701.328.5285 or the Division of Water Quality-NDPDES Permits Program at 701.328.5210. Note that enclosures are not being sent to carbon copy recipients.

Sincerely,

Marty Haroldson  
NDPDES Program Manager  
Division of Water Quality

Enc.

Environmental Health  
Section Chief's Office  
701-328-5150

Division of  
Air Quality  
701-328-5188

Division of  
Municipal Facilities  
701-328-5211

Division of  
Waste Management  
701-328-5166

Division of  
Water Quality  
701-328-5210

Permit No: ND0026662  
Effective Date: October 01, 2014  
Expiration Date: September 30, 2019

AUTHORIZATION TO DISCHARGE UNDER THE  
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33-16-01 of the North Dakota Department of Health rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Basin Electric Power Cooperative – Lonesome Creek Station  
Bismarck, North Dakota

is authorized to discharge from its gas fired electric generating plant (Lonesome Creek Station) located near Alexander, North Dakota

to the unnamed tributary of Lonesome Creek

provided all the conditions of this permit are met.

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

Sept 30, 2019.

Signed this 25 day of September, 2014.



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

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**DEFINITIONS Standard Permit BP 2013.12.31**

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

**OUTFALL DESCRIPTION**

**Outfall 001: Active. 1.154 acre-foot pond.** This pond is designed to treat runoff from storm events for the entire Lonesome Creek Station facility as well as gather evaporative cooling water blow down and overflow. This pond is designed to retain runoff from a 25-year 24-hour storm event. It is located in the SW ¼, NW ¼, NE ¼, Section 23, Township 150 North, Range 101 West, latitude 47° 47' 49" longitude 103° 34' 47" in McKenzie County. The pond will have one inlet, a 36 inch diameter corrugated high density polyethylene (CHDPE) pipe entering from the east side. This pond will also have one outlet, which is an 18 inch diameter CHDPE pipe controlled by a valve on the west side of the pond. In the northwest corner of the pond there is a riprap lined spillway used for overflow in case of emergency. The design capacity is approximately 50,276 cubic feet (at a 3 foot water depth). The pond is also sized to accommodate 2 feet of sediment accumulation and to have 2 feet of freeboard, so the total capacity is roughly twice the design capacity.

**PERMIT SUBMITTALS SUMMARY**

Coverage Point	Submittal	Frequency	First Submittal Date
001	Discharge Monitoring Report	Semiannual	January 31, 2015
Application Renewal	EPA Form 1 & 2C	1/permit cycle	March 31, 2019

**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 tributary of Lonesome Creek**

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:

<b>Outfall 001</b>				
<b>Parameter</b>	<b>Discharge Limitations</b>		<b>Monitoring Requirements</b>	
	<b>Monthly Average</b>	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Total Suspended Solids (mg/l)	30	100	Weekly	Grab
pH (S.U.) (1)	Between 6.0 and 9.0		Weekly	Grab
Oil & Grease (mg/l) (2)	15	20	Daily	Conditional/Grab
Oil & Grease (2)	N/A	N/A	Daily	Visual
Sulfate (mg/l)	*	*	Weekly	Grab
Chloride (mg/l)	*	*	Weekly	Grab
Sodium (mg/l)	*	*	Weekly	Grab
Total Days Discharging	N/A	N/A	Semiannual	Calculated
Flow Effluent (MGD)	*	*	Daily	Calculated
Drain, Total (MG)	N/A	N/A	Semiannual	Calculated
(1) The pH, an instantaneous limitation, shall be between 6.0 standard units and 9.0 standard units. Any single analysis and or measurement beyond this limitation shall be considered a violation of the conditions of this permit.				
(2) There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the Department shall be contacted and a grab sample analyzed to ensure compliance with concentration limitation.				
(*) This parameter is not limited; however the Department may impose limitations based on sample history and to protect the receiving waters.				
(N/A) Not Applicable				
There shall be no discharge of floating solids or visible foam in other than in trace amounts. There shall be no unsightly or deleterious floating materials present in the discharge.				
Samples shall be taken prior to the discharge water leaving the facility or entering a receiving stream.				
Dates of discharge, frequency of analysis, number of exceedances shall be included on the Discharge Monitoring Reports (DMR).				
The Department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.				

**II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2014.08.20**

**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 the 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 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 analysis

**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**

Monitoring results shall be summarized on Discharge Monitoring Report forms. If no discharge occurs during a reporting period, "No Discharge" shall be reported. All reports must be postmarked by the last day of the month following the end of each reporting period. All original documents and reports required herein shall be signed and submitted to the Department at the following address:

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

**F. Records Retention**

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

**III. COMPLIANCE RESPONSIBILITIES**

**A. Duty to Comply**

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

**B. Proper Operation and Maintenance**

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

**C. Planned Changes**

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

**D. Duty to Provide Information**

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

#### **E. Signatory Requirements**

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

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

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

1. The authorization is made in writing by a person described above and submitted to the Department; and
2. 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 as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the EPA, Region VIII, Emergency Response Branch at 1.800.424.8802 and the State of North Dakota, Division of Homeland Security at 1.800.472.2121. The following occurrences of noncompliance shall be reported by telephone to the Department at 701.328.5210 by the first workday (8:00 a.m.-5:00 p.m. Central time) following the day the permittee became aware of the circumstances:
  - 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.

##### **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**.
2. **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.