

**AIR QUALITY EFFECTS ANALYSIS  
FOR  
PERMIT TO CONSTRUCT  
ACP-18273 v1.0**

**Applicant:**

Basin Electric Power Cooperative  
1717 East Interstate Avenue  
Bismarck, North Dakota 58503

**Facility Location:**

Bison Generation Station  
6261 121<sup>st</sup> Ave NW  
Ray, North Dakota 58849  
48.32495900/-103.31015600  
SW¼, NE¼, Section 20, T156N, R98W

**Introduction:**

Basin Electric Power Cooperative (Basin) submitted a Permit to Construct (PTC) application to the North Dakota Department of Environmental Quality – Division of Air Quality (Department) on February 10, 2025. The February application did not contain the required Class I area modeling analysis, which was subsequently completed and received on June 6, 2025. An additional amendment was submitted on June 17, 2025. These applications are collectively referred to as the ‘application’. The application was for the construction of a new natural gas combined cycle electric generation station (Bison Generation Station or facility) to be located in Williams County, North Dakota.

The facility will contain two 745 megawatt (MW) units for a total combined-cycle power plant capable of producing up to 1,490 MW. Various other equipment will be constructed to support the combined cycle turbines operation.

ACP-18273 v1.0 Table 1-1 lists the emission units (EU), emission points (EP), and air pollution control equipment for the Bison Generation Station. Table 1-2 lists all the insignificant activities for the Bison Generation Station.

The facility will be a major source under federal New Source Review (NSR) Prevention of Significant Deterioration (PSD) regulations and is expected to be a major source under 40 Code of Federal Regulations (CFR) Part 63. Basin may perform emissions testing upon start-up to determine major source status under 40 CFR 63. The facility will also become a major source under the Title V Permit to Operate (PTO) program.

## Facility Wide Emissions Profile

Table 1 lists the Potential to Emit (PTE) for all emissions units and the facility-wide totals for all criteria air pollutants and selected hazardous air pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.

*Table 1 - PTE Summary. All units are in tons per year (tpy) <sup>A</sup>*

<b>Emission Unit Description</b>	<b>Emission Unit (EU)</b>	<b>Emission Point (EP)</b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>2</sub></b>	<b>VOCs</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>H<sub>2</sub>SO<sub>4</sub></b>	<b>Total HAPs</b>	<b>n-Hexane (Largest HAP)</b>
Combustion turbine #1	1	1	481.7	276.9	32.4	198.4	240.4	240.4	240.4	49.8	19.5	9.3
Combustion turbine #2	2	2	481.7	276.9	32.4	198.4	240.4	240.4	240.4	49.8	19.5	9.3
Auxiliary boiler	3	3	9.2	2.7	0.1	1.3	1.9	1.9	1.9	0.0	0.5	0.4
Heater #1	4	4	2.5	0.7	0.0	0.4	0.5	0.5	0.5	0.0	0.1	0.1
Heater #2	5	5	2.5	0.7	0.0	0.4	0.5	0.5	0.5	0.0	0.1	0.1
Heater #3	6	6	2.5	0.7	0.0	0.4	0.5	0.5	0.5	0.0	0.1	0.1
Emergency diesel generator	7	7	7.7	14.1	0.0	0.9	0.4	0.4	0.4	0.0	0.3	--
Emergency diesel fire pump	8	8	0.7	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0	--
Piping fugitives	FUG-1	FUG-1	--	--	--	13.3	--	--	--	--	--	--
haul road fugitives	FUG-2	FUG-2	--	--	--	--	0.1	0.0	0.0	--	--	--
Miscellaneous <sup>B</sup>	IA	IA	34.4	41.0	0.2	2.4	3.1	3.1	3.1	--	0.8	0.8
<b>Total (without FUGs or IA):</b>			<b>988.3</b>	<b>573.5</b>	<b>65.1</b>	<b>400.4</b>	<b>484.7</b>	<b>484.7</b>	<b>484.7</b>	<b>99.5</b>	<b>40.2</b>	<b>19.5</b>
<b>Total:</b>			<b>1022.8</b>	<b>614.5</b>	<b>65.4</b>	<b>416.2</b>	<b>487.9</b>	<b>487.8</b>	<b>487.8</b>	<b>99.5</b>	<b>41.0</b>	<b>20.2</b>

<sup>A</sup> Abbreviations:

PM: filterable and condensable particulate matter

PM<sub>2.5</sub>: PM with an aerodynamic diameter less than or equal to 2.5 microns ( $\leq 2.5 \mu\text{m}$ )

PM<sub>10</sub>: PM with an aerodynamic diameter less than or equal to 10 microns ( $\leq 10 \mu\text{m}$ ) including PM<sub>2.5</sub>

SO<sub>2</sub>: sulfur dioxide

NO<sub>x</sub>: oxides of nitrogen

CO: carbon monoxide

VOCs: volatile organic compounds

H<sub>2</sub>SO<sub>4</sub>: sulfuric acid mist

<sup>B</sup> Insignificant activities, such as building heat and diesel storage tanks

Detailed calculations have been provided in the permit application. The Department has reviewed these calculations and believes they accurately represent the proposed facility operations. Table 2 details how the facility total PTE triggers PSD pollutants for all listed pollutants under either the PSD major source thresholds or under Significant Emissions Rate (SER) thresholds.

Table 2 - PSD Major Source Threshold Analysis. All units are in tpy.

<b>Emission Unit Description</b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>2</sub></b>	<b>VOCs</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>H<sub>2</sub>SO<sub>4</sub></b>
Facility Total	1,022.8	614.5	65.4	416.2	487.9	487.8	487.8	99.5
PSD Major Source Thresholds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSD Major Source Triggered	Yes	Yes	No	Yes	Yes	Yes	Yes	No
PSD SER	100	40	40	40	25	15	10	7
PSD SER Triggered	N/A	N/A	Yes	N/A	N/A	N/A	N/A	Yes
Project PSD Pollutant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### **Rules Analysis - Potentially Applicable Rules and Expected Compliance Status**

#### **A. NDAC 33.1-15-01 – General Provisions:**

Multiple topics are included in the General Provisions chapter: entry onto premises - authority, variances, circumvention, severability, land use plans and zoning regulations (only to provide air quality information), measurement of air contaminants, shutdown and malfunction of an installation - requirements for notification, time schedule for compliance, prohibition of air pollution, confidentiality of records, enforcement, and compliance certifications.

#### **Applicability and Expected Compliance**

Based on the review of the information provided, the facility will comply with all applicable sections of this rule.

#### **B. NDAC 33.1-15-02 – Ambient Air Quality Standards:**

The facility must comply with the North Dakota and Federal Ambient Air Quality Standards (AAQS) and the “Criteria Pollutant Modeling Requirements for a Permit to Construct” guidelines<sup>1</sup>.

#### **Applicability and Expected Compliance**

The facility triggers the PSD program emissions thresholds which require air quality modeling. Therefore, preconstruction air quality modeling for this facility was required and completed. See Section O for discussion on PSD. Preconstruction air quality modeling was completed for PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>2</sub>, and SO<sub>2</sub> to demonstrate compliance with Class II AAQS and PSD increment standards.

In addition, due to the project’s proximity<sup>2</sup> to Class I areas in North Dakota (Theodore Roosevelt National Park and Lostwood Wilderness Area) and Montana (Medicine Lake Wilderness Area and Fort Peck Reservation), modeling was conducted to demonstrate compliance with Class I impact thresholds. The analysis evaluated four key impacts for each Class I area: ambient air quality, visibility, ozone, and deposition of nitrogen and sulfur. The Department engaged with the affected Federal Land Managers (FLMs), which included the National Park Service (NPS) and US Fish and Wildlife Service (USFWS), as required by Section 0 and 40 CFR 52.21(p), to perform a visibility analysis to determine any expected adverse impacts on visibility in the Federal Class I areas.<sup>3</sup>

The results of preconstruction modeling demonstrate that the potential emissions from the facility are not expected to cause or contribute to an exceedance of Class I and Class II

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<sup>1</sup> See October 6, 2014, Criteria Pollutant Modeling Requirements for a Permit to Construct. Available at: [https://www.deq.nd.gov/publications/AQ/policy/Modeling/Criteria\\_Modeling\\_Memo.pdf](https://www.deq.nd.gov/publications/AQ/policy/Modeling/Criteria_Modeling_Memo.pdf)

<sup>2</sup> Department Guidance specifies Class I areas within 250 kilometers (km) for PSD major sources. See above footnote.

<sup>3</sup> Applicable FLMs reviewed the information provided and did not request additional analysis. See Appendix A, attached to this document.

AAQS. Details regarding the preconstruction permit modeling analysis and results are discussed in the Air Quality Impacts Analysis (AQIA) associated with this permitting action. See “ACP-18273 v1.0\_AQIA” for details.

C. NDAC 33.1-15-03 – Restriction of Emission of Visible Air Contaminants:

This chapter requires all non-flare sources from new facilities to comply with an opacity limit of 20% except for one six-minute period per hour when 40% opacity is permissible. This chapter also requires facility flares to comply with an opacity limit of 20% except for one six-minute period per hour when 60% opacity is permissible. Lastly, this chapter restricts the opacity of fugitive emissions transported off property to 40% except for one six-minute period per hour when 60% opacity is permissible. This chapter also contains exceptions under certain circumstances and provides the method of measurement to determine compliance with the referenced limits.

Applicability and Expected Compliance

Based on Department experience with similar sources and the implementation of best available control technology (BACT) on all emission units, visible air contaminants from the facility are expected to be minimal and able to comply with the 20%/40% opacity limits described above without additional controls.

D. NDAC 33.1-15-04 – Open Burning:

No person may dispose of refuse and other combustible material by open burning, or cause, allow, or permit open burning of refuse and other combustible material, except as provided for in Section 33.1-15-04-02 or 33.1-15-10-02, and no person may conduct, cause, or permit the conduct of a salvage operation by open burning.

Applicability and Expected Compliance

The facility is subject to this chapter and will comply with all open burning regulations.

E. NDAC 33.1-15-05 – Emissions of Particulate Matter Restricted:

This chapter establishes particulate matter emission limits and restrictions for industrial process equipment and fuel burning equipment used for indirect heating.

Applicability and Expected Compliance

Since the fuel-burning equipment used for indirect heating is fired on gaseous fuels, and there is no other industrial process equipment that emit PM, the limits in this chapter do not apply. It should be noted that combustion of gaseous fuels in the units is not expected to exceed the allowable levels established by this chapter.

F. NDAC 33.1-15-06 – Emissions of Sulfur Compounds Restricted:

This chapter applies to any installation in which SO<sub>2</sub> emissions are substantially due to the sulfur content of burned fuel used primarily to produce heat. This chapter is not applicable to installations which are subject to an SO<sub>2</sub> emission limit under NDAC 33.1-15-12 or installations which burn pipeline quality natural gas.

Applicability and Expected Compliance

All of the combustion equipment associated with the project are exempted because they will either burn pipeline quality natural gas (EUs 1-6) or ultra-low sulfur diesel (EUs 7 & 8) with sulfur contents well below the limits established in this chapter.

G. NDAC 33.1-15-07 – Control of Organic Compounds Emissions:

This chapter establishes requirements for the construction of organic compound facilities and the disposal of organic compounds gas and vapor generated as waste resulting from storage, refining, or processing operations.

Applicability and Expected Compliance

The requirements of this chapter are not applicable to the facility since it is not considered an organic compound facility and is not expected to produce any organic compounds in need of proper disposal (e.g., flaring). The facility will conduct periodic leak detection monitoring to limit leaks of pipeline quality natural gas and subsequently lower fuel costs. A written leak detection and repair (LDAR) program will be submitted to the Department for review and approval; see Condition 2.H of ACP-18273 v1.0.

H. NDAC 33.1-15-08 – Control of Air Pollution from Vehicles and Other Internal Combustion Engines:

This chapter restricts the operation of internal combustion engines which emit, from any source, unreasonable and excessive smoke, obnoxious or noxious gas, fumes or vapor. This chapter also prohibits the removal or disabling of motor vehicle pollution control devices.

Applicability and Expected Compliance

The facility engines (EUs 7 & 8) are subject to the requirements of this chapter, opacity requirements under NDAC 33.1-15-03-02, NSPS IIII, and MACT ZZZZ. The facility will also have an on-site fleet of motor vehicles subject to the requirements of this chapter. As a result of expected compliance with these provisions, the engines and motor vehicles are not expected to emit any unreasonable and excessive smoke, obnoxious or noxious gases, fumes, or vapor requiring no additional measures.

I. NDAC 33.1-15-09 – [repealed]

J. NDAC 33.1-15-10 – Control of Pesticides:

This chapter provides restrictions on pesticide use and restrictions on the disposal of surplus pesticides and empty pesticide containers.

*Applicability and Expected Compliance*

The facility is subject to this chapter and is expected to comply with all applicable requirements should pesticides be used.

K. NDAC 33.1-15-11 – Prevention of Air Pollution Emergency Episodes:

This chapter is designed to prevent the excessive buildup of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these air contaminants on human health.

*Applicability and Expected Compliance*

When an air pollution episode is declared by the Department, the facility shall comply with the requirements of this Chapter. As part of the project, the facility will prepare an abatement strategies plan to reduce the emission of air contaminants during periods of an air pollution alert, air pollution warning, and air pollution emergency following NDAC 33.1-15-11 Table 7 for “Other energy and fuel facilities” requirements. The facility shall submit this plan to the Department upon request within 30 days of receipt of such request for review.

L. NDAC 33.1-15-12 – Standards of Performance for New Stationary Sources (40 CFR Part 60):

This chapter adopts most of the NSPS under 40 CFR Part 60 as of July 1, 2019, to which the facility is subject:

Subpart A – General Provisions

Subpart A contains general requirements for plan reviews, notification, recordkeeping, performance tests, reporting, monitoring and general control device requirements.

*Applicability and Expected Compliance*

The facility will comply with the general provisions of Subpart A through submission of timely notifications, performance testing, reporting, and following the general control device and work practice requirements under Subpart A. In addition, any changes to the facility after it is built will be evaluated with respect to this subpart as well as others.

### Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

This subpart details information on the applicability, definitions, standards, compliance, performance test methods, emission monitoring, reporting, and recordkeeping requirements for steam generating units. The subpart applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 19, 1984, and that has a maximum design heat input capacity of greater than 29 megawatts (MW) (100 million British thermal units per hour [MMBtu/h]).

#### *Applicability and Expected Compliance*

The facility auxiliary boiler (EU 3) is subject to Subpart Db since the boiler is rated at 249 MMBtu/hr, and it will provide heat to the turbines when the turbines are not in operation. The boiler is subject to a NO<sub>x</sub> emission limit of 0.20 lb NO<sub>x</sub>/MMBtu from 40 CFR 60.44b(a) for natural gas combustion. The facility will demonstrate compliance with this requirement by complying with the BACT limit of 0.011 lb NO<sub>x</sub>/MMBtu on a 30-day rolling average basis. Compliance demonstration is achieved by equipping and operating a NO<sub>x</sub> CEMS or predictive emission monitoring system (PEMS)<sup>4</sup> on the stack (EP 3). The boiler is not subject to SO<sub>2</sub> requirements since it will burn gaseous fuel below levels outlined in 40 CFR 60.42b(k)(1) and through implementation of BACT. Fuel records shall be maintained to demonstrate the sulfur content is below the standard and in compliance with the BACT limit. The boiler is also not subject to PM requirements since it will burn gaseous fuels per 40 CFR 60.43b(a)-(h).

The duct burners (~1,209 MMBtu/hr, each) associated with the combined cycle turbines are heat recovery steam generating (HRSG) units, but they are exempt from the standards of this subpart since they are regulated with the combined cycle turbines under Subpart KKKK (40 CFR 60.40b(i)).

### Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

This subpart details information on the applicability, definitions, standards, compliance, performance test methods, emission monitoring, reporting, and recordkeeping requirements for small steam generating units. The subpart applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 29 MW (100 MMBtu/h) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

#### *Applicability and Expected Compliance*

The facility natural gas-fired heaters (EUs 4, 5, & 6) are subject to Subpart Dc and will comply by exclusively firing pipeline quality natural gas and maintaining fuel records.

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<sup>4</sup> If a PEMS is used to demonstrate compliance, the requirements of 40 CFR 60.49b(c) shall be followed. All CFR air program regulations are available at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C>



### Subpart IIII – Standards of Performance for Stationary Compressor Ignition Internal Combustion Engines

This subpart applies to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines. It covers provisions and requirements related to emission standards, certification, labeling and recordkeeping, performance tests, monitoring requirements, and compliance with standards and maintenance requirements.

#### *Applicability and Expected Compliance*

The emergency diesel generator (EU 7) has a maximum rating of 5,364 horsepower (hp) and is subject to Subpart IIII. The emergency diesel fire water pump engine (EU 8) has a maximum rating of 455 hp and is subject to Subpart IIII. The facility will comply by purchasing a Tier II emergency generator and pump engine, which will comply with the applicable emission standards from NSPS IIII. Under 40 CFR 60.4207, the engines will burn ULSD to meet fuel requirements. An hour meter will be installed on each engine to track the unit's operation hours. The facility will operate and maintain the engines per manufacturer specifications and comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 60.4214.

### Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

This subpart establishes emission standards (NO<sub>x</sub>, SO<sub>2</sub>) and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

#### *Applicability and Expected Compliance*

The combustion turbines and associated duct burners (EU 1 & 2) are subject to the requirements of Subpart KKKK, which requires the facility to operate and maintain EU 1 and 2, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

Since EU 1 and 2 are new combustion turbines with a heat input of greater than 850 MMBtu/hr (~4,295 MMBtu/hr), Subpart KKKK establishes a NO<sub>x</sub> limit of 15 parts per million (ppm) at 15% oxygen (O<sub>2</sub>) or 0.43 lb/MWh during typical operations. When the turbine is operating at less than 75% of peak load or operating at a temperature of less than 0°F, a NO<sub>x</sub> limit of 96 ppm at 15% oxygen or 4.7 lb/MWh applies. Beyond the Subpart KKKK limit for NO<sub>x</sub>, EUs 1 and 2 are subject to a BACT limit of 2 ppm by volume, dry (ppmvd) at 15% O<sub>2</sub> during all operating conditions (i.e., load and temperature) and with and without duct firing, excluding startup/shutdown. The facility has elected to install NO<sub>x</sub> continuous emission monitor system (CEMS) to demonstrate compliance with the NO<sub>x</sub> limits, shall meet the NO<sub>x</sub> CEMS requirements of 40 CFR 60.4345, and shall follow 40 CFR 60.4350 when identifying excess emissions.

The Subpart KKKK limit for SO<sub>2</sub> is 0.90 lb/MWh gross output or requires the fuel to not contain total potential sulfur in excess of 0.060 lb/MMBtu heat input. EUs 1 and 2 receive pipeline quality natural gas demonstrated not to exceed the potential sulfur limits set forth

in Subpart KKKK and shall maintain records in accordance with 40 CFR 60.4365(a) to demonstrate compliance with the SO<sub>2</sub> requirements. Additionally, EUs 1 and 2 are subject to a BACT limit of 0.5 grains of sulfur per hundred standard cubic feet (gr/100scf), below the subpart standard.<sup>5</sup>

CO emissions from EUs 1 and 2 are required to meet a BACT limit of 1.6 ppmvd @ 15% O<sub>2</sub> with duct firing and 1.5 ppmvd @ 15% O<sub>2</sub> without duct firing, excluding startup/shutdown. While CO emissions are not regulated under Subpart KKKK, it establishes how to determine compliance during operating periods in which multiple emissions standards apply, which is incorporated as the standard for CO emissions limits on EUs 1 and 2. Per 40 CFR 60.4380(b)(3), *“the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.”* See Condition 3.B.1 in ACP-18273 v1.0.

#### Subpart KKKKa – Standards of Performance for Stationary Combustion Turbines

On December 13, 2024, EPA proposed Subpart KKKKa for stationary combustion turbines.<sup>6</sup> On March 25, 2025, EPA reopened the comment period for Subpart KKKKa until April 15, 2025.<sup>7</sup> EPA has yet to take any final action on Subpart KKKKa. Should EPA finalize Subpart KKKKa, the facility may be required to comply with the subpart. That determination will be based on any final regulatory applicability criteria.

#### Subpart TTTTa – Standards of Performance for Greenhouse Gas Emissions for Modified Coal-fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units

Subpart TTTTa establishes emission standards and compliance schedules for the control of greenhouse gas (GHG) emissions from a coal-fired steam generating unit or integrated gasification combined cycle facility (IGCC) that commences modification after May 23, 2023. This subpart also establishes emission standards and compliance schedules for the control of GHG emissions from a stationary combustion turbine that commences construction or reconstruction after May 23, 2023. An affected coal-fired steam generating unit, IGCC, or stationary combustion turbine shall, for the purposes of this subpart, be referred to as an affected electric generating unit (EGU).

#### Applicability and Expected Compliance

On June 17, 2025, EPA proposed the repeal of greenhouse gas emission standards for fossil fuel-fired electric generating units.<sup>8</sup> With the proposed repeal, EPA also proposed, as an

<sup>5</sup> Based on anticipated fuel gas sulfur content, 0.0013 lb SO<sub>2</sub>/MMBtu is the expected emission rate.

<sup>6</sup> See: <https://www.federalregister.gov/documents/2024/12/13/2024-27872/review-of-new-source-performance-standards-for-stationary-combustion-turbines-and-stationary-gas>

<sup>7</sup> See: <https://www.federalregister.gov/documents/2025/03/25/2025-04990/review-of-new-source-performance-standards-for-stationary-combustion-turbines-and-stationary-gas>

<sup>8</sup> See: <https://www.federalregister.gov/documents/2025/06/17/2025-10991/repeal-of-greenhouse-gas-emissions-standards-for-fossil-fuel-fired-electric-generating-units>

alternative, different carbon capture and sequestration/storage (CCS)-based standards for new base load stationary combustion turbines.

Future regulatory applicability of Subpart TTTTa will be based on the outcome of the proposed repeal.

If the proposed repeal is unsuccessful and the alternative CCS-based standards for new base load turbines are also not finalized, the facility is expected to provide additional data addressing permitted operation of the facility.<sup>9</sup>

M. NDAC 33.1-15-13 – Emission Standards for Hazardous Air Pollutants (40 CFR Part 61):

This chapter discusses emission standards for HAPs. It specifically incorporates a majority of the subparts and appendices of the National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 61 as of July 2, 2010.

Applicability and Expected Compliance

The facility does not appear to have any applicable requirements under this chapter.

N. NDAC 33.1-15-14 – Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate:

This chapter designates that federally regulated sources are required to obtain a PTC and a Permit to Operate and comply with specific emission control and air quality standards.

Applicability and Expected Compliance

The facility has submitted an application and met all requirements necessary to obtain a PTC. The facility will be considered a major source under the PSD program and is expected to be a major source of HAPs under 40 CFR Part 63. This source will also be a future major source under the Title V program and must submit a timely initial Title V PTO application within one year of start-up (see Condition 6.F of ACP-18273 v1.0).

The permit must undergo public comment per NDAC 33.1-15-14-02(6)(c), and the public participation procedures under NDAC 33.1-15-15-01.2 shall be followed.

O. NDAC 33.1-15-15 – Prevention of Significant Deterioration of Air Quality (40 CFR 52.21):

This chapter adopts the federal provisions of the PSD program.

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<sup>9</sup> See PSD Air Permit Application for Bison Generation Station from February 10, 2025, Section 4.2.8 Regulatory Review, PDF page 34.

### Applicability and Expected Compliance

This facility is classified as a “major stationary source” under 40 CFR 52.21(b)(1)(i)(a) because it is a “steam electric plant of more than 250 MMBtu/hr”.<sup>10</sup> It is therefore subject to PSD review since emissions of a regulated new source review (NSR) pollutant<sup>11</sup> exceed the threshold of 100 tpy (including fugitive emissions). Table 2 shows the facility total PTE, which is above the PSD threshold for all pollutants except SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub>. SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> are, however, above the SER and are subject to PSD review. As a result, PSD requires the installation of BACT, air quality analysis (i.e. air dispersion modeling), additional impacts analysis, and public involvement. Additionally, based on the location of the facility and proximity to Federal Class I areas, requirements specific to “sources impacting Federal Class I areas” apply.

### BACT Review

The facility submitted a BACT analysis supporting the control equipment proposed for the facility on the emission sources listed in Table 1-1 of ACP-18273 v1.0. The Department completed a detailed review of the proposed BACT limits and agrees with the information provided.<sup>12</sup> A summary of the information relevant to BACT is provided below.

A BACT analysis was completed for the species of NO<sub>x</sub>, SO<sub>2</sub>, CO, particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>), VOC, H<sub>2</sub>SO<sub>4</sub> and greenhouse gases (GHGs). Table 3 lists all the equipment and NSR pollutants which were included in the BACT analysis.

*Table 3 – Summary of Emission Units and Pollutants Subject to BACT*

<b>Emission Unit Description</b>	<b>NSR Pollutants Affected</b>
Combined cycle combustion turbine #1 & #2 with duct burner	NO <sub>x</sub> , SO <sub>2</sub> , PM/PM <sub>10</sub> /PM <sub>2.5</sub> , CO, VOC, H <sub>2</sub> SO <sub>4</sub> , GHG
Natural gas-fired auxiliary boiler	NO <sub>x</sub> , SO <sub>2</sub> , PM/PM <sub>10</sub> /PM <sub>2.5</sub> , CO, VOC, H <sub>2</sub> SO <sub>4</sub> , GHG
Natural gas-fired heater #1, #2, & #3	NO <sub>x</sub> , SO <sub>2</sub> , PM/PM <sub>10</sub> /PM <sub>2.5</sub> , CO, VOC, H <sub>2</sub> SO <sub>4</sub> , GHG
Diesel-fired emergency generator	NO <sub>x</sub> , SO <sub>2</sub> , PM/PM <sub>10</sub> /PM <sub>2.5</sub> , CO, VOC, H <sub>2</sub> SO <sub>4</sub> , GHG
Diesel-fired emergency fire pump	NO <sub>x</sub> , SO <sub>2</sub> , PM/PM <sub>10</sub> /PM <sub>2.5</sub> , CO, VOC, H <sub>2</sub> SO <sub>4</sub> , GHG
Piping fugitives (natural gas components)	VOC, GHG
Haul roads	PM/PM <sub>10</sub> /PM <sub>2.5</sub>

The submitted BACT analysis for the above units was reviewed and approved by the Department. BACT emissions limits are listed in Table 3-1 of ACP-18273 v1.0.

<sup>10</sup> The combined cycle duct burners are considered heat recovery steam generating units and are each rated at 1,208 MMBtu/hr.

<sup>11</sup> See 40 CFR 52.21(b)(50)

<sup>12</sup> See PSD Air Permit Application for Bison Generation Station from February 10, 2025, Section 5.0 Best Available Control Technology Analysis, (PDF pages 39-96)

### Ambient Air Analysis

An ambient air quality analysis was completed to demonstrate that the facility's potential emissions will not cause or contribute to a violation of any applicable AAQS or PSD increment.<sup>13</sup> The Department has reviewed the air quality analysis and completed an independent analysis to verify the results. See Section B and "ACP-18273v1.0\_AQIA" for details.

### Additional Impacts Analysis

An additional impacts analysis was completed to assess the impacts of air, ground, and water pollution on soils, vegetation, and visibility caused by any increase in emissions of any regulated pollutant from the facility, and from associated growth. Associated growth refers to industrial, commercial, and residential growth that will occur in the area due to the source. The Department has reviewed the additional impacts analysis included in the application and believes it accurately assesses that there are no unacceptable expected impacts associated with the facility.<sup>14</sup>

### Sources Impacting Federal Class I Areas – Additional Requirements

See Section B for explanation on applicability of modeling requirements. The Class I areas included in the analysis are: Theodore Roosevelt National Park North Unit which is approximately 78 km from the facility; Lostwood Wilderness Area which is approximately 73 km from the facility; Fort Peck Indian Reservation which is approximately 95 km from the facility; and Medicine Lake National Wildlife Refuge which is approximately 76 km from the facility.

Expected impacts on ambient air quality, visibility, and deposition of nitrogen and sulfur were determined using CALPUFF since it is the preferred model for sources greater than 50 km away. The modeling confirmed the facility is not expected to cause or contribute to a violation of the Class I ambient standards and will not exceed any applicable air quality related value (AQRV) screening thresholds. A summary is presented in Section 7 of ACP-18273 v1.0\_AQIA.<sup>15,16</sup>

### Public Participation

The permit must undergo public comment per NDAC 33.1-15-14-02(6)(c) and NDAC 33.1-15-15. See "Summary:" section for details on the public comment period.

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<sup>13</sup> See PSD Air Permit Application for Bison Generation Station from February 10, 2025, Section 6.0 Air Dispersion Modeling, (PDF page 97-116)

<sup>14</sup> See PSD Air Permit Application for Bison Generation Station from February 10, 2025, Section 7.0 Additional Impacts Analysis, (PDF page 117-122) and PSD Class I Visibility and Deposition Modeling Report for Bison Generation Station from June 2025, Sections 5 and 6, (PDF page 15-19)

<sup>15</sup> See PSD Class I Increment Modeling Report for Basin Bison Generation Station from June 2025, Section 6, (PDF page 16-17)

<sup>16</sup> See PSD Class I Visibility and Deposition Modeling Report for Bison Generation Station from June 2025, Sections 5 and 6, (PDF page 15-19)

P. NDAC 33.1-15-16 – Restriction of Odorous Air Contaminants:

This chapter restricts the discharges of objectionable odorous air contaminants which measure seven odor concentration units or greater outside the property boundary. The emission of hydrogen sulfide is also addressed with strict concentration limitations. The chapter also establishes the method of measurement using certified inspectors, scentometers, and other approved instruments.

*Applicability and Expected Compliance*

Based on Department experience with sources having similar emission units, processes, and low hydrogen sulfide concentrations, the facility is expected to comply with this chapter with no additional controls.

Q. NDAC 33.1-15-17 – Restriction of Fugitive Emissions:

This chapter restricts fugitive emissions from particulate matter or other visible air contaminants and gaseous emissions that would violate Chapter 2 (ambient air quality standards), Chapter 15 (PSD), Chapter 16 (odor), or Chapter 19 (visibility).

*Applicability and Expected Compliance*

The facility will be required to take reasonable precautions to prevent fugitive emissions in violation of the aforementioned NDAC chapters: PM sources are regulated by BACT, gaseous fugitive emission sources will follow a LDAR (AVO) program and are regulated by BACT, and haul roads at the facility will be paved and will follow a fugitive dust control plan to control emissions of PM.

R. NDAC 33.1-15-18 – Stack Heights:

This chapter restricts the use of stack heights above good engineering practices (GEP). The chapter primarily adopts federal regulations listed under 40 CFR 51.100(ii). This chapter also restricts the use of dispersion techniques to affect the concentration of a pollutant in the ambient air. Demonstrations of good engineering practice stack heights must be made available for review.

*Applicability and Expected Compliance*

The proposed stacks at the facility do not exceed GEP and will not use dispersion techniques that negatively affect the pollutant concentration in the ambient air. The required stack heights at the facility are listed in Condition 5.C of ACP-18273 v1.0.

S. NDAC 33.1-15-19 – Visibility Protection:

This chapter outlines regulations regarding visibility protection and applies to new major stationary sources as defined in Section 33.1-15-19-01. It contains provisions regarding visibility impact analysis, visibility models, notification requirements for permit applications, review by federal land managers, permit issuance criteria, and visibility monitoring.

*Applicability and Expected Compliance*

The facility is a new major stationary source and is therefore subject to the requirements of this chapter. The Class I areas included in the analysis are detailed in Section O and the visibility modeling results are detailed in ACP-18273 v1.0\_AQIA. The visibility modeling results demonstrated that expected impacts to each Class I area were below FLM thresholds, meaning there is no expected adverse impact to visibility due to this facility. Representatives from the National Park Service and US Fish and Wildlife Service did not request additional analysis or review.<sup>3</sup>

T. NDAC 33.1-15-20 – Control of Emissions from Oil and Gas Well Production Facilities:

This chapter applies to any oil or gas well facility which emits air contaminants to the atmosphere.

*Applicability and Expected Compliance*

The facility is not an oil or gas well facility and is therefore not subject to the requirements of this chapter.

U. NDAC 33.1-15-21 – Acid Rain Program:

This chapter adopts the acid rain provisions under 40 CFR Parts 72, 75, & 76.

*Applicability and Expected Compliance*

EUs 1 and 2 will be considered affected units and will be subject to the acid rain provisions. The facility will meet the Acid Rain Permit application requirements once a facility identification number is established and the ability to submit an application becomes available. The facility is required to submit the application at least 24 months prior to operation of EUs 1 and 2.

V. NDAC 33.1-15-22 – Emissions Standards for Hazardous Air Pollutants for Source Categories (40 CFR Part 63 or MACT):

This chapter adopts most of the NESHAP for Source Categories under 40 CFR 63. These standards typically apply to major sources of air pollution that are in a regulated source category. In addition to the major source requirements, some of the regulations have “area source” standards (for non-major sources). Some of the area source standards have not been adopted by the Department and compliance will be determined by the United States Environmental Protection Agency.

### Applicability

The facility is expected to be a major source of HAPs with potential HAP emissions greater than 10 tpy of any single HAP and greater than 25 tpy for combined HAP<sup>17</sup>. N-hexane is the single largest HAP, with a PTE of approximately 20.2 tpy.<sup>18</sup> The second largest HAP is formaldehyde, with a PTE of approximately 8.4 tpy. N-hexane accounts for about 50% of total facility HAP PTE, which is approximately 41 tpy. These emissions are based on AP-42 emission factors and may not be representative of actual emissions.

### MACT A – General Provisions

MACT A contains general requirements for prohibited activities and circumvention, preconstruction review and notification, maintenance, performance tests, monitoring, recordkeeping, reporting, and control device work practice.

### Applicability and Expected Compliance

The facility will comply with the general provisions of MACT A through submission of timely notifications, performance testing, monitoring, recordkeeping, reporting, and following the control device work practice requirements.

### MACT YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

MACT YYYY establishes national emission and operating limitations for HAP emissions from stationary combustion turbines located at major sources of HAP emissions and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

### Applicability and Expected Compliance

The combustion turbines (EUs 1 & 2) are subject to the requirements of MACT YYYY. The duct burners are considered steam generating units and are not subject. In some cases, it may be difficult to separately monitor emissions from the turbine and duct burner, so sources are allowed to meet the required emission limitations with their duct burners in operation.<sup>19</sup>

EUs 1 and 2 will be required to limit the formaldehyde emissions to 91 parts per billion by volume (ppbv) at 15% O<sub>2</sub>, except during start-up. To demonstrate continued compliance with the formaldehyde limit, initial and annual compliance testing in accordance with 40 CFR 63.6120 and Table 3 of MACT YYYY is required. Since the turbines at the facility use an oxidation catalyst, they are required to maintain a 4-hour catalyst temperature within the target range suggested by the catalyst manufacture (not required during start-up).

---

<sup>17</sup> 40 CFR 63.2 “Major Source”

<sup>18</sup> N-hexane potential emissions are largely from fuel combustion. N-hexane emissions from fuel combustion were calculated using an emission factor from AP-42 Chapter 1.4, Table 1.4-3, which has an emission factor rating of “E”, which is poor.

<sup>19</sup> See 40 CFR 63.6092



MACT ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

MACT ZZZZ establishes national emission and operating limitations for HAP emissions from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

*Applicability and Expected Compliance*

The facility has engines (EUs 7 & 8) that are subject to the requirements of MACT ZZZZ which are met by complying with the requirements of NSPS IIII.

MACT DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

MACT DDDDD applies to major sources of HAPs and establishes emission limitations, work practice standards, and requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards for boilers and process heaters.

*Applicability and Expected Compliance*

The facility has an auxiliary boiler (EU 3) and process heaters (EUs 4, 5, & 6) subject to MACT DDDDD. These emission units are subject to the work practice standards, annual tune-ups, and burner inspection requirements of 40 CFR 63.7500. Since the boilers and heaters subject to this subpart are units designed to burn gas 1 subcategory<sup>20</sup> fuel, they are not subject to any pollutant-specific emission limits.

W. NDAC 33.1-15-23 – Fees:

This chapter requires a filing fee of \$325 for PTC applications, plus any additional fees based on actual processing costs. The additional fees based on processing costs will be assessed upon issuance of the draft PTC. The annual operating permit fee is also applicable. The applicant has paid the \$325 filing fee and will be required to pay the additional fees associated with PTC processing.

X. NDAC 33.1-15-24 – Standards for Lead-Based Paint Activities:

The facility will not perform any lead-based painting and is therefore not subject to this chapter.

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<sup>20</sup> 40 CFR 63.7575 “Unit designed to burn gas 1 subcategory”

Y. NDAC 33.1-15-25 – Regional Haze Requirements:

This chapter is specific to existing stationary sources or groups of sources which have the potential to “contribute to visibility impairment” as defined in NDAC 33.1-15-25-01(2). Existing stationary sources or groups of sources determined to contribute to visibility impairment may be required to implement emissions reduction measures to help the Department make reasonable progress toward North Dakota’s reasonable progress goals established in accordance with 40 CFR 51.308.

*Applicability and Expected Compliance*

The facility is a new major stationary source and is therefore not applicable to this chapter. See Section 0 for visibility discussion.

**Summary:**

A complete review of the proposed project indicates that the facility is expected to comply with the applicable federal and state air pollution rules and regulations. The Department will make a final recommendation on the issuance of a Permit to Construct for the Bison Generation Station following completion of a 30-day public comment period. The public comment period will run from November 22, 2025, through December 22, 2025.

See the notice of intent to issue an air pollution control PTC associated with this proposed permit issuance for information regarding the public comment process and details associated with the tentatively scheduled public information meeting and hearing.

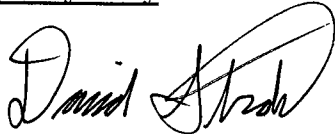
**Update post comment period:**

No comments were received during the public comment period and no request for a public hearing was made. The Department recommends issuance of a Permit to Construct for the Bison Generation Station.

**Date of Draft Analysis:** November 14, 2025

**Date of Final Analysis:** December 29, 2025

**Analysis By:**

A handwritten signature in black ink, appearing to read "David Stroh", with a large, sweeping loop at the end.

David Stroh  
Permit Program Manager  
Division of Air Quality

DES:

Enc:

Appendix A – FLM Communication

## Appendix A – FLM communications

**From:** [Allen, Tim](#)  
**To:** [Thorton, Rhannon T.](#); [Pohlman, David C.](#); [Salazer, Holly](#); [Barna, Michael](#)  
**Cc:** [Stroh, David E.](#); [Erin Dukart](#); [Kumar, Sankalp](#)  
**Subject:** Re: [EXTERNAL] Notification of Class I PSD Modeling Protocols - North Dakota  
**Date:** Thursday, January 23, 2025 6:09:04 PM  
**Attachments:** [image001.png](#)

---

**\*\*\*\*\* CAUTION:** This email originated from an outside source. Do not click links or open attachments unless you know they are safe. **\*\*\*\*\***

Hi Rhannon,

I received a message from the NPS asking me to respond to this. NPS and FWS may elect to combine comments in the future as we are here but please continue to check with both Agencies as we move forward.

The protocol looks good and is quite comprehensive. Just a couple thoughts:

1. Please add a few (3) 12km grids on the East and South border of the domain. I would like to ensure that wind shifts will result in the proper reverse flow during the simulations.
2. Normally, I do not ask for or allow speciation or particle size distributions for this type of source. I am not convinced that Calpuff is detailed enough to properly resolve those entries.

In past cases, the NPS has used these enhancements. Section 3 of the protocol discusses this feature but does not offer sufficient citation on how the speciation and size distribution values were justified to this source. Please provide additional information or stay with the default entries provided with the Calpuff model. Don Shepard of the NPS may have know of references to assist you.

3. Please verify how the MMIF converter was used to process WRF data. A sample of an actual input file would be sufficient.

Thank you,

Tim Allen  
USFWS

---

**From:** Thorton, Rhannon T. <rThorton@nd.gov>  
**Sent:** Wednesday, January 15, 2025 10:57 AM  
**To:** Pohlman, David C. <David\_Pohlman@nps.gov>; Salazer, Holly <Holly\_Salazer@nps.gov>; Allen,

Tim <tim\_allen@fws.gov>; Barna, Michael <Mike\_Barna@nps.gov>

**Cc:** Stroh, David E. <deStroh@nd.gov>; Erin Dukart <EDukart@bepec.com>; Kumar, Sankalp <kumarsankalp@nd.gov>

**Subject:** [EXTERNAL] Notification of Class I PSD Modeling Protocols - North Dakota

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Good morning,

In accordance with 40 CFR 51.307(a)(2), NDDEQ is providing notification of the receipt of Class I PSD modeling protocols for a potential major source located in Williams County, North Dakota. These protocols have been submitted on behalf of Basin Electric Power Cooperative and outline the proposed methodologies that will be used for conducting the PSD Class I Increment and PSD Class I visibility and deposition analyses. Please note that a permit application for this project has not been received at this time.

Please forward this information to the appropriate individuals within your organizations. If you identify any deficiencies in the modeling protocol or have any concerns, please provide feedback at your earliest convenience.

Regards,

**Rhannon Thorton**

*Environmental Scientist*

701-328-5271 • [rthorton@nd.gov](mailto:rthorton@nd.gov)



4201 Normandy St. • Bismarck, ND 58503

**From:** [Allen, Tim](#)  
**To:** [Thorton, Rhannon T.](#); [Pohlman, David C.](#); [Salazer, Holly](#); [Barna, Michael](#); [Shepherd, Don](#)  
**Cc:** [Stroh, David E.](#); [Kumar, Sankalp](#); [Melder, Ethan](#); [Erin Dukart](#)  
**Subject:** Re: [EXTERNAL] Notification of Proposed Major Source - North Dakota  
**Date:** Tuesday, March 11, 2025 9:30:06 AM  
**Attachments:** [image001.png](#)

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Thank you, Rhannon.

I have the documents.

Tim Allen

---

**From:** Thorton, Rhannon T. <rThorton@nd.gov>  
**Sent:** Tuesday, March 11, 2025 8:21 AM  
**To:** Pohlman, David C. <David\_Pohlman@nps.gov>; Salazer, Holly <Holly\_Salazer@nps.gov>; Allen, Tim <tim\_allen@fws.gov>; Barna, Michael <Mike\_Barna@nps.gov>; Shepherd, Don <Don\_Shepherd@nps.gov>  
**Cc:** Stroh, David E. <deStroh@nd.gov>; Kumar, Sankalp <kumarsankalp@nd.gov>; Melder, Ethan <emelder@nd.gov>; Erin Dukart <EDukart@bepc.com>  
**Subject:** [EXTERNAL] Notification of Proposed Major Source - North Dakota

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Good morning,

In accordance with 40 CFR 51.307(a)(1), NDDEQ is providing notification of a proposed new major stationary source located in Williams County, North Dakota. I have attached the information received to date regarding a permit to construct application for the Basin Electric Bison Generation Station, also available at:

<https://ceris.deq.nd.gov/ext/nsite/map/results/detail/-7823729787464021703/documents>

Note: The Class I CALPUFF analysis is taking the previous NPS and FWS requests received from Tim Allen on 1/23/2025 into consideration and was not submitted with the application (see attached email from Tim). I will provide notification once that analysis is submitted. We would be happy to set up a meeting at that time if you would like to discuss those results.

Please forward this information to all other appropriate individuals within your organizations.

Regards,

Rhannon Thorton

*Environmental Scientist*

701-328-5271 • [rthorton@nd.gov](mailto:rthorton@nd.gov)



4201 Normandy St. • Bismarck, ND 58503



**From:** [Barna, Michael](#)  
**To:** [Thorton, Rhannon T.](#); [Pohlman, David C.](#); [Salazer, Holly](#); [Allen, Tim](#); [Shepherd, Don](#)  
**Cc:** [Stroh, David E.](#); [Kumar, Sankalp](#); [Melder, Ethan](#); [Erin Dukart](#)  
**Subject:** RE: [EXTERNAL] Notification of Proposed Major Source - North Dakota  
**Date:** Tuesday, March 11, 2025 9:42:44 AM  
**Attachments:** [image001.png](#)

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Thanks Rhannon – got them.

-Mike

Michael G. Barna, PhD

*Air Resources Division, National Park Service*

[mike\\_barna@nps.gov](mailto:mike_barna@nps.gov), (970) 491-8692



---

**From:** Thorton, Rhannon T. <rThorton@nd.gov>  
**Sent:** Tuesday, March 11, 2025 8:21 AM  
**To:** Pohlman, David C. <David\_Pohlman@nps.gov>; Salazer, Holly <Holly\_Salazer@nps.gov>; Allen, Tim <tim\_allen@fws.gov>; Barna, Michael <Mike\_Barna@nps.gov>; Shepherd, Don <Don\_Shepherd@nps.gov>  
**Cc:** Stroh, David E. <deStroh@nd.gov>; Kumar, Sankalp <kumarsankalp@nd.gov>; Melder, Ethan <emelder@nd.gov>; Erin Dukart <EDukart@bepc.com>  
**Subject:** [EXTERNAL] Notification of Proposed Major Source - North Dakota

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Good morning,

In accordance with 40 CFR 51.307(a)(1), NDDEQ is providing notification of a proposed new major

stationary source located in Williams County, North Dakota. I have attached the information received to date regarding a permit to construct application for the Basin Electric Bison Generation Station, also available at:

<https://ceris.deq.nd.gov/ext/nsite/map/results/detail/-7823729787464021703/documents>

Note: The Class I CALPUFF analysis is taking the previous NPS and FWS requests received from Tim Allen on 1/23/2025 into consideration and was not submitted with the application (see attached email from Tim). I will provide notification once that analysis is submitted. We would be happy to set up a meeting at that time if you would like to discuss those results.

Please forward this information to all other appropriate individuals within your organizations.

Regards,

**Rhannon Thorton**

*Environmental Scientist*

701-328-5271 • [rthorton@nd.gov](mailto:rthorton@nd.gov)



4201 Normandy St. • Bismarck, ND 58503

**From:** [Allen, Tim](#)  
**To:** [Thorton, Rhannon T.](#); [Salazer, Holly](#); [Barna, Michael](#); [Shepherd, Don](#); [He, Li-Ming](#)  
**Cc:** [Stroh, David E.](#); [Melder, Ethan](#); [Erin Dukart](#); [Nelson, Minda](#); [Ming, Jaron E](#)  
**Subject:** Re: [EXTERNAL] Notification of Updates to Proposed Major Source - North Dakota  
**Date:** Monday, July 21, 2025 10:03:07 AM  
**Attachments:** [image001.png](#)

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Hi Rhannon et al.,

After review of the provided information for the Bison Electric modification project in North Dakota, the USFWS will not request additional air quality analysis or review. If significant modifications to the project occur, please submit those for further review. Please continue to include USFWS on future calls, meetings. or briefings if they occur. And, continue to work with NPS and USDA/FS with additional questions regarding impacts to Class I areas they manage.

Thank you for the information and opportunity to comment on this project,  
Tim Allen

---

**From:** Thorton, Rhannon T. <rThorton@nd.gov>  
**Sent:** Wednesday, July 2, 2025 1:04 PM  
**To:** Salazer, Holly <Holly\_Salazer@nps.gov>; Allen, Tim <tim\_allen@fws.gov>; Barna, Michael <Mike\_Barna@nps.gov>; Shepherd, Don <Don\_Shepherd@nps.gov>; He, Li-Ming <li-ming\_he@nps.gov>  
**Cc:** Stroh, David E. <deStroh@nd.gov>; Melder, Ethan <emelder@nd.gov>; Erin Dukart <edukart@becpc.com>; Nelson, Minda <mnelson@burnsmcd.com>  
**Subject:** [EXTERNAL] Notification of Updates to Proposed Major Source - North Dakota

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Good afternoon,

In accordance with 40 CFR 51.307(a)(1), NDDEQ is providing notification of the receipt of documents pertaining to the proposed new major stationary source located in Williams County, North Dakota. I have attached the PSD Class I Visibility and Deposition Modeling Report along with application amendment documents submitted for the Basin Electric Bison Generation Station. These documents, along with the original application and NPS and FWS requests, are available at: <https://ceris.deq.nd.gov/ext/nsite/map/results/detail/-7823729787464021703/documents>

Note: The Class I CALPUFF analysis files are too large for our CERIS system but are available upon request.

Please forward this information to all other appropriate individuals within your organizations.

Regards,

**Rhannon Thorton**

*Environmental Scientist*

701-328-5271 • [rthorton@nd.gov](mailto:rthorton@nd.gov)



4201 Normandy St. • Bismarck, ND 58503

---

**From:** Thorton, Rhannon T.

**Sent:** Tuesday, March 11, 2025 9:21 AM

**To:** Pohlman, David C. <David\_Pohlman@nps.gov>; Holly Salazer <Holly\_Salazer@nps.gov>; Tim\_Allen@fws.gov; mike\_barna@nps.gov; Shepherd, Don <Don\_Shepherd@nps.gov>

**Cc:** Stroh, David E. <deStroh@nd.gov>; Kumar, Sankalp <kumarsankalp@nd.gov>; Melder, Ethan <emelder@nd.gov>; Erin Dukart <EDukart@bepc.com>

**Subject:** Notification of Proposed Major Source - North Dakota

Good morning,

In accordance with 40 CFR 51.307(a)(1), NDDEQ is providing notification of a proposed new major stationary source located in Williams County, North Dakota. I have attached the information received to date regarding a permit to construct application for the Basin Electric Bison Generation Station, also available at:

<https://ceris.deq.nd.gov/ext/nsite/map/results/detail/-7823729787464021703/documents>

Note: The Class I CALPUFF analysis is taking the previous NPS and FWS requests received from Tim Allen on 1/23/2025 into consideration and was not submitted with the application (see attached email from Tim). I will provide notification once that analysis is submitted. We would be happy to set up a meeting at that time if you would like to discuss those results.

Please forward this information to all other appropriate individuals within your organizations.

Regards,

**Rhannon Thorton**

*Environmental Scientist*

701-328-5271 • [rthorton@nd.gov](mailto:rthorton@nd.gov)

**From:** [Shepherd, Don](#)  
**To:** [Thorton, Rhannon T.](#); [Salazer, Holly](#); [Allen, Tim](#); [Barna, Michael](#); [He, Li-Ming](#); [Martin, Danny J](#)  
**Cc:** [Stroh, David E.](#); [Melder, Ethan](#); [Erin Dukart](#); [Nelson, Minda](#)  
**Subject:** Re: [EXTERNAL] Notification of Updates to Proposed Major Source - North Dakota  
**Date:** Monday, July 28, 2025 7:20:38 AM  
**Attachments:** [image001.png](#)

---

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Hello Rhannon,

After review of the provided information for the Basin Electric Bison Generating Station project in North Dakota, the NPS does not request additional Class I air quality analysis. If significant modifications to the project occur, please submit those for further review. Please continue to include NPS on future calls, meetings, or briefings if they occur, and please provide all relevant information, including the staff analyses and draft permit, as required by 40CFR51.301.

Thank you for the information and opportunity to comment on this project,

---

**From:** Thorton, Rhannon T. <rThorton@nd.gov>  
**Sent:** Wednesday, July 2, 2025 1:04 PM  
**To:** Salazer, Holly <Holly\_Salazer@nps.gov>; Allen, Tim <tim\_allen@fws.gov>; Barna, Michael <Mike\_Barna@nps.gov>; Shepherd, Don <Don\_Shepherd@nps.gov>; He, Li-Ming <li-ming\_he@nps.gov>  
**Cc:** Stroh, David E. <deStroh@nd.gov>; Melder, Ethan <emelder@nd.gov>; Erin Dukart <edukart@becpc.com>; Nelson, Minda <mnelson@burnsmcd.com>  
**Subject:** [EXTERNAL] Notification of Updates to Proposed Major Source - North Dakota

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Good afternoon,

In accordance with 40 CFR 51.307(a)(1), NDDEQ is providing notification of the receipt of documents pertaining to the proposed new major stationary source located in Williams County, North Dakota. I have attached the PSD Class I Visibility and Deposition Modeling Report along with application amendment documents submitted for the Basin Electric Bison Generation Station. These documents, along with the original application and NPS and FWS requests, are available at: <https://ceris.deq.nd.gov/ext/nsite/map/results/detail/-7823729787464021703/documents>

Note: The Class I CALPUFF analysis files are too large for our CERIS system but are available upon request.

Please forward this information to all other appropriate individuals within your organizations.

Regards,

**Rhannon Thorton**

*Environmental Scientist*

701-328-5271 • [rthorton@nd.gov](mailto:rthorton@nd.gov)



4201 Normandy St. • Bismarck, ND 58503

---

**From:** Thorton, Rhannon T.

**Sent:** Tuesday, March 11, 2025 9:21 AM

**To:** Pohlman, David C. <David\_Pohlman@nps.gov>; Holly Salazer <Holly\_Salazer@nps.gov>; Tim\_Allen@fws.gov; mike\_barna@nps.gov; Shepherd, Don <Don\_Shepherd@nps.gov>

**Cc:** Stroh, David E. <deStroh@nd.gov>; Kumar, Sankalp <kumarsankalp@nd.gov>; Melder, Ethan <emelder@nd.gov>; Erin Dukart <EDukart@bepc.com>

**Subject:** Notification of Proposed Major Source - North Dakota

Good morning,

In accordance with 40 CFR 51.307(a)(1), NDDEQ is providing notification of a proposed new major stationary source located in Williams County, North Dakota. I have attached the information received to date regarding a permit to construct application for the Basin Electric Bison Generation Station, also available at:

<https://ceris.deq.nd.gov/ext/nsite/map/results/detail/-7823729787464021703/documents>

Note: The Class I CALPUFF analysis is taking the previous NPS and FWS requests received from Tim Allen on 1/23/2025 into consideration and was not submitted with the application (see attached email from Tim). I will provide notification once that analysis is submitted. We would be happy to set up a meeting at that time if you would like to discuss those results.

Please forward this information to all other appropriate individuals within your organizations.

Regards,

**Rhannon Thorton**

*Environmental Scientist*

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