MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

Permitting and Compliance Division
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901

Montana-Dakota Utilities Company
Glendive Generating Station
SE ¼ and Lot 4 of Section 15, Township 15 North, Range 55 East in Dawson County
400 North Fourth Street
Bismarck, ND 59330-0201

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		
Ambient Monitoring Required		X	
COMS Required		X	
CEMS or PEMS Required	X		NO_x PEMS
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 – Montana Air Quality Permit (MAQP)	X		MAQP#1551-06
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart GG and Subpart IIII
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63 Subpart ZZZZ
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV	X		Phase II
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

TABLE OF CONTENTS

SECTION I. GENERAL INFORMATION 3

A. PURPOSE 3
B. FACILITY LOCATION 3
C. FACILITY BACKGROUND INFORMATION 3
D. CURRENT PERMIT ACTION 6
E. TAKING AND DAMAGING ANALYSIS 7
F. COMPLIANCE DESIGNATION 7

SECTION II. SUMMARY OF EMISSION UNITS 8

A. FACILITY PROCESS DESCRIPTION 8
B. EMISSION UNITS AND POLLUTION CONTROL DEVICE IDENTIFICATION 8
C. CATEGORICALLY INSIGNIFICANT SOURCES/ACTIVITIES 9

SECTION III. PERMIT CONDITIONS 10

A. EMISSION LIMITS AND STANDARDS 10
B. MONITORING REQUIREMENTS 11
C. TEST METHODS AND PROCEDURES 12
D. RECORDKEEPING REQUIREMENTS 12
E. REPORTING REQUIREMENTS 12
F. PUBLIC NOTICE 12

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS 14

SECTION V. FUTURE PERMIT CONSIDERATIONS 17

A. MACT STANDARDS 17
B. NESHAP STANDARDS 17
C. NSPS STANDARDS 17
D. RISK MANAGEMENT PLAN 17
E. CAM APPLICABILITY 17
F. PSD AND TITLE V GREENHOUSE GAS TAILORING RULE 17

SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the renewal application submitted by Montana-Dakota Utilities Company (Montana-Dakota) on February 26, 2010. The renewal application incorporated information from the original operating permit application submitted to the Department on August 22, 1997; the Acid Rain Phase II permit application submitted by Montana-Dakota and received by the Department on March 9, 2001; Permit #1551-01, issued March 6, 1998; Permit #1551-02, issued April 5, 2000; and Permit #1551-03, issued September 25, 2001; the permit modification request received by the Department on September 3, 2002; administrative amendment requests received on October 15, 2003 and February 9, 2004; permit renewal application received by the Department on March 5, 2004; a permit modification request received by the Department on December 3, 2004; permit modification request received on October 5, 2007; a de minimis notification received January 9, 2008; emitting unit clarification received January 31, 2008; a de minimis notification received May 12, 2008; and a de minimis notification received on March 25, 2011, a renewal application received by the Department on February 5, 2016.

B. Facility Location

Montana-Dakota owns and operates the Glendive Generating Station. This facility is located in the SE ¼ and Lot 4 of Section 15, Township 15 North, Range 55 East, in Dawson County, Montana. Dawson County is designated as an Unclassifiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The Glendive Generating Station is located approximately 4 miles south of Glendive. The generation site is bordered on the West by Marsh Road. All other boundaries are essentially undeveloped. The Yellowstone River is approximately ½ mile west of the site. The surrounding area within one mile of the site is essentially undeveloped except for an occasional single family dwelling.

C. Facility Background Information

Montana Air Quality Permit (MAQP)

On July 1, 1977, Montana-Dakota submitted the original application for construction of Glendive turbine site. This facility was granted a construction permit, Permit #1085, on September 9, 1977. On December 15, 1980, Montana-Dakota requested a modification to the original permit to allow burning of natural gas as a fuel in addition to burning No.2 fuel oil. On March 3, 1981, the Department issued **MAQP #1551** to Montana-Dakota for the continued operation of the turbine.

On January 8, 1998, Montana-Dakota submitted additional information to complete Permit Application #1551-01. As part of this application, Montana-Dakota requested an alteration to increase the hours of operation from 600 hours to 1,050 hours per year. After consultation with

the Department and upon further consideration, Montana-Dakota decided to request an additional increase in the hours of operation and committed to submitting a Title V application within 1 year.

On March 6, 1998, Montana-Dakota was issued **MAQP #1551-01** for the operation of their Glendive turbine site with updated operating parameters. The Title V application was submitted within approximately 6 months of permit issuance of MAQP #1551-01.

On April 5, 2000, Montana-Dakota was issued **MAQP #1551-02** for the addition of fogging and Turbine Ice Peaking Power (TIPP) equipment. The addition of this equipment allowed the combustion turbine to operate more efficiently during periods of warm weather. By adding the new equipment to the facility the actual emissions increased; however, the permitted allowable emissions were not increased.

On March 9, 2001, the Department received the Acid Rain Phase II permit application submitted by Montana-Dakota. The acid rain permit is intended to include the requirements contained in 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78. The Department is issuing this permit in accordance with the EPA guidance issued by the Acid Rain Division in October 1997. The draft acid rain permit was issued March 29, 2002, with the comment period ending April 30, 2002.

On September 25, 2001, Montana-Dakota was issued **MAQP #1551-03**. The alteration included the installation and operation of an additional multi-fuel turbine, rated at 43-MW capacity. The new turbine, designated as Unit 2, has its own 600-horsepower (hp) diesel starting engine and a fuel tank for the starting engine.

On September 3, 2002, Montana-Dakota submitted a request for a modification to MAQP #1551-03. The modification included the installation and operation of a 43-MW General Electric LM-6000 dual fuel turbine instead of a General Electric 43-MW PG6561 dual fuel turbine, which was never installed. **MAQP #1551-04** was issued to Montana-Dakota-Glendive on October 25, 2002.

On December 3, 2004, Montana-Dakota submitted an application for the addition of a 2 MW emergency generator to be available to supply additional peaking capacity during periods of equipment failure, malfunction, or the necessary replacement of equipment to prevent an equipment failure. The generator would also be available to supply an additional peaking capacity of approximately 2 MW. The facility accepted a federally enforceable limit for the generator of 1,000 hours/year to keep emissions below major modification significant emissions thresholds. Therefore, the action was not subject to NSR/PSD review. The permit format, language, and rule references were updated to reflect the Department's current permit format, language, and rule references. **MAQP #1551-05** replaced MAQP #1551-04.

On October 1, 2007 the Department received a request to amend MAQP #1551-05. The letter requested that Section III.A.7 be changed to clarify that 40 CFR 60, Subpart GG is only applicable to Unit 2. No change was made to Section III.A.7 because the condition is clear in requiring Montana-Dakota to comply with all the requirements of 40 CFR 60, Subpart GG, as applicable. In addition, the request noted a number of inaccuracies in the Permit Analysis. The current permit action corrects those inaccuracies.

In addition, the Department received notifications from Montana-Dakota of de minimis actions. First, on November 26, 2007, Montana-Dakota provided notification they would be installing a 60 kilowatt (kW), 94.5 hp diesel-powered generator/engine for an uninterruptible power supply. In the event of a power outage, the generator is used to supply electrical power to the site for normal site functions and so Units 1 and 2 may be started if needed. Second, on May 9, 2007, notification was received for an action to install and operate a natural gas fired liquid fuel heater that will be used to heat No. 2 fuel used in Units 1 and 2. No changes were made to MAQP #1551-06 as a result of these actions, but they were noted in the permit analysis under permitted equipment. **MAQP #1551-06** replaced MAQP #1551-05.

Title V Operating Permit

On August 22, 1997, Montana-Dakota submitted the original Title V Permit Application. **Operating Permit #OP1551-00** was issued effective on October 15, 1999.

On January 16, 2003, **Operating Permit #OP1551-01** was issued to incorporate the second turbine (General Electric LM6000 with Dry Low Emission Burners) at the Montana-Dakota-Glendive facility.

The significant modification application originally included a General Electric model PG6561 dual fuel turbine, but was changed to a General Electric LM6000 with Dry Low Emission Burners in a minor modification request (both modifications are included in this action). Operating Permit #OP1551-01 replaced Operating Permit #OP1551-00.

On December 9, 2003, **Operating Permit #OP1551-02** was issued to update Section V.B.3 of the General Conditions incorporating changes to federal Title V rules 40 CFR 70.6(c)(5)(iii)(B) and 70.6(c)(5)(iii)(C) (incorporated into Montana's Title V rules at ARM 17.8.1213) regarding Title V annual compliance certifications. Operating Permit #OP1551-02 replaced Operating Permit #OP1551-01.

On April 4, 2004, the Department issued **Operating Permit #OP1551-03** to update the responsible official and contact person for the Montana-Dakota-Glendive facility. Operating Permit #OP1551-03 replaced Operating Permit #OP1551-02.

On March 5, 2004, the Department received an application for the renewal of Title V Operating Permit #OP1551-03. The permit modification included the addition of a 2 Megawatt emergency generator to be available for emergency situations as well as additional peaking capacity. **Operating Permit #OP1551-04** replaced Operating Permit #OP1551-03 and was issued on August 26, 2005.

On October 1, 2007, the Department received a request to amend Operating Permit #OP1551-04 to correct a number of inaccuracies in the permit. The inaccuracies include: removing reference of applicability of a Continuous Emission Monitoring System (CEMS) and replacing it with a Predictive Emission Monitoring System (PEMS); removing requirements in Appendix F that are not applicable as Montana-Dakota only operates a PEMS; and removing requirements from Appendix F that are not applicable as Montana-Dakota only burns natural gas and No. 2 fuel oil. The current permit action incorporates these changes.

On January 31, 2008, the Department received clarification from Montana-Dakota regarding storage tanks present at the facility. A tank, approximately 1.5 million gallons, was used on the site from 1979 to 1994. The tank was removed from service and is permanently closed. A second tank, listed in the Operating Permit #OP1551-04 as 75,000 gallons, was put into service in 1994. Montana-Dakota noted field measurements indicate the tank should be listed as 74,000 gallons. The permit action noted the clarification and changed the size of the 74,000 gallon tank.

In addition, the Department received notifications from Montana-Dakota of de minimis actions. First, on November 26, 2007, Montana-Dakota provided notification that a 60 kilowatt (kW), 94.5 horsepower (hp) diesel-powered generator was installed as an uninterruptible power supply. In the event of a power outage, the generator is used to supply electrical power to the site for normal site functions and so Units 1 and 2 may be started if needed. Second, on May 9, 2007, notification was received for an action to install and operate a natural gas fired liquid fuel heater that will be used to heat No. 2 fuel used in Units 1 and 2. These emitting units are considered insignificant and the permit action added the emitting units to the list of insignificant emitting units.

Additionally, on February 13, 2008, the Department notified Montana-Dakota that in the process of incorporating the changes requested above, it became evident Operating Permit #OP1551-04 did not accurately incorporate all applicable requirements and the Department would reopen and revise Operating Permit #OP1551-04. When the draft version of Operating Permit #OP1551-05 was issued, language was included in Section V.E which incorporated changes to Prompt Deviation Reporting requirements that are only applicable to operating permits undergoing renewal. In the Proposed Permit version of Operating Permit #1551-05, the Prompt Deviation Reporting language was changed to the previous language existing in Operating Permit #OP1551-04. **Operating Permit #OP1551-05** replaced Operating Permit #OP1551-04.

On February 26, 2010, the Department received an application for renewal from Montana-Dakota for renewal of Operating Permit #OP1551-05. The renewal application identified changes needed to applicable requirements for reciprocating internal combustion engines existing on site as well as typographical errors in the permit needing revision. During development of the new permit the Department determined that EU004 and EU005 were insignificant emitting units and has updated the permit accordingly. The renewed permit also incorporates updated rule references, current permit language and information included in a de-minimis notification received by the Department on March 25, 2011. The de-minimis request informed the Department that an insignificant emitting unit (IEU006), a 1,250 diesel fuel storage tank, had been added to the facility and that further fuel flexibility for turbines and other emitting units such that No.1 diesel fuel in addition to the currently authorized No.2 diesel fuel was authorized for combustion at the facility. The additional insignificant emitting unit and fuel flexibility have been incorporated into the renewed permit. **Operating Permit #OP1551-06** replaced Operating Permit #OP1551-05.

D. Current Permit Action

On February 5, 2016, the Department received an application for renewal from Montana-Dakota for renewal of Operating Permit #OP1551-06. The renewal application identified changes needed to applicable requirements for reciprocating internal combustion engines existing on site. The renewal application also requested that Insignificant Emitting Unit (IEU)

002 (60 kilowatt emergency plant power supply diesel generator) be removed from the IEU list and relisted as Emitting Unit (EU) 007. The additional EU has been incorporated into the renewed permit. **Operating Permit #OP1551-07** will replace Operating Permit #OP1551-06.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
NA		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
NA		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation

Since Operating Permit #OP1551-06 was issued and effective on August 6, 2011, the Department has conducted eleven compliance actions for the facility including but not limited to nine partial compliance evaluations and two full compliance evaluations (5/17/2012 and 6/6/2014). Montana-Dakota – Glendive Generating Station was found to be in compliance with all applicable requirements during the last full compliance evaluation conducted June 6, 2014.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

The Montana-Dakota Glendive Generating Station is used for electrical power generation, transmission, and distribution. The Standard Industrial Classification (SIC) for this facility is "Electrical Power Generation, Transmission, and Distribution" which has an SIC Code of "4911."

The Glendive combustion turbine (Unit 1) is a General Electric Model MS-6000 dual fuel unit. Name plate rating of the combustion turbine is 34-MW with 38-MW peak capability at optimum conditions. The turbine is capable of maintaining full load using either natural gas or No.1 or No.2 fuel oil. A Detroit Diesel starting motor rated at 600-hp, burning No.1 or No.2 fuel oil, is used for starting the turbine.

The Montana-Dakota combustion turbine (Unit 2) is a General Electric Model LM-6000 dual fuel unit. The turbine, rated at 43-MW capacity, has its own electric starting engine.

The turbines are used to provide electricity during peak electrical demand. These periods are normally short in time duration during summer or winter seasons. The units are capable of sustaining maximum generation for long periods of time when needed.

B. Emission Units and Pollution Control Device Identification

The emission units regulated by Operating Permit #OP1551-05 and the pollution control device utilized by each emission units are summarized in the following table:

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	34-MW General Electric MS-6000 Turbine/Generator Peaking Plant (Natural Gas or No. 2 Fuel Oil)	none
EU002	43-MW General Electric LM-6000 Turbine/Generator Peaking Plant (Natural Gas or No. 2 Fuel Oil)	Dry-Low NO_x combustor
EU003	600-hp Detroit Diesel 7123-7300 Starting Motor	none
EU006	2-MW Emergency Diesel Generator	none
EU007	60 kilowatt emergency plant power supply diesel generator	none

Unit 2 is subject to New Source Performance Standards (NSPS) requirements of 40 CFR Part 60, Subpart GG. The turbine routinely burns natural gas, but has the capability to also burn No. 1 or No. 2 fuel oil. Reciprocating engines on-site, EU003 and EU006 are not subject to 40 CFR 60, Subpart IIII, as they all predate 07/11/2005 construction/modification/reconstruction date listed in 40 CFR 60.4200. EU007 is subject to 40 CFR60, Subpart JJJJ because was constructed after 07/11/2005. EU003, EU006, and EU007 are subject to 40 CFR 63, Subpart ZZZZ as designated under those subparts.

C. Categorically Insignificant Sources/Activities

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by any applicable requirement other than a generally applicable requirement. The list of insignificant emitting units at the Montana-Dakota facility are summarized in the following table.

Insignificant Emissions Unit ID	Description
IEU001	Fugitive emissions from in-plant vehicle traffic
IEU003	Natural gas fired liquid fuel heater
IEU004	74,000 gallon No. 1/No.2 turbine fuel oil storage
IEU005	200 gallon No.1/No.2 turbine starting engine diesel fuel tank
IEU006	1,250 gallon No.1/No.2 emergency generator diesel fuel tank

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

This facility is not subject to PSD regulations. General emission limits apply to the 34-MW General Electric MS-6000. The 43-MW General Electric LM-6000, Unit 2, is subject to the NSPS requirements of 40 CFR Part 60, Subpart GG. Montana-Dakota will primarily use pipeline quality natural gas in Unit 2, but will have the capability to also burn No.2 fuel oil. If No.1 or No.2 fuel oil is burned in Unit 2, the existing 74,000-gallon diesel (No. 2 fuel oil) tank will supply fuel to both Unit 1 and Unit 2. Several of the conditions for both turbines will vary according to the fuel type that is used (refinery quality No.1 or No.2 fuel oil or pipeline quality natural gas). Reciprocating engines on-site are subject to 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ as designated under those subparts.

An opacity limit of 20% is required for the 34-MW General Electric MS-6000, the 43-MW General Electric LM-6000, the 600-hp Detroit Diesel Starting Motors, and the Fuel Oil Storage Tanks. This limit was established through ARM 17.8.304(2) for Visible Air Contaminants. A particulate matter from fuel combustion limit is applicable to the 34-MW General Electric MS-6000, the 43-MW General Electric LM-6000 and the 600-hp Detroit Diesel Starting Motors. The particulate from fuel combustion limit was established through ARM 17.8.309.

Additional limits have been incorporated in the permit for sulfur compounds in fuel (gaseous and liquid). The limits for sulfur compounds in fuel (gaseous) were established through ARM 17.8.322(5) and are applicable to the 34-MW General Electric MS-6000 and the 43-MW General Electric LM-6000 while burning natural gas. The limits for sulfur compounds in fuel (liquid) were established through ARM 17.8.322(4) and are applicable to the 600 Hp Detroit Diesel Starting Motor, the 34-MW General Electric MS-6000, and the 43-MW General Electric LM-6000 while burning No.1 or No.2 fuel oil.

An operational limit has been placed on the 34-MW General Electric MS-6000. The operational limit is dependent upon the type of fuel that is being used. If natural gas is being used exclusively, then the operational limit for the turbine is 2,620 hours per any rolling 12-month time frame. If refinery quality No.1 or No.2 fuel oil is being used exclusively, then the operational limit for the turbine is 1,667 hours per any rolling 12-month time frame. If a combination of pipeline quality natural gas and refinery quality No.1 or No.2 fuel oil are being used, then the operational limit for the turbine will be some amount of time between 1,667 and 2,620 hours per any rolling 12-month time period, depending on how long each fuel type is used.

An operational limit has been placed on the 43-MW General Electric LM-6000. The operational limit is dependent upon the type of fuel that is being used. If natural gas is being used exclusively, then the operational limit for the turbine is 6500 hours per any rolling 12-month time frame. If refinery quality No.1 or No.2 fuel oil is being used exclusively, then the operational limit for the turbine is 3,254 hours per any rolling 12-month time frame. If a combination of pipeline quality natural gas and refinery quality No. 2 fuel oil are being used, then the operational limit for the turbine will be some amount of time between 3,254 and 6,500 hours per any rolling 12-month time period, depending on how long each fuel type is used.

A NO_X emission limit of 225 tons per any rolling 12-month time period has been placed on Unit 1 and its associated startup engine. The total emissions of NO_X are derived through several steps, 1) multiplying the hours of operation of the 34-MW General Electric turbine while using natural gas by the most recent source test on file with the Department of the 34-MW General Electric turbine while burning natural gas (results will be in lb/yr); 2) multiplying the hours of operation of the 34-MW General Electric turbine while using No.1 or No.2 fuel oil by the most recent source test on file with the Department of the 34-MW General Electric turbine while burning No.1 or No.2 fuel oil (results will be in lb/yr); 3) add the results of 1) and 2) and divide by 2000 to convert to ton/yr; 4) add the total NO_X from the 34-MW General Electric to any other NO_X emissions from the site and compare the result with the 225 ton per any rolling 12-month time period limit.

A NO_X emissions limit of 247 tons per rolling 12-month period has been placed on Unit 2 when combusting pipeline quality natural gas, No.1 or No.2 fuel oil, or a combination of pipeline quality natural gas and No.1 or No.2 fuel oil. Any calculations used to establish NO_X emissions shall be approved by the Department.

Unit 2 has a NO_X emission limit of 76.0 pounds per hour and a CO emission limit of 17.0 pounds per hour while combusting pipeline quality natural gas. Unit 2 has a NO_X emission limit of 151.8 pound per hour and a SO_2 limit of 90.8 pound per hour while combusting No.1 or No.2 fuel oil.

One additional limit was placed on the 34-MW General Electric MS-6000 and the 43-MW General Electric LM-6000. Only refinery quality No.1 or No.2 fuel oil or pipeline quality natural gas may be used as fuel for the 34-MW General Electric MS-6000 and the 43-MW General Electric LM-6000.

The 2-MW CAT diesel-powered generator has an hourly operational limit of no more than 1,000 hours per rolling 12-month period.

The 60 kW diesel-powered generator is regulated under 40 CFR 60, Subpart IIII.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance do not require the permit to impose the same level of rigor for all emissions units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for a insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo **(i.e., no monitoring)** will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least 5 years following the date of the generation of the record.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit and Section V of the operating permit "General Conditions" explains the reporting requirements. However, the permittee is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in the *Glendive Ranger ~ Review* newspaper on or before March 24, 2016. The Department provided a 30-day public comment period on the draft operating permit from March 24, 2016, to April 24, 2016. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The comments and issues received by May 18, 2011, will be summarized, along with the Department's responses, in the following table. All comments received during the public comment period will be promptly forwarded to Montana-Dakota so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Section IV of the operating permit "Non-applicable Requirements" contains the requirements that the Department determined were non-applicable and for which a permit shield was granted. The following table identifies non-applicable requirements for which the Department did not grant a permit shield with the applicability determination

Rule Citation		Reason
State	Federal	
ARM 17.8.130 ARM 17.8.142 ARM 17.8.510 ARM 17.8.763 ARM 17.8.806 ARM 17.8.807 ARM 17.8.808 ARM 17.8.825 ARM 17.8.826 ARM 17.8.1210-1215 ARM 17.8.1222 ARM 17.8.1223 ARM 17.8.1225 ARM 17.8.1228 ARM 17.8.1231	40 CFR 50 et seq. 40 CFR 51 et seq. 40 CFR 53 40 CFR 54 40 CFR 56 40 CFR 58	These rules contain requirements for regulatory authorities and not major sources; however, they are never shielded because they could be used as authority to impose specific requirements on a major source.
ARM 17.8.101 ARM 17.8.102 ARM 17.8.103 ARM 17.8.202 ARM 17.8.301 ARM 17.8.302 ARM 17.8.330 ARM 17.8.401 ARM 17.8.501 ARM 17.8.601 ARM 17.8.602 ARM 17.8.740 ARM 17.8.767 ARM 17.8.801 ARM 17.8.802 ARM 17.8.901 ARM 17.8.902 ARM 17.8.904 ARM 17.8.1001		These rules consist of a statement of purpose, applicability statement, regulatory definitions or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.

ARM 17.8.1002 ARM 17.8.1004 ARM 17.8.1101 ARM 17.8.1201-1203		
ARM 120 et seq ARM 17.8.131 ARM 17.8.140 ARM 17.8.141 ARM 17.8.403 ARM 17.8.511 ARM 17.8.514 ARM 17.8.515 ARM 17.8.611-615 ARM 17.8.743-748 ARM 17.8.762 ARM 17.8.764 ARM 17.8.765 ARM 17.8.804 ARM 17.8.805 ARM 17.8.828 ARM 17.8.905 ARM 17.8.906 ARM 17.8.1005-1007 ARM 17.8.1224 ARM 17.8.1226 ARM 17.8.1227		Procedural rules that have specific requirements that may become relevant to a major source during the permit span.
ARM 17.8.204 ARM 17.8.749-756		These rules are always applicable to a major source and may contain specific requirements for compliance.
ARM 17.8.104 ARM 17.8.315 ARM 17.8.323		These rules are either repealed or reserved.
ARM 17.8.340		This source is not an affected source under an NSPS (40 CFR 60, Subparts KKKK) but could become an affected source in the future.
	40 CFR 52 et seq.	Rules that do not have specific requirements that are always relevant to a major source.
	40 CFR 60.9-12 40 CFR 60.14-19	These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.

	40 CFR 60 Subpart Kb	This rule refers to a process, equipment or activity that may be used at this facility.
	40 CFR 60 Appendix C	Procedural rules that have specific requirements that may become relevant to a major source during the permit span.
	40 CFR 61 Subpart A	These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
	40 CFR 62	Rules that do not have specific requirements that are always relevant to a major source and should never be listed in the applicable requirements or non-applicable requirements.
	40 CFR 63, Appendices A - E 40 CFR 66 40 CFR 70	Rules that do not have specific requirements and may or may not be relevant to a major source.
	40 CFR 67 40 CFR 71 40 CFR 98 40 CFR 81	Rules that do not have specific requirements for major sources because they are requirements for EPA or state and local authorities.
	40 CFR 68 40 CFR 69	These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
	40 CFR 55 40 CFR 85 40 CFR 86 40 CFR 88-91 40 CFR 93-97	Not applicable under Title V.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards

As of the issuance date of this permit, the Department is unaware of any future MACT Standards that may be promulgated that will affect this facility.

B. NESHAP Standards

As of the issuance date of this permit, the Department is unaware of any future NESHAP Standards that may be promulgated that will affect this facility.

C. NSPS Standards

As of the issuance date of this permit, the Department is unaware of any future NSPS Standards that may be promulgated that will affect this facility.

D. Risk Management Plan

As of this date (04/19/11), this facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

E. CAM Applicability

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to Subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant (unless the limitation or standard that is exempt under ARM 17.8.1503(2));
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emission of the applicable regulated air pollutant that is greater than major source thresholds.

Montana-Dakota does not currently have any emitting units that meet all the applicability criteria in ARM 17.8.1503, and is therefore not currently required to develop a CAM Plan.

F. PSD and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the "light duty vehicle rule" (Docket # EPA-HQ-OAR- 2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG "Tailoring Rule" (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that would become final on or after January 2, 2011 would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO_2e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities which hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision occurring on or after January 2, 2011.

Starting on July 1, 2011, PSD permitting requirements would be triggered for modifications that were determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, sources that are not considered PSD major sources based on criteria pollutant emissions would become subject to PSD review if their facility-wide potential emissions equaled or exceeded 100,000 TPY of CO_2e and 100 or 250 TPY of GHG on a mass basis depending on their listed status in ARM 17.8.801(22) and they undertook a permitting action with increases of 75,000 TPY or more of CO_2e and greater than 0 TPY of GHG on a mass basis. With respect to Title V, sources not currently holding a Title V permit that have potential facility-wide emissions equal to or exceeding 100,000 TPY of CO_2e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

Based on information provided by Montana-Dakota, Montana Dakota's potential emissions exceed the GHG major source threshold of 100,000 TPY of CO2e for both Title V and PSD under the Tailoring Rule.

The Supreme Court of the United States (SCOTUS), in its *Utility Air Regulatory Group v. EPA* decision on June 23, 2014, ruled that the Clean Air Act neither compels nor permits EPA to require a source to obtain a PSD or Title V permit on the sole basis of its potential emissions of GHG. SCOTUS also ruled that EPA lacked the authority to tailor the Clean Air Act's unambiguous numerical thresholds of 100 or 250 TPY to accommodate a CO_2e threshold of 100,000 TPY. SCOTUS upheld that EPA reasonably interpreted the Clean Air Act to require sources that would need PSD permits based on their emission of conventional pollutants to comply with BACT for GHG. As such, the Tailoring Rule has been rendered invalid and sources cannot become subject to PSD or Title V regulations based on GHG emissions alone. Sources that must undergo PSD permitting due to pollutant emissions other than GHG may still be required to comply with BACT for GHG emissions.