

# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

**Air, Energy & Mining Division  
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NorthWestern Energy  
Dry Creek Compressor Station  
SE<sup>1</sup>/<sub>4</sub> of the SW<sup>1</sup>/<sub>4</sub> of Section 34, Township 6 South, Range 21 East, Carbon County, Montana  
11 East Park Street  
Butte, MT 59701

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		Method 9, Portable Analyzer
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		As applicable
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
<b>Applicable Air Quality Programs</b>			
Administrative Rules of Montana (ARM) Subchapter 7 – Montana Air Quality Permit (MAQP)	X		MAQP #2784-06
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart KKK
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except for 40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart HH and Subpart <i>ZZZZ</i>
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	
<b>Applicable Air Quality Programs</b>			
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

## TABLE OF CONTENTS

<b>SECTION I. GENERAL INFORMATION.....</b>	<b>4</b>
A. PURPOSE.....	4
B. FACILITY LOCATION.....	4
C. FACILITY BACKGROUND INFORMATION .....	4
D. CURRENT PERMIT ACTION .....	7
E. TAKING AND DAMAGING ANALYSIS.....	8
F. COMPLIANCE DESIGNATION .....	8
<b>SECTION II. SUMMARY OF EMISSION UNITS.....</b>	<b>9</b>
A. FACILITY PROCESS DESCRIPTION .....	9
B. EMISSION UNITS AND POLLUTION CONTROL DEVICE IDENTIFICATION .....	9
C. CATEGORICALLY INSIGNIFICANT SOURCES/ACTIVITIES .....	9
<b>SECTION III. PERMIT CONDITIONS.....</b>	<b>10</b>
A. EMISSION LIMITS AND STANDARDS.....	10
B. MONITORING REQUIREMENTS .....	10
C. TEST METHODS AND PROCEDURES.....	11
D. RECORDKEEPING REQUIREMENTS .....	11
E. REPORTING REQUIREMENTS.....	11
<b>SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS.....</b>	<b>13</b>
<b>SECTION V. FUTURE PERMIT CONSIDERATIONS.....</b>	<b>18</b>
A. NESHAP/MACT STANDARDS.....	18
B. NSPS STANDARDS .....	18
C. RISK MANAGEMENT PLAN .....	18
D. CAM APPLICABILITY .....	18
E. PSD AND TITLE V GREENHOUSE GAS TAILORING RULE .....	18

## 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 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 the following information submitted to the Department of Environmental Quality-Air Resources Management Bureau (Department) by NorthWestern Energy (NWE) formerly NorthWestern Corporation (NorthWestern): original Operating Permit Application submitted by Montana Power Company (MPC) on June 7, 1996; Operating Permit Application #OP2784-01 and Montana Air Quality Permit (MAQP) Application #2784-03 submitted by MPC on August 24, 2000; administrative amendment requests submitted on October 15, 2002, October 14, 2003, June 12, 2003, February 11, 2003, November 4, 2008, and September 7, 2011; Operating Permit Renewal Applications #OP2784-06 submitted by NWE on July 31, 2003, #OP2784-08 submitted on September 30, 2009 and #OP2784-10 submitted on September 11, 2015, a de minimis notification letter submitted on April 2, 2009, and an administrative amendment request received on December 16, 2019.

### B. Facility Location

NWE owns and operates the Dry Creek Field Compressor Station. This facility is located in the SE<sup>1</sup>/<sub>4</sub> of the SW<sup>1</sup>/<sub>4</sub> of Section 34, Township 6 South, Range 21 East, Carbon County, Montana. Carbon County and is designated as an Unclassifiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The Dry Creek Field Compressor Station is located on a two-acre site in Carbon County, approximately 6 miles northeast of Red Lodge near Big Slide Mountain.

### C. Facility Background Information

#### Montana Air Quality Permit (MAQP)

On July 14, 1993, MPC was issued **MAQP #2784-00** for operation of their natural gas processing plant and associated equipment at the Dry Creek Field Station 056-1 through 056-4. Most of the Dry Creek Field was an existing source (it was operating at the same location prior to March 16, 1979) and a Best Available Control Technology (BACT) determination was not required. However, the Joule-Thompson refrigeration unit was considered new or altered source since it was installed in 1985. Therefore, a BACT analysis was required for the Joule-Thompson refrigeration unit.

The Joule-Thompson refrigeration unit at the facility is used to separate the heavy-end hydrocarbons from the gas storage field. The unit is completely enclosed and there should be no emissions from the unit during operation. In addition, the flanges and connections are state of the art, further preventing any loss of product from the unit. The Joule-Thompson refrigeration unit is subject to the New Source Performance Standards (NSPS) stated in 40 CFR 60, Subpart KKK because it meets the definition of a natural gas processing plant and was

installed after January 20, 1984. Some of the NSPS requirements are monthly monitoring of applicable equipment to detect leaks, additional reporting and record keeping requirements, notification requirements. The Department determined BACT for this source to be the proper operation of the Joule-Thompson refrigeration unit to maintain compliance with all standards, limitations, and the reporting, record keeping, and notification requirements as set forth in 40 CFR 60, Subpart KKK.

On March 7, 1994, MAQP #2784-01 was issued to MPC. This modification was requested because the Department revised the emission limitation units from grams per brake horsepower-hour (g/bhp-hr) to pounds per hour (lb/hr). The revision was due to varying parameters such as engine revolutions per minute (RPM), operating load (bhp), ambient air temperature, gas temperature, site, elevation, fuel gas quality, air/fuel ratio (AFR), field gas conditions, etc. Rather than limit the engines to a g/bhp-hr limit, an hourly emission limit allowed some needed operational flexibility. Also, to clarify oxides of nitrogen (NO<sub>x</sub>) mass emission calculations, NO<sub>x</sub> emission limitations were identified as nitrogen dioxide (NO<sub>2</sub>). **MAQP #2784-01** replaced MAQP #2784-00.

On October 5, 1998, MPC was issued MAQP #2784-02. The modification incorporated the Smart Ash Burner requirements into the permit, removed General Condition I with reference to application data, and updated rule references. **MAQP #2784-02** replaced MAQP #2784-01.

On October 11, 2000, MAQP #2784-03 was issued to MPC. The modification added a 1,100-horsepower (hp) Solar Saturn turbine-driven compressor to the Dry Creek facility. The 1,100-hp Solar Saturn turbine-driven compressor was previously located at MPC's Mainline #3 compressor station (MAQP #2997-01) and was installed prior to 1968. The Department made a determination that moving the 1,100-hp Solar Saturn turbine-driven compressor from the Mainline #3 facility to the Dry Creek facility did not modify the operating parameters of the turbine and did not constitute reconstruction; therefore, the turbines installation date was still considered prior to 1968. **MAQP #2784-03** replaced MAQP #2784-02.

On November 23, 2001, MPC notified the Department of a pending merger of MPC with and into Montana Power, LLC (MPC LLC). Due to questions regarding the length of time the new company name would be valid, the Department decided to wait on the name change for the permit. On October 18, 2002, the Department received a request to change the permit from MPC LLC to NorthWestern. This permit action incorporated the name change from MPC LLC to NorthWestern. On December 17, 2002, **MAQP #2784-04** replaced MAQP #2784-03.

On February 7, 2008, the Department received a request to administratively change the name from NorthWestern to NWE. On October 17, 2008, **MAQP #2784-05** replaced MAQP #2784-04.

On April 2, 2009, the Department received a de minimis determination request for the addition of a new 0.750 Million British thermal unit per hour (MMBtu/hr) triethylene glycol (TEG) dehydrator at the facility. The correspondence indicated that the inclusion of the 0.750 MMBtu/hr TEG dehydrator would result in an increase of 12.89 tons per year (TPY) of volatile organic compounds (VOC) at the facility which was less than de minimis threshold at that time. The Department approved the de minimis request in a correspondence dated April 10, 2009.

On November 18, 2019, NWE notified the Department of the transfer of ownership of the two Ajax engines at the Dry Creek Field, Station 056 from NWE to Big Sky Energy, LLC and requested that all conditions related to the two Ajax engines be removed from NWE's air quality permit. The two engines are an Ajax DPC-300 and an Ajax DPC-360. All applicable permit conditions for the two Ajax engines were transferred to MAQP #5237-00. **MAQP #2784-06** replaced MAQP #2784-05.

#### Title V Operating Permit

On June 7, 1996, the Department received an operating permit application for the Dry Creek facility. The application was assigned #OP2784. The permit application was deemed administratively complete on July 7, 1996, and the application was deemed technically complete on August 7, 1996. **Operating Permit #OP2784-00** became final and effective on February 6, 1999.

On August 24, 2000, MPC submitted an air quality permit application to modify the Dry Creek facility. MPC LLC requested to add a 1,100-hp Solar Saturn turbine-driven compressor to the facility. The 1,100-hp Solar Saturn turbine-driven compressor was added to MPC LLC's MAQP (#2784-03) on October 11, 2000; however, the change was not incorporated into MPC LLC's Operating Permit (#OP2784-00). This permit action added the 1,100-hp Solar Saturn turbine-driven compressor to MPC's operating permit. In addition, the legal description of the facility was corrected. **Operating Permit #OP2784-01** replaced Operating Permit #OP2784-00.

On October 15, 2002, the Department received a letter from MPC LLC. MPC LLC notified the Department that MPC LLC had changed their name from MPC LLC to NorthWestern. This permit action incorporated the name change from MPC LLC to NorthWestern. **Operating Permit #OP2784-02** replaced Operating Permit #OP2784-01.

On February 11, 2003, the Department received a letter from NorthWestern. NorthWestern notified the Department of a change in the responsible official for all of NorthWestern's facilities. This amendment updated the permit to reflect the change in the responsible official. **Operating Permit #OP2784-03** replaced Operating Permit #OP2784-02.

On June 12, 2003, the Department received a letter from NorthWestern. NorthWestern notified the Department of a change in the responsible official for all of NorthWestern's facilities. This amendment updated the permit to reflect the change in the responsible official. **Operating Permit #OP2784-04** replaced Operating Permit #OP2784-03.

On October 16, 2003, the Department received a request from NorthWestern for an administrative amendment of Operating Permit #OP2784-04 to update Section V.B.3 of the General Conditions incorporating changes to federal Title V rules CFR 70.6(c)(5)(iii)(B) and 70.6(c)(5)(iii)(C) (to be incorporated into Montana's Title V rules at ARM 17.8.1213) regarding Title V annual compliance certifications. **Operating Permit #OP2784-05** replaced Operating Permit #OP2784-04.

On July 31, 2003, the Department received a renewal application from NorthWestern. **Operating Permit #OP2784-06** replaced Operating Permit #OP2784-05.

On March 28, 2008, the Department received a request to administratively change the name from NorthWestern to NWE. **Operating Permit #OP2784-07** replaced Operating Permit #OP2784-06.

On September 30, 2009, the Department received a Title V renewal application for Operating Permit #OP2784-07. The renewal application indicated that since the last permitting action NWE had removed two insignificant emitting units from the facility; a 1 MMBtu/hr reboiler and a 0.175 MMBtu/hr reboiler. A new emitting unit was added to the facility, a 0.750 MMBtu/hr TEG dehydrator, which the application listed as an insignificant emitting unit. Because the 0.750 MMBtu/hr TEG dehydrator was an affected source under the area source provisions of 40 Code of Federal Regulations (CFR) 63, Subpart HH, and because its inclusion resulted in an increase of 12.89 TPY of VOC at the facility, it was considered a significant emitting unit and incorporated into the operating permit as such. **Operating Permit #OP2784-08** replaced Operating Permit #OP2784-07.

On September 7, 2011, the Department received an administrative amendment request form NWE requesting a Responsible Official change to Michael R. Cashell. In accordance with ARM 17.8.1228 (1)(a), the Department also updated permit conditions for the engine units based on 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines which was revised in 2010 with applicable requirements for existing engines at area sources of hazardous air pollutants (HAP). **Operating Permit #OP2784-09** replaced Operating Permit #OP2784-08.

On September 11, 2015, the Department received a Title V renewal application for Operating Permit #OP2784-09. The renewal application stated that all permit modifications submitted since the last renewal have been incorporated into the operating permit. There was a request for a single change to the permit, that the facility contact person be changed from Ross Welchel to Beth Stimatz, effective January 1, 2016. **Operating Permit #OP2784-10** replaces Operating Permit #OP2784-09.

#### **D. Current Permit Action**

On December 16, 2019, the Department received an administrative amendment request to remove the 2 Ajax engines from the Title V Operating Permit. These engines had a transfer of ownership to Big Sky Energy, LLC. All applicable permit conditions for the 2 Ajax engines were transferred to Big Sky Energy, LLC's MAQP #5237-00. Therefore, NWE no longer has any applicable requirements for these engines and they can be removed from the Title V Operating Permit. **Operating Permit #OP2784-11** replaces Operating Permit #OP2784-10.

## 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)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		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

The most recent Full Compliance Evaluation at the Dry Creek facility was completed on October 30, 2017. During the inspection, the Dry Creek facility was in compliance with all applicable permit requirements contained in Operating Permit #OP2784-10 and MAQP #2784-05. At the time of this permit issuance, the Department believes the Dry Creek facility is in compliance with all applicable regulations and permit conditions.



## SECTION II. SUMMARY OF EMISSION UNITS

### A. Facility Process Description

The Dry Creek Field Compressor Station serves as a natural gas pipeline compressor station. The storage units are used primarily to inject natural gas into the storage field during the off season to replace gas withdrawn by natural feed during the previous heating season. The storage units can be used to withdraw from storage or in transmission service. During withdrawal from storage, the gas is first dehydrated using the glycol contactor vessel(s) and then stripped of the heavy-end hydrocarbons by passing through a Joule-Thompson type refrigeration plant before entering the transmission line at approximately 500 to 700 pounds per square inch gauge (psig).

The production compressors withdraw natural gas from local production wells and increase the gas pressure before entering the mechanical refrigeration plant, which removes both water and hydrocarbons heavier than natural gas. The production gas stream then enters the pipeline and is transported east or west, or to the inlet of the storage compressors for injection into the storage field. Discharge pressures on the production compressors range from 350 to 700 psig.

The complex has two other purposes. The first is to pump the field gas up to the required pressure in the natural gas transmission system. Compression of the gas is accomplished using the four compressor engines and the turbine-driven compressor. Three heaters provide heat to the various station facilities. The second purpose is to "dry" the gas as it is being processed using a dehydrator or glycol unit. NWE has three glycol units at this site, which have heat inputs ranging from 256 to 900 thousand British thermal units per hour (MBtu per hour). In the mechanical refrigeration unit, gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol solution is then heated to about 375 degrees Fahrenheit (°F) to drive off the water and return the glycol. The heat necessary for the activity is generated by burning natural gas in the dehydrator reboiler. The Standard Industrial Classification (SIC) for this facility is "Natural Gas Transmission" which has an SIC Code of "4922".

### B. Emission Units and Pollution Control Device Identification

Currently, the NorthWestern Dry Creek Field Station is not required to install or operate any air pollution control equipment. The Smart Ash Burner is an incinerator that will control emissions from the burning of oil soaked rags, oil adsorbents, and filters.

### 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 an applicable requirement other than a generally applicable requirement.

The miscellaneous insignificant emissions from the NorthWestern Dry Creek Field Station include emissions from the 256 Mbtu/hr Reboiler, 900 Mbtu/hr Reboiler, mechanical refrigeration unit, building heaters < 1 million British thermal unit per hour (MMBtu/hr), and process valves. These units are insignificant because they emit less than 5 tons per year of any regulated pollutant.

## SECTION III. PERMIT CONDITIONS

### A. Emission Limits and Standards

Emission limits for the 800-hp White Superior engine were established under the authority of ARM 17.8.749. The 800-hp White Superior engine has emission limits of 26.5 lb/hr NO<sub>x</sub>, 3.17 lb/hr carbon monoxide (CO), and 0.35 lb/hr volatile organic compounds (VOC). The Joule Thompson Refrigeration Unit is subject to 40 CFR 60, Subpart KKK. The 750 MBtu/hr triethylene glycol dehydrator is subject to 40 CFR 63, Subpart HH. This facility is not subject to PSD regulations.

### 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 does not require the permit to impose the same level of rigor for all emission units. Furthermore, it does 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 an 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. However, the Department may request additional testing to determine compliance with the emission limits and standards. If it is determined through testing using test methods identified in the Montana Source Test Protocol and Procedures Manual that any emissions unit is out of compliance with any applicable requirement, NWE will not be shielded from an enforcement action even if the required monitoring methods listed in the permit indicate compliance with the applicable requirement.

The semi-annual testing with the portable analyzer for the 800-hp compressor engine should provide NWE and the Department with adequate data to assure compliance with the NO<sub>x</sub> and CO emission limits in this permit. Since the fuel consumed by the emission units is required to be pipeline quality natural gas, the potential to exceed the opacity, particulate, or sulfur in fuel conditions in this permit is negligible. Therefore, the recordkeeping provisions of this permit should demonstrate compliance with these conditions.

This permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by NWE 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**

This operating permit contains requirements for semi-annual testing with a portable analyzer for the 800-hp compressor engine. The Department has stipulated that the portable analyzer be capable of achieving performance specifications equivalent to the traditional test methods in 40 CFR 60, Appendix A or shall be capable of meeting the requirements of EPA Conditional Test Method 022 for the "Determination of Nitric Oxide, Nitrogen Dioxide and NO<sub>x</sub> from Stationary Sources by Electrochemical Analyzer." NWE may use another testing procedure as approved in advance by the Department. All tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). NWE will then convert the NO<sub>x</sub> and CO emissions test results from a "ppm" value to a "lb/hr" number. Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A in order to demonstrate compliance with the emissions limitations in the permit.

The Department will use the portable analyzer test results as a direct measure of compliance. 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, NWE may elect to voluntarily conduct compliance testing to confirm compliance status.

### **D. Recordkeeping Requirements**

The recordkeeping provisions shall be sufficient to meet the provisions of the monitoring requirements and shall include, as necessary, the installation, use, and maintenance of the monitoring equipment or methods as well as the following information: the date the analyses were performed, the place and time of the sampling, the company or entity performing the sampling, the analytical techniques or methods used, the results of such analyses, and the operating conditions at the time of the analyses. Retention of the records of all required monitoring data and support information shall be for a period of at least five years from the date of measurement. Support information includes: all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the operating permit. NWE is required to keep all records listed in the operating permit as a permanent business record for at least five 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, NWE 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**

The current permit action is an administrative action; therefore, there was no public notice required.

## SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Section IV of the operating permit discussing "Non-applicable Requirements" contains the requirements that the NWE identified as non-applicable and for which a permit shield was granted by the Department. The following table summarizes the requirements that NWE identified as non-applicable in the renewal permit application but for which the Department did not grant a permit shield or disagreed with the applicability determination.

### Requirements not Identified in the Operating Permit

Applicable Requirement	Reason
<b>Sub-Chapter 1 General Provisions</b>	
ARM 17.8.120 Variance Procedures ARM 17.8.131 Enforcement Procedures – Appeal to Board ARM 17.8.140 Rehearing Procedures – Form and Filing of Petition ARM 17.8.141 Rehearing Procedures – Filing Requirements	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
ARM 17.8.130 Enforcement Procedures – NOV ARM 17.8.142 Rehearing Procedures – Board Review	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
<b>Sub-Chapter 2 Ambient Air Quality</b>	
ARM 17.8.204 Ambient Air Monitoring	These rules are always applicable to a major source and may contain specific requirements for compliance.
<b>Sub-Chapter 3 Emission Standards</b>	
ARM 17.8.301 and 302 Definitions and Incorporation by Reference ARM 17.8.330 Emissions Standards for Aluminum Plants - Definitions	These are rules that consist of either: 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 17.8.326 Prohibited Materials for Wood or Coal Residential Stoves	These are rules that are always applicable to a major source and may contain specific requirements for compliance
<b>Sub-Chapter 5 Air Quality Permit Application, Operation and Open Burning Fees</b>	
ARM 17.8.501 Definitions	These are rules that consist of either 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.

Applicable Requirement	Reason
ARM 17.8.510 Annual Review	This rule contains requirements for the regulatory authorities and not major sources; however, it can be used as authority to impose specific requirements on a major source.
ARM 17.8.511 Air Quality Permit Application/Operation Fee Assessment Appeal Procedures ARM 17.8.514 Air Quality Open Burning Fees ARM 17.8.515 Air Quality Open Burning Fees for Conditional, Emergency, Christmas Tree Waste, and Commercial Film Production Open Burning Permits	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
<b>Sub-Chapter 6 Open Burning</b>	
ARM 17.8.601 and 602 Definitions & Incorporation by Reference	These are rules that consist of either: 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 17.8.611 Emergency Open Burning Permits ARM 17.8.612 Conditional Air Quality Open Burning Permits ARM 17.8.613 Christmas Tree Waste Open Burning Permits ARM 17.8.614 Commercial Film Production Open Burning Permits ARM 17.8.615 Firefighter Training	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
<b>Sub-Chapter 7 Permit, Construction and Operation of Air Contaminant Sources</b>	
ARM 17.8.740 Definitions	These rules consist of either: a statement of purpose, applicability statement, regulatory definitions or a statement of incorporation by reference. These types of rules do not have specific requirement associate with them.
ARM 17.8.743- <i>et seq.</i>	These are procedure rules that have specific requirements that may become relevant to major source during the permit span.
<b>Sub-Chapter 8 Prevention of Significant Deterioration</b>	
ARM 17.8.801 Definitions ARM 17.8.802 Incorporation by Reference	These are rules that consist of either: 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 17.8.804 Ambient Air Increments ARM 17.8.805 Ambient Air Ceilings ARM 17.8.828 Innovative Control Technology	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.

Applicable Requirement	Reason
ARM 17.8.806 Restrictions on Area Classifications ARM 17.8.807 Exclusions from Increment Consumption ARM 17.8.808 Redesignation ARM 17.8.825 Sources Impacting Federal Class I Areas – Additional Requirements ARM 17.8.826 Public Participation	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
<b>Sub-Chapter 9 Permit Requirements for Major Stationary Sources or Major Modifications Located Within Nonattainment Areas</b>	
ARM 17.8.901 Definitions ARM 17.8.902 Incorporation by Reference ARM 17.8.904 When Montana Air Quality Permit Required	These are rules that consist of either: 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 17.8.905 Additional Conditions of Montana Air Quality Permit ARM 17.8.906 Baseline for Determining Credit for Emissions and Air Quality Offsets	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
<b>Sub-Chapter 10 Preconstruction Permit Requirements for Major Stationary Sources or Major Modifications Located Within Attainment or Unclassified Areas</b>	
ARM 17.8.1001 Definitions ARM 17.8.1002 Incorporation by Reference ARM 17.8.1004 When Montana Air Quality Permit Required	These are rules that consist of either: 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 17.8.1005 Additional Conditions of Air Quality Preconstruction Permit ARM 17.8.1006 Review of Specified Sources for Air Quality Impact ARM 17.8.1007 Baseline for Determining Credit for Emissions and Air Quality Offsets	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
<b>Sub-Chapter 11 Visibility Impact Assessment</b>	
ARM 17.8.1101 Definitions ARM 17.8.1102 Incorporation by Reference ARM 17.8.1103 Applicability – Visibility Requirements	These are rules that consist of either 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 17.8.1108 Notification of Permit Application ARM 17.8.1109 Adverse Impact and Federal Land Management	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.

Applicable Requirement	Reason
<b>Sub-Chapter 12 Operating Permit Program</b>	
ARM 17.8.1201 Definitions ARM 17.8.1202 Incorporation by Reference ARM 17.8.1203 Air Quality Operating Permit Program Overview ARM 17.8.1234 Acid Rain – Permit Regulations	These are rules that consist of either: 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 17.8.1210 General Requirements for Air Quality Operating Permit Content ARM 17.8.1211 Requirements for Air Quality Operating Permit Content Relating to Emission Limitations and Standards, and other Requirements ARM 17.8.1212 Requirements for Air Quality Operating Permit Content Relating to Monitoring, Recordkeeping, and Reporting ARM 17.8.1213 Requirements for Air Quality Operating Permit Content relating to Compliance ARM 17.8.1214 Requirements for Air Quality Operating Permit Content Relating to the Permit Shield and Emergencies ARM 17.8.1215 Requirements for Air Quality Operating Permit Content Relating to Operational Flexibility ARM 17.8.1222 General Air Operating Permits ARM 17.8.1223 Temporary Air Quality Operating Permits ARM 17.8.1225 Additional Requirements for Air Quality Operating Permit Amendments ARM 17.8.1228 Additional Requirements for Air Quality Operating Permit Revocation, Reopening, and Revision for Cause ARM 17.8.1231 Notice of Termination, Modification, or Revocation and Reissuance by the Administrator for Cause ARM 17.8.1233 Permit Review by the Administrator and Affected States	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
ARM 17.8.1224 Additional Requirements for Operational Flexibility and Air Quality Operating Permit Changes that Do Not Require Revisions	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
<b>Sub-Chapter 15 Compliance Assurance Monitoring</b>	
ARM 17.8.1501 <i>et seq.</i>	These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.



Applicable Requirement	Reason
40 CFR 50, Appendices A through R 40 CFR 61, Subpart M National Emissions Standards for Hazardous Air Pollutants – Asbestos	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
40 CFR 51 Requirements for Preparation, Adoption, and Submittal of Implementation Plans 40 CFR 53 Ambient Air Monitoring Reference and Equivalent Methods 40 CFR 54 Prior Notice of Citizen Suits 40 CFR 56 Regional Consistency 40 CFR 58 Ambient Air Quality Surveillance 40 CFR 64 Compliance Assurance Monitoring 40 CFR 67 EPA Approval of State Noncompliance Penalty Program 40 CFR 81 Designation of Areas for Air Quality Planning Purposes	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
40 CFR 52 Approval and Promulgation of Implementation Plans 40 CFR 62 Approval and Promulgation of State Plans for Designated Facilities and Pollutants 40 CFR 66 Assessment and Collection of Noncompliance Penalties by EPA 40 CFR 70 State Operating Permit Programs 40 CFR 71 Federal Operating Permit Programs	These rules do not have specific requirements but may or may not be relevant to a major source.

## SECTION V. FUTURE PERMIT CONSIDERATIONS

### A. NESHAP/MACT Standards

As of the issuance date of Permit #OP2784-11, the Department is unaware of any other future MACT Standards that may be promulgated that will affect this facility. The facility is currently subject to 40 CFR 63, Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines has been updated since the previous revision of this permit and now has applicable requirements for engines at this facility.

### B. NSPS Standards

As of the date that Permit #OP2784-11 was issued, the Department is unaware of any other future NSPS Standards that may be promulgated that will affect this facility. The facility is currently subject to 40 CFR 60, Subpart KKK. 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart KKKK Standards of Performance for Stationary Combustion Turbines and 40 CFR 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution could potentially be applicable to this facility in the future.

### C. Risk Management Plan

As of the issuance date of Permit #OP2784-11 this facility does not have any substance listed in 40 CFR Part 68.115 or 40 CFR Part 68.130, which exceeds the minimum threshold quantities. Consequently, this facility is not required to submit a Risk Management Plan.

### D. 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;
- 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 are greater than major source thresholds.

EU002, an 800-hp White Superior compressor engine, does have potential annual emissions of NO<sub>x</sub> in excess of major source thresholds and is subject to a NO<sub>x</sub> emission limitation; however, the unit does not utilize a pollution control device and is therefore not subject to CAM.

### E. 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<sub>2</sub>e) 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<sub>2</sub>e 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<sub>2</sub>e 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<sub>2</sub>e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

Based on information provided by NWE and Department calculations, Dry Creek's potential CO<sub>2</sub>e emissions do not exceed the GHG major source threshold of 100,000 TPY of CO<sub>2</sub>e for 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<sub>2</sub>e 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.