

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

**Air, Energy, and Mining Division  
1520 E. Sixth Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901**

WBI Energy Transmission, Inc.  
Cabin Creek Compressor Station  
E ½ of SE ¼ of SE ¼, Section 16, Township 10 North, Range 58 East, Fallon County  
1661 Cabin Creek Road #1  
Baker, MT 59313

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		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		
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
<b>Applicable Air Quality Programs</b>			
ARM Subchapter 7 – Montana Air Quality Permit (MAQP)	X		2484-08
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart GG, JJJJ, and OOOOa
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 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	
Compliance Assurance Monitoring (CAM)	X		
State Implementation Plan (SIP)	X		

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 EMISSIONS UNITS..... 9**

- A. FACILITY PROCESS DESCRIPTION ..... 9
- B. EMISSIONS UNITS AND POLLUTION CONTROL DEVICE IDENTIFICATION..... 9
- 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..... 11
- D. RECORDKEEPING REQUIREMENTS..... 12
- E. REPORTING REQUIREMENTS ..... 12
- F. PUBLIC NOTICE..... 12
- G. DRAFT PERMIT COMMENTS ..... 12

**SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS..... 15**

**SECTION V. FUTURE PERMIT CONSIDERATIONS..... 166**

- A. MACT STANDARDS..... 16
- B. NESHAP STANDARDS..... 16
- C. NSPS STANDARDS..... 16
- D. RISK MANAGEMENT PLAN..... 16
- E. CAM APPLICABILITY..... 16
- 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 emissions 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 original Title V application submitted by WBI Energy Transmission, Inc. (WBI) on June 12, 1996; Title V renewal applications and supporting documents submitted on January 30, 2003, February 3, 2003, September 23, 2008, June 5, 2014, and April 16, 2020. Title V significant modification application and additional correspondence submitted on February 15, 2011, February 25, 2011, March 14, 2011, and May 10, 2022. Information was also taken from Montana Air Quality Permits (MAQP) for Cabin Creek Compressor Station issued May 31, 1988, July 17, 1992, March 31, 1994, June 3, 2003, May 3, 2011, and May 10, 2022; and an Administrative Amendment (AA) request date December 10, 2012. Additional correspondence was received on October 21, 2013.

### B. Facility Location

WBI Energy Transmission, Inc. (WBI) owns and operates the Cabin Creek Compressor Station. This facility is located in the SE<sup>1</sup>/<sub>4</sub> of SE<sup>1</sup>/<sub>4</sub> of Section 16, Township 10 North, Range 58 East, in Fallon County, Montana. Fallon County is designated as an Unclassifiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The Cabin Creek Compressor Station is located in a remote location 20 miles northwest of Baker, Montana. The adjacent land is used for grain cropland and rangeland. The area is also a developed oil and gas field. The nearest residences are the company-owned WBI employee housing located approximately 1000 yards away.

### C. Facility Background Information

#### Montana Air Quality Permit (MAQP)

On May 31, 1988, Williston Basin Interstate Pipeline Company (WBIPC) was issued an MAQP for the operation of the Cabin Creek Compressor Station consisting of 16 natural gas compressor engines, located in the SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Section 16, Township 10 North, Range 58 East, Fallon County, Montana. The application was assigned **MAQP #2484-00**.

On July 17, 1992, WBIPC was issued a permit to replace an existing 1961 Waukesha 1197G generator engine (248 horsepower (hp)) with a 1992 Waukesha 3521GL generator engine (544 hp) at their Cabin Creek facility. The old engine was removed. **MAQP #2484-01** replaced MAQP #2484-00.

The Montana Department of Environmental Quality's (DEQ) Best Available Control Technology (BACT) determination for MAQP #2484-01 was the use of a Waukesha, Model 3521GL Lean Burn Combustion gas engine with emission factors of 2.0, 2.0, and 1.0 grams per brake-horsepower hour (g/bhp-hr) for oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC), respectively.

On March 31, 1994, WBIPC was issued a permit to increase the permitted operational horsepower and the CO emission factor for the recently permitted 1992 Waukesha 3512GL generator engine (544 hp). The engine was originally permitted to operate at 1200 revolutions per minute (RPM) and the corresponding CO emission factor of 2.0 g/bhp-hr. The actual installed horsepower of the engine/generator set was site rated at 559 hp and limited to 900 RPM. This de-torquing of the engine generally increased the CO emissions; therefore, WBIP could only achieve the manufacturer's guaranteed emissions under limited conditions. This emission factor was also due to increase as a result of site-specific fuel analysis quality. WBI submitted a revised manufacturer's emission guarantee for CO of 3.3 g/bhp-hr based on the results of a site-specific fuel analysis.

WBIPC also requested that the permitted emission limits be expressed in pounds per hour (lb/hr) rather than g/bhp-hr, which is consistent with DEQ's revised guidelines. The revision to the guidelines for developing an emission limitation is due to varying parameters such as engine 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 engine to a g/bhp-hr limit, an hourly emission limit will allow operational flexibility. **MAQP #2484-02** replaced MAQP #2484-01.

On June 3, 2003, WBIPC was issued a permit for the installation and operation of an 1149 hp capacity natural gas-fired turbine. WBIPC is a major stationary source of emissions as defined under the NSR/PSD program; however, potential emissions from the proposed turbine did not exceed any PSD significant emission thresholds and the permit action did not trigger PSD review.

Further, WBIPC submitted a modeling analysis including annual NO<sub>x</sub> ambient air impacts as well as 1- and 8-hour CO ambient impacts from the turbine. Based on the ambient air modeling results initially submitted by WBIPC, and in accordance with DEQ's "Monitoring Requirements" guidance document (October 9, 1998), the WBIP facility, as initially proposed, was required to conduct ambient monitoring because the modeled NO<sub>x</sub> concentration was above 95% of the ambient standard.

Subsequently, WBIPC submitted a letter to DEQ requesting various permit changes to keep the source emission impacts below the applicable ambient standards for NO<sub>x</sub> and to avoid the requirement for ambient NO<sub>x</sub> monitoring. Specifically, under this permit action, WBIPC was required to install a Non-Selective Catalytic Reduction (NSCR) catalyst on Emissions Unit (EU) 001, raise the stack heights on EU001 and EU004 through EU010, lower the allowable NO<sub>x</sub> emission rates for EU008 through EU010, and limit the operating hours for EU004 to 3500 hours during any rolling 12-month time period. This permit revision included conditional requirements for all previously cited equipment and operational modifications.

Furthermore, WBIPC requested that DEQ modify the testing schedule for the 559 hp Waukesha 3521GL (GEN1). Previously, based on Department source testing guidance, WBIPC was required to test GEN1 on an every 4-year schedule. However, the Title V operating permit for WBIPC requires semiannual testing for this unit. Therefore, at the request of WBIPC the testing requirements for GEN1 have been modified to incorporate language allowing for consistency between the MAQP and the Title V operating permit source testing schedules for this unit. **MAQP #2484-03** replaced MAQP #2484-02.

On August 7, 2003, WBIPC submitted a letter of application for a modification to MAQP #2484-03. WBIPC requested that the stack heights for EU001, EU004, EU005, EU006, and EU007 be lowered. Additionally, to ensure compliance with the NAAQS and the Montana Ambient Air Quality Standards (MAAQS), WBI requested hours of operation restrictions on EU004, EU005, EU006, and EU007.

An Air Dispersion Modeling Analysis was submitted along with the modification request by Aspen Consulting & Engineering Inc. (Aspen). After reviewing the permit action request and modeling analysis, DEQ determined the proposed modification could be accomplished according to ARM 17.8.764(b) while adequately protecting the ambient standards.

In addition, according to ARM 17.8.764(c), DEQ updated the emissions inventory based on emission factors, which more accurately reflect operation of the emitting units at WBIPC. The changes made to the emissions inventory do not affect substantive provisions of the permit. **MAQP #2484-04** replaced MAQP #2484-03.

On February 18, 2011, DEQ received a combined MAQP and Title V modification application for the facility. WBIPC requested that five compressor engines (Units #4 through #8) be removed from the permit and be replaced with a one Caterpillar G3606LE compressor engine (Unit #17). The Caterpillar G3606LE is a four-stroke lean burn engine (4SLB) equipped with an oxidation catalyst and with a maximum rated design capacity of 1,775 hp (maximum site rating of 1,714 hp). Also included in this project was an upgrade in the facility heating system involving the removal of a 0.819 MMBtu/hr, a 0.770 MMBtu/hr, and a 1.18 MMBtu/hr natural gas boiler and replacement with two new 1.5 MMBtu/hr natural gas boilers. The 1.18 MMBtu/hr boiler was incorrectly labeled in earlier permits as a 1.47 MMBtu/hr boiler. Unit identification numbers were changed to match the designations as listed in the February 18, 2011, application. **MAQP #2484-05** went final May 3, 2011, and replaced MAQP #2484-04.

On December 10, 2012, DEQ received an AA request from WBI to change the official name of the company from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. (WBI). **MAQP #2484-06** replaced MAQP #2484-05.

On November 19, 2019, DEQ received correspondence from WBI to install a smaller dehydrator regenerator heater and to correct typographical errors in the emission inventory calculations. Other minor updates were also made to the emission inventory table to reflect the current equipment descriptions. **MAQP #2484-07** replaced MAQP 2484-06.

On November 19, 2019, DEQ received correspondence from WBI to install a smaller dehydrator regenerator heater and to correct typographical errors in the emission inventory calculations. The smaller dehydrator replaced an existing unit which was removed from service. **MAQP #2484-07** replaced #2484-06.

On May 10, 2022, DEQ received an application from WBI to add one (1) 4SLB 3750 HP Caterpillar G3612LE (Unit #17) compressor engine. WBI also requested the removal of the Waukesha L7042 GSU (Unit #1), and two (2) Ingersoll-Rand 48 KVG (Unit #9 & #10) compressor engines. WBI also requested that the 4SLB 1,775 HP Caterpillar G6306LE (Unit #17) be redesignated as Unit #2 to align with current WBI naming conventions. DEQ also updated the MAQP to reflect current naming conventions and language. **MAQP #2484-08** replaced MAQP #2484-07.

## Title V Operating Permit

On June 12, 1996, WBIPC submitted the original Title V Operating Permit application for the Cabin Creek Compressor Station. The Title V Operating Permit application was deemed administratively complete July 12, 1996, and technically complete on August 12, 1996. **Title V Operating Permit #OP2484-00** became final and effective on August 23, 1998.

On January 31, 2003, DEQ received a Title V renewal application from WBIPC. The Title V Operating Permit renewal application was deemed administratively complete on March 3, 2003, and technically complete on October 3, 2003. **Title V Operating Permit #OP2484-01** became final and effective on March 26, 2004, and replaced Operating Permit #OP2484-00.

On September 23, 2008, DEQ received the Title V Operating Permit renewal application from WBI for the Cabin Creek Compressor Station. The renewal application stated that there had been no substantive changes to emission unit descriptions, ancillary equipment, BACT determinations, air dispersion analyses, stack height changes, or compliance demonstration practices since the issuance of Title V Operating Permit #OP2484-01. This permitting action established a CAM plan for EU001 because it met the requirement conditions of ARM 17.8.1513. **Title V Operating Permit #OP2484-02** became final and effective on March 20, 2010, and replaced Title V Operating Permit #OP2484-01.

On February 18, 2011, DEQ received a combined MAQP and Title V permit modification application for the facility. WBIPC requested that five compressor engines (Units #4 through #8) be removed from the permit and be replaced with a one Caterpillar G3606LE compressor engine (Unit #17). The Caterpillar G3606LE is a 4SLB engine equipped with an oxidation catalyst and with a maximum rated design capacity of 1,775 hp (maximum site rating of 1,714 hp). Also included in this project was an upgrade in the facility heating system involving the removal of a 0.819 MMBtu/hr, a 0.770 MMBtu/hr, and a 1.18 MMBtu/hr natural gas boiler and replacement with two new 1.5 MMBtu/hr natural gas boilers. The 1.18 MMBtu/hr boiler was incorrectly labeled in earlier permits as a 1.47 MMBtu/hr boiler. Unit identification numbers were changed to match the designations as listed in the February 18, 2011, application. **Title V Operating Permit #OP2484-03** replaced Title V Operating Permit #OP2484-02.

On December 10, 2012, DEQ received an AA request from WBI to change the official name of the company from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. **Title V Operating Permit #OP2484-04** replaced Title V Operating Permit #OP2484-03.

On October 17, 2013, DEQ received an AA request from WBI to change the Responsible Official from Mr. Scott Fradenburgh to Mr. Marc Dempeworf. Mr. Scott Fradenburgh is now considered the Alternate Responsible Official for WBI facilities in the State of Montana. **Title V Operating Permit #OP2484-05** replaced Title V Operating #OP2484-04.

On June 05, 2014, DEQ received a Title V permit renewal application from WBI. Title V Operating Permit **#OP2484-06** replaced Title V Operating Permit #OP2484-05.

On April 16, 2020, DEQ received a Title V permit renewal application from WBI. Title V Operating Permit **#OP2484-07** replaced Title V Operating Permit #OP2484-06.

## D. Current Permit Action

On May 10, 2022, DEQ received a minor modification application from WBI to add one (1) 4SLB 3750 HP Caterpillar G3612LE (Unit #17) compressor engine. WBI also requested the removal of the Waukesha L7042 GSU (Unit #1), and two (2) Ingersoll-Rand 48 KVG (Unit #9 & #10) compressor engines. WBI also requested that the 4SLB 1,775 HP Caterpillar G6306LE (Unit #17) be redesignated as Unit #2 to align with current WBI naming conventions. **Title V Operating Permit #OP2484-09** replaces Title V Operating Permit #OP2484-08.

## 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, DEQ is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, MCA, DEQ 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	8. 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, DEQ determined there are no taking or damaging implications associated with this permit action.

## **F. Compliance Designation**

DEQ inspected the Cabin Creek Compressor Station on April 30, 2020. The facility was in compliance with all applicable requirements. The most recent semiannual stack test reports were reviewed on April 30, 2020, and all tested units were in compliance.



## SECTION II. SUMMARY OF EMISSIONS UNITS

### A. Facility Process Description

The Cabin Creek Compressor Station is used to compress natural gas to the required pressure for transportation within the natural gas transmission system. Compression of the gas is accomplished with the use of 10 compressor engines and turbines. The Standard Industrial Classification (SIC) for this facility is Natural Gas Transmission which has a SIC Code of 4922.

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

The following table summarizes the permitting equipment at the Cabin Creek Compressor Station.

Emissions Unit ID	Description	Pollution Control Device/Practice
EU002	1775 hp Caterpillar G3606LE Engine	Oxidation catalyst
EU011	1100 hp Solar Saturn Phase IV Turbine Engine	None
EU012	1100 hp Solar Saturn Phase IV Turbine Engine	None
EU013	1100 hp Solar Saturn Phase IV Turbine Engine	None
EU014	1200 hp Solar Saturn Mark II Turbine Engine	None
EU015	1149 hp Solar Saturn Mark II Turbine Engine	None
EU016	3800 hp Solar Centaur Turbine Engine	None
EU017	3750 hp Caterpillar G3612LE Engine	Oxidation catalyst
GEN1	559 hp Waukesha 3521GL Reciprocating Engine	None
DEHY	15.25 MMBtu/hr Fired (DEHY) Regenerator Heater	None

Notes: MMBTU: Million British thermal units per hours

### C. Categorically Insignificant Sources/Activities

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 (HAP), and is not regulated by any applicable requirement other than a generally applicable requirement.

Emissions Unit ID	Description
MISC2	1.5 MMBtu/hr boiler
MISC3	1.5 MMBtu/hr boiler
MISC4	0.450 MMBtu/hr Eclipse Heater Model D-6
MISC5	Tanks (contain hydrocarbon condensate, gasoline, diesel, alcohol, slop oil, ethylene glycol, and odorant)
MISC6	0.03 MMBtu/hr Reliance 501 water heater
MISC7	0.07 MMBtu/hr Siegler 550 UN-24 heater
MISC8	0.07 MMBtu/hr Janitrol heater
FUG1	Fugitive emissions from valves, flanges, open-ended lines, compressor seals, etc.

## SECTION III. PERMIT CONDITIONS

### A. Emission Limits and Standards

The 1,109 hp Waukesha Compressor Engine (EU001) is limited to 4.88 lb/hr for NO<sub>x</sub>, 24.40 lb/hr for CO, and 0.18 lb/hr for VOC. The emission limits are based on ARM 17.8.749 determinations that were established by DEQ. Emissions from EU001 are required to be controlled by a NSCR catalyst. The minimum stack height for EU001 is 9.91 meters (m) above ground level.

The 1,149 hp Solar Turbine (EU015) is limited to 5.07 lb/hr for NO<sub>x</sub>, 7.60 lb/hr for CO, and 2.53 lb/hr for VOC. The emission limits are based on BACT determinations that were established by DEQ.

40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. Units EU001 and EU017 are subject to this subpart and must be in compliance with the applicable standards.

40 CFR 60, Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015. EU017 is subject to this subpart and must be in compliance with the applicable standards.

40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants (HAP) for Stationary Reciprocating Internal Combustion Engines was revised in 2010 with new compliance requirements for existing engines at area sources of HAP. Units EU001, EU009, EU010, and Gen1 are now subject to this subpart and must be in compliance with the applicable standards.

The 1,775 hp Caterpillar G3606LE (EU002) is limited to 0.70 g/bhp-hr and 2.74 lb/hr for NO<sub>x</sub>, 0.18 g/bhp-hr and 0.70 lb/hr for CO, and 0.30 g/bhp-hr and 1.17 lb/hr for VOC. The emissions limits are based on BACT determinations that were established by DEQ. Emission limits are presented in multiple units because 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, which EU002 is subject to, requires compliance with a g/bhp-hr emission factor and lb/hr units are necessary for emission inventory reporting purposes. 40 CFR 63, Subpart ZZZZ is also applicable to EU017.

The 3,750 hp Caterpillar G3612LE (EU017) is limited to 1.0 g/bhp-hr and 8.27 lb/hr for NO<sub>x</sub>, 2.0 g/bhp-hr and 16.54 lb/hr for CO, and 0.70 g/bhp-hr and 2.48 lb/hr for VOC. The emissions limits are based on BACT determinations that were established by DEQ. Emission limits are presented in multiple units because 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, which EU017 is subject to, requires compliance with a g/bhp-hr emission factor and lb/hr units are necessary for emission inventory reporting purposes. 40 CFR 63, Subpart ZZZZ is also applicable to EU017.

The 559 hp Waukesha Generator Engine (GEN1) is limited to 2.46 lb/hr for NO<sub>x</sub>, 4.06 lb/hr for CO, and 1.23 lb/hr for VOC. The emission limits are based on BACT determinations that were established by DEQ.

## **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 emissions 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 emissions 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, DEQ may request additional testing to determine compliance with the emission limits and standards.

## **C. Test Methods and Procedures**

Compliance with the opacity, particulate from fuel combustion, sulfur compounds in fuel (gaseous), and VOC limitations in the permit may be demonstrated by burning pipeline quality natural gas (as defined by WBI's Federal Energy Regulatory Commission (FERC) gas tariff) on an ongoing basis.

Title V Operating Permit #OP2484-08 contains requirements for semiannual testing with a portable analyzer for NO<sub>x</sub> and CO on units EU002, EU015, and EU017. The permit stipulates that the portable analyzer shall 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 030 for the "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers." WBI may use another testing procedure as approved in advance by DEQ. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). WBI will then convert the NO<sub>x</sub> and CO emissions test results from a parts per million (ppm) concentration to a lb/hr and g/bhp-hr emission rate as necessary. Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A in order to monitor compliance with the emissions limitations in the permit.

DEQ will use the portable analyzer testing 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 DEQ has the authority to require testing if deemed necessary to

determine compliance with an emission limit or standard. In addition, the WBI may elect to voluntarily conduct compliance testing to confirm its compliance status.

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but DEQ 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 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, the permittee is required to submit semi-annual and annual monitoring reports to DEQ 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 Fallon County Times, a local newspaper on or before September 14, 2022. DEQ provided a 30-day public comment period on the draft operating permit from September 14, 2022 to October 14, 2022. ARM 17.8.1232 requires DEQ to keep a record of both comments and issues raised during the public participation process. The comments and issues received by October 14, 2022, will be summarized, along with DEQ's responses, in the following table. All comments received during the public comment period will be promptly forwarded to WBI so they may have an opportunity to respond to these comments as well.

**Summary of Public Comments**

Person/Group Commenting	Comment	DEQ Response
<b>No Public Comments Received</b>		

**G. Draft Permit Comments**

**Summary of Permittee Comments**

Permit Reference	Permittee Comment	DEQ Response
Operating Permit, Section III.B	WBI Energy requests the removal of the conditions, parameters, and limits for the NSCR catalyst and Stack Height from the table on Page 7. There are no longer any engines equipped with an NSCR catalyst	DEQ made the requested changes.

	at the facility, and the Stack Height conditions in the table pertain to EU001, which has been removed.	
Operating Permit, Section III.B.9	WBI Energy requests the removal of Condition B.9. EU001 has been removed from the facility, and the remaining engines do not require a CAM Plan. Subsequent condition numbering will have to be revised to reflect this change.	DEQ made the requested changes.
Operating Permit, Section III.B.18 & 19	WBI Energy requests the removal of Condition B.18 and B.19 as there are no longer any engines equipped with NSCR catalysts, and EU001 has been removed from the facility.	DEQ made the requested changes.
Operating Permit, Section III.B.21	WBI Energy requests the removal of Condition B.21 as there are no longer any engines at the facility that require a CAM plan.	DEQ made the requested changes.
Operating Permit, Section III.B.28 & 29	WBI Energy requests the removal of Condition B.28 and B.29 as there are no longer any engines equipped with NSCR catalysts, and EU001 has been removed from the facility.	DEQ made the requested changes.
Operating Permit, Section III.B.31	WBI Energy requests the removal of Condition B.31 as there are no longer any engines at the facility that require a CAM plan.	DEQ made the requested changes.
Operating Permit, Section III.B.35 & 37	WBI Energy requests that these conditions be placed under a "Reporting" heading consistent with previous permit versions.	DEQ made the requested changes.
Operating Permit, Section III.B.37	WBI Energy requests the removal of conditions d, e, and g from Condition B.37 as there are no longer any engines equipped with NSCR catalysts, EU001 has been removed, and there are no longer any engines at the facility that require a CAM plan.	DEQ made the requested changes.
Operating Permit, Section III.C.12	WBI Energy requests that Carbon Monoxide (CO) be included as part of the semiannual testing requirements outlined in Condition C.12.	DEQ made the requested changes.

Operating Permit - General	<p>WBI Energy requests the removal of the Subpart OOOOa compliance requirements from Section 111.C EU0 17. The requirements for Subpart OOOOa do not pertain to the compressor driver, but the compressor itself.</p> <p>WBI Energy requests the creation of a separate source category for fugitive emissions sources to accommodate the Subpart OOOOa requirements for compressor venting and collection of fugitive emissions components.</p>	<p>DEQ made the requested changes.</p> <p>DEQ added the requested section to the Operating Permit.</p>

**Summary of EPA Comments**

Permit Reference	EPA Comment	DEQ Response
<b>No EPA Comments Received</b>		

## SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Section IV of the operating permit Non-applicable Requirements contains the requirements that DEQ determined were non-applicable. The following paragraphs summarize the requirements that WBI identified as non-applicable and contains the reasons that DEQ did not include these requirements as non-applicable in the permit.

40 CFR 60 Subpart KKKK – *Standards of Performance for Stationary Gas Turbines* is not applicable to the turbines at the Cabin Creek Compressor Station at this time because they were manufactured and installed before the applicable date outlined in the subpart. However, future turbine installations or replacements may be subject to 40 CFR 60 Subpart KKKK.

## SECTION V. FUTURE PERMIT CONSIDERATIONS

### A. MACT Standards

40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* could be applicable to future engine installations at this facility.

### B. NESHAP Standards

As of the draft issuance date of Title V Operating Permit #OP2484-08, DEQ is unaware of any future NESHAP rules that may be promulgated that will affect this facility.

### C. NSPS Standards

40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines could be applicable to future engine installations at this facility. Turbines currently subject to 40 CFR 60, Subpart GG would be subject to 40 CFR 60, Subpart KKKK Standards of Performance for Stationary Combustion Turbines if they undergo modification, replacement, or reconstruction. Units that become subject to 40 CFR 60, Subpart KKKK will then cease to be subject to 40 CFR 60, Subpart GG. 40 CFR 60, Subpart KKKK could potentially be applicable to any turbine at this facility if they undergo modification, replacement, or reconstruction.

### D. Risk Management Plan

As of May 1, 2020, 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; three 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.

There are no emitting units at the Cabin Creek facility that require 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<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.

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 PSD may still be required to comply with BACT for GHG emissions.