# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

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

NorthWestern Energy
Telstad Field Station
NE ¼ of the NE ¼ of Section 34, Township 32 North, Range 1 East, Toole County,
Montana
40 East Broadway St.
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		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		Annual and semiannual
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 Montana Air Quality Permit (MAQP)	X		MAQP #2782-07
New Source Performance Standards (NSPS)		X	
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 ZZZZ
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR	X		NO <sub>x</sub> emissions > 250 tons per year
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

# TABLE OF CONTENTS

SECT	TION I. GENERAL INFORMATION	3
Α.	Purpose	3
В.	FACILITY LOCATION	
C.	FACILITY BACKGROUND INFORMATION	3
D.	CURRENT PERMIT ACTION	6
E.	TAKING AND DAMAGING ANALYSIS	7
F.	COMPLIANCE DESIGNATION	7
SECT	TION II. SUMMARY OF EMISSIONS UNITS	8
Α.	FACILITY PROCESS DESCRIPTION	8
В.	EMISSION UNITS AND POLLUTION CONTROL DEVICE IDENTIFICATION	8
C.	CATEGORICALLY INSIGNIFICANT SOURCES/ACTIVITIES	8
SECT	TION III. PERMIT CONDITIONS	9
Α.	Emissions Limits and Standards	9
В.	MONITORING REQUIREMENTS	
C.	TEST METHODS AND PROCEDURES	
D.	RECORDKEEPING REQUIREMENTS	11
Е.	REPORTING REQUIREMENTS	11
F.	PUBLIC NOTICE	11
G.	Draft Permit Comments	11
SECT	TION V. FUTURE PERMIT CONSIDERATIONS	16
Α.	MACT Standards (Part 63)	16
В.	NESHAP STANDARDS (PART 61)	
C.	NSPS STANDARDS	16
D.	RISK MANAGEMENT PLAN	16
E.	CAM APPLICABILITY	
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 application submitted by NorthWestern Energy (NWE), as Montana Power Company (MPC), on July 11, 1995; information provided in the modification application submitted to the Department of Environmental Quality (Department) on August 18, 2001; information submitted by NWE, or as NorthWestern Corporation (NorthWestern), in the administrative amendment requests submitted on February 11, 2003, June 12, 2003, October 16, 2003, March 24, 2008, and September 7, 2011; and the permit renewal applications submitted July 02, 2003, September 30, 2009 and February 27, 2015.

## B. Facility Location

NWE owns and operates the Telstad Field Station. This facility is located in the NE<sup>1</sup>/<sub>4</sub>, of the NE1/4, of Section 34, Township 32 North, Range 1 East in Toole County, Montana.

# C. Facility Background Information

EU1&2 EU3&4	<ul> <li>(2) Ingersoll Rand XVG compressor engines were installed in 1948</li> <li>(2) Ajax DPC-600 compressor engines were installed in 1977</li> <li>(4) Ajax DPC-460</li> </ul>
EU5	(1) Ajax DPC-160 compressor engine, was installed in July of 1979
EU6	(1) 1.512 million British thermal unit per hour (MMbtu/hr) General Building
	reboiler, (2) 0.137 MMbtu/hr heaters, (8) 0.11 MMbtu/hr heaters, (2) 0.075
	MMbtu/hr heaters, (2) 0.05 MMbtu/hr heaters, and (1) 0.03 MMbtu/hr
	heater
EU7	(1) 0.4 MMbtu/hr Olman Heath dehydrator reboiler
EU8	(1) Solar Saturn Turbine Compressor (1100 brake horsepower (bhp))
EU9	(1) Solar Saturn Turbine Compressor (1100 bhp)
EU10	(1) 0.75 MMbtu/hr Lochnivar heating boiler
EU11	(2) Waukesha Natural Gas Emergency Backup Generators
EU12	In-plant vehicle traffic

# Montana Air Quality Permit (MAQP) Background

The Ingersoll Rand XVG compressor engines were installed at the Telstad compressor station in 1948, the Clark RA-8 compressor engine was installed in 1967 (removed in 2010), the Ajax DPC-600 compressor engines were installed in 1977, and the Ajax DPC-160 compressor engine, was installed in July 1979.

TRD2782-09 Date of Decision: 09/29/2015 3

On September 23, 1993, the Department of Environmental Quality (Department) issued MAQP #2782-00 to MPC for the operation of a natural gas processing plant and associated equipment. The 160 bhp Ajax DPC-160 compressor engine was installed in July 1979. Therefore, a Best Available Control Technology (BACT) analysis was required for the 160 bhp Ajax DPC-160 compressor engine. Based on the BACT analysis, the Department determined BACT to be the proper operation of the 160 bhp Ajax DPC compressor engine to maintain compliance with the oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) emission limitations. The heaters and the reboilers at the Telstad Field are considered minor sources. Based on previous determinations, BACT for these sources is no control.

On May 16, 1994, the Department issued MAQP #2782-01 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 was allowed for operational flexibility.

In addition, MPC requested a modification to their initial permit for the 160 bhp Ajax DPC-160 compressor engine. MPC requested to change the limits from 3.0 g NO<sub>X</sub>/bhp-hr and 2.5 g CO/bhp-hr to 11.0 g CO or NO<sub>X</sub>/bhp-hr basis. A test conducted October 12, 1993, showed that MPC could not meet the initial NO<sub>X</sub> and CO limitations. The Department agreed with MPC's request to increase the allowable emissions. The initial limitation was based on erroneous manufacturer data.

Also, as part of the permit modification for MAQP #2782-01, the NO<sub>X</sub> emission limitations were identified as NO<sub>2</sub>, and the heaters were calculated at the next 1 million British thermal unit per hour (MMBtu/hr) increment. **MAQP** #2782-01 replaced MAQP #2782-00.

On September 30, 1998, MPC requested a permit modification to MAQP #2782-01. The request involved removing the testing requirement for the 160 bhp Ajax DPC-160 compressor engine. Based on the emissions and past testing results for this source, the Department agrees that an every 4-year testing schedule is not necessary for this engine at this time; however, the limit will remain and testing may be required in the future. This permit modification is consistent with other compressor stations and the Department's testing guidance. Rule references were also updated. MAQP #2782-02 replaced MAQP #2782-01.

On October 4, 2001, MPC was issued MAQP #2782-03 to facilitate the installation and operation of two 1100 bhp Solar Saturn turbine compressors and one 750 Mbtu/hr heating boiler. In addition, MPC removed the 3000 Mbtu/hr Sweetening Plant Reboiler, the 250 Mbtu/hr Reclaimer Reboiler, the Sweetening Plant Flare, and the Sweetening Plant Dehydrator. MAQP #2782-03 includes a restriction on the combined hours of operation for the two Solar Saturn turbines to keep the facility below the Prevention of Significant Deterioration (PSD) significance level for NO<sub>X</sub>. **MAQP #2783-03** replaced MAQP #2782-02.

TRD2782-09 Date of Decision: 09/29/2015 On October 18, 2002, the Department received a request to administratively amend MAQP #2782-03 to incorporate a name change from MPC to NorthWestern. MAQP #2782-04 incorporated the name change into the permit. MAQP #2782-04 replaced MAQP #2782-03.

On October 30, 2003, the Department received an administrative amendment request from NorthWestern for MAQP #2782-04. NorthWestern requested that the every 4-year testing requirements for each of the two 1100 bhp Solar Saturn turbine compressors be removed from the permit because NorthWestern's Title V Operating Permit #OP2782-03, as issued as final on August 25, 2003, requires semiannual testing on each of the turbine compressors. In addition, the permit format, language, and rule references were updated to reflect the Department's current permit format, language, and rule references. MAQP #2782-05 replaced MAQP #2782-04.

On February 7, 2008, the Department received an administrative amendment request from NWE for MAQP #2782-05. NWE requested a name change from NorthWestern to NWE. On April 8, 2008, the Department incorporated the requested name change. MAQP #2782-06 replaced MAQP #2782-05.

On January 22, 2010, the Department received an administrative amendment request from NWE for MAQP #2782-06. NWE requested the Department to correct the name of the facility from Telestad Field Station to Telstad Field Station. In addition, NWE also requested removal of the 800 bhp Clark compressor engine from the permitted equipment list because the compressor engine has been removed from service and will not be repaired. MAQP #2782-07 replaced MAQP #2786-06.

# Title V Operating Permit Background

Title V Permit Application #OP2782-00 was submitted to the Department on July 11, 1995, and Operating Permit #OP2782-00 was issued effective on January 3, 1999.

MPC was issued Operating Permit #OP2782-01 on September 18, 2002. The modification added two 1100 bhp Solar Saturn turbine compressors and one 750 Mbtu/hr heating boiler to the permit. In addition, the 3000 Mbtu/hr Sweetening Plant Reboiler, the 250 Mbtu/hr Reclaimer Reboiler, the Sweetening Plant Flare, and the Sweetening Plant Dehydrator were removed from the permit. The permit included a restriction on the combined hours of operation for the two Solar Saturn turbine compressors to keep facility emissions below PSD significance level for NO<sub>X</sub>. On October 19, 2002, Operating Permit #OP2782-01 replaced Operating Permit #OP2782-00.

On February 11, 2003, the Department received a request from NorthWestern to administratively amend Operating Permit #OP2782-01. NorthWestern requested the Department to update the permit to reflect a change of the responsible official. In addition, the permit action updated the permit to reflect a name change from MPC to NorthWestern, as requested by MPC on October 15, 2002. Operating Permit #OP2782-02 replaced Operating Permit #OP2782-01.

TRD2782-09 5 On June 12, 2003, the Department received a request from NorthWestern to administratively amend Operating Permit #OP2782-02. NorthWestern requested the Department to update the permit to reflect a change of the responsible official. Operating Permit #OP2782-03 replaced Operating Permit #OP2782-02.

On October 16, 2003, the Department received a request from NorthWestern for an administrative amendment of Operating Permit #OP2782-03 to update Section V.B.3 of the General Conditions incorporating changes to federal Title V rules 40 Code of Federal Regulations (CFR) 70.6(c)(5)(iii)(B) and 70.6(c)(5)(iii)(C) (to be incorporated into Montana's Title V rules at Administrative Rules of Montana (ARM) 17.8.1213) regarding Title V annual compliance certifications. Operating Permit #OP2782-04 replaced Operating Permit #OP2872-03.

On July 2, 2003, the Department received a renewal application from NorthWestern. The limits and conditions in the renewed permit were primarily based upon limits and conditions as developed for Operating Permit #OP2782-03. Operating Permit #OP2782-05 replaced Operating Permit #OP2782-04.

On March 24, 2008, the Department received an administrative amendment request from NWE for Operating Permit #OP2782-05. NWE requested a name change from NorthWestern to NWE. The Department incorporated the requested name change. Operating Permit #**OP2782-06** replaced Operating Permit #OP2782-05.

On September 30, 2009, the Department received a renewal application from NWE (assigned Operating Permit OP#2782-07). **Operating Permit #OP2782-07** replaced Operating Permit #OP2782-06.

On September 7, 2011 the Department received an administrative amendment request to change the name of the responsible official from Dave Gates to Michael R. Cashell. In processing the administrative amendment, it was noted that the operating permit's expiration date was incorrect. The permit action was an administrative amendment to change the name of the responsible official and to correct the operating permit expiration date from March 31, 2015 to August 30, 2015. 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 #OP2782-08 replaced Operating Permit #OP2782-07 for the Telstad Field Station.

#### D. Current Permit Action

On February 27, 2015, the Department received a renewal application from NorthWestern. Minor rule reference changes were made according to Department guidance and the nonapplicable requirements table was also updated. **Operating Permit #OP2782-09** replaces Operating Permit #OP2782-08 for the Telstad Field Station.

TRD2782-09 Date of Decision: 09/29/2015 6

## 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 pubic 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 Telstad Field Station was last inspected on December 6, 2012. In addition to the on-site inspection, the Department conducted a review of reports/records submitted by NWE during the period up to December 19, 2012, for this Full Compliance Evaluation (FCE). Based on the information gathered at the time of the facility inspection, the observations made during the inspection, and the review of reports/records, the Department believes that the NWE Telstad Field Station was in compliance with the conditions and limitations of both applicable air quality permits (MAQP #2782-07 and Title V Operating Permit #OP2782-08).

TRD2782-09 Effective Date: 10/30/2015

#### SECTION II. SUMMARY OF EMISSIONS UNITS

## A. Facility Process Description

The purpose of the NWE Telstad Field Station is to boost the field gas to the natural gas transmission system. This initial compression of the gas is accomplished with the compressor engines and turbines. The heaters provide the heat to the various station facilities. Another purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with a dehydrator, also commonly called a reboiler or glycol unit. The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol solution is then heated to about 300° F to drive off the water and return the glycol. The heat necessary for this activity is generated by burning natural gas in the dehydrator reboilers. These units range in heat input from 250 - 3000 MBtu/hr.

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

Emissions Unit ID	Description	Pollution Control Device/Practice
EU1	300 bhp Ingersoll Rand XVG Compressor Engine	none
EU2	300 bhp Ingersoll Rand XVG Compressor Engine	none
EU3	AJAX DPC-600, 600 bhp Compressor Engine	none
EU4	AJAX DPC-600, 600 bhp Compressor Engine	none
EU5	AJAX DPC-160, 160 bhp Compressor Engine	none
EU6	Natural Gas Building Heaters, < 4MMBtu/hr	none
EU7	Olman Heath Dehydrator Reboiler, 400 MBtu/hr	none
EU8	Solar Saturn, 1100 bhp Turbine Compressor	none
EU9	Solar Saturn, 1100 bhp Turbine Compressor	none
EU10	750 Mbtu/hr Lochnivar heating boiler	none
EU11	(2) 190 bhp Waukesha Natural Gas Emergency Backup Generators	none
EU12	In-plant Vehicle Traffic	none

## 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, and is not regulated by an applicable requirement other than a generally applicable requirement that applies to all emission units subject to this subchapter. A list of insignificant emitting units at the Telstad Field Station is summarized in the following table:

Emissions Unit ID	Description
IEU1	Process Valves, flanges, open ended lines, etc.

#### **SECTION III. PERMIT CONDITIONS**

## A. Emissions Limits and Standards

Each of the two 300 bhp Ingersoll Rand XVG compressor engines does not have associated emission limits. However, emissions from each engine are limited to 40% opacity averaged over 6 consecutive minutes and particulate matter caused by the combustion of fuel is limited to E=0.882\*H-0.1664. In addition, fuel burned in the engines must not contain sulfur compounds in excess of 50 gr/100 dscf of gaseous fuel, calculated as hydrogen sulfide (H<sub>2</sub>S) at standard conditions.

Each of the two 600 bhp Ajax DPC-600 compressor engines is limited to 20.5 lb/hr for NO<sub>x</sub>, 1.46 lb/hr for CO, and 0.66 lb/hr for VOC. The emission limits are based on Best Available Control Technology (BACT) determinations that were established by the Department. Emissions from each engine are limited to 20% opacity averaged over 6 consecutive minutes and particulate matter caused by the combustion of fuel is limited to E=1.026\*H<sup>-0.233</sup>. In addition, fuel burned in the engines must not contain sulfur compounds in excess of 50 gr/100 dscf of gaseous fuel, calculated as H<sub>2</sub>S at standard conditions.

The 160 bhp Ajax DPC-160 compressor engine is limited to 3.88 lb/hr for NO<sub>x</sub>, 3.88 lb/hr for CO, and 0.28 lb/hr for VOC. The emission limits are based on BACT determinations that were established by the Department. Emissions from the 160 bhp compressor engine are limited to 20% opacity averaged over 6 consecutive minutes and particulate matter caused by the combustion of fuel is limited to E=1.026\*H-0.233. In addition, fuel burned in the engines must not contain sulfur compounds in excess of 50 gr/100 dscf of gaseous fuel, calculated as H<sub>2</sub>S at standard conditions.

Each of the two 1100 bhp Solar Saturn turbine compressors is limited to 7.11 lb/hr for NO<sub>x</sub>, 11.57 lb/hr for CO, and 1.66 lb/hr for VOC. The emission limits are based on BACT determinations that were established by the Department. Emissions from each engine are limited to 20% opacity averaged over 6 consecutive minutes and particulate matter caused by the combustion of fuel is limited to E=1.026\*H<sup>-0.233</sup>. In addition, fuel burned in the engines must not contain sulfur compounds in excess of 50 gr/100 dscf of gaseous fuel, calculated as H<sub>2</sub>S at standard conditions. The combined total hours of operation for the two Solar Saturn turbine compressors are limited to 10,400 hours during any rolling 12-month time period. The hours of operation limit was placed on the Solar Saturn turbine compressors, as requested by NWE, to allow the facility to remain below the Prevention of Significant Deterioration (PSD) significance threshold value for NO<sub>x</sub>.

Each of the two 190 bhp natural gas Waukesha emergency backup generators does not have associated emission limits. However, emissions from each generator are limited to 20% opacity averaged over 6 consecutive minutes and particulate matter caused by the combustion of fuel is limited to E=1.026\*H<sup>-0.233</sup>. In addition, fuel burned in the backup generators must not contain sulfur compounds in excess of 50 gr/100 dscf of gaseous fuel, calculated as H<sub>2</sub>S at standard conditions. Neither Waukesha emergency backup generator shall be operated more than 500 hours per rolling 12-month time period, nor shall either Waukesha emergency backup generator be operated as part of routine operations.

Emissions from the Natural Gas Building Heaters (< 4 MMBtu), the 400 MBtu/hr Olman Heath Dehydrator Reboiler, and the 750 MBtu/hr Lochnivar Heating Boiler limited to 20% opacity averaged over 6 consecutive minutes and particulate matter caused by the combustion of fuel is limited to E=1.026\*H-0.233. In addition, fuel burned in the units must not contain sulfur compounds in excess of 50 gr/100 dscf of gaseous fuel, calculated as H<sub>2</sub>S at standard conditions.

NWE shall not cause or authorize the production, handling, transportation, or storage of any material, unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate from any stationary source shall not exhibit an opacity of 20% or greater when averaged over 6 consecutive minutes. NWE shall not cause or authorize the use of any access roads, parking lots, or the general plant area without taking reasonable precautions to control emissions of airborne particulates. NWE shall treat all unpaved portions of the access roads, parking lots and general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precaution limitation.

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

Monitoring at the Telstad Field station consists of certifying that only pipeline quality natural gas is used.

#### 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. Portable analyzer testing is required semiannually for the two 600 bhp Ajax DPC-600 compressor engines, the 160 bhp Ajax DPC-160 compressor engine, and the two 1100 bhp Solar Saturn turbine compressors. This testing schedule and method has been approved by the Department and EPA.

# 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 semiannual 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 *Shelby Promoter* on July 8, 2015. The Department provided a 30-day public comment period on the draft operating permit from July 8, 2015, to August 7, 2015. 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 August 7, 2015, are summarized, along with the Department's responses, in the following table. All comments received during the public comment period will be promptly forwarded to NWE so they may have an opportunity to respond to these comments as well.

## **Summary of Public Comments**

Person/Group	Comment	Department Response
Commenting		
	None received	

#### 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 REQUIREMENTS ANALYSIS

Section IV. of the Operating Permit "Non-applicable Requirements" contains the requirements that the Department determined were non-applicable. The following table summarizes the requirements that the Department has determined to be applicable including the requirements NWE identified as non-applicable. The table contains the reasons that the Department did not include these requirements as non-applicable in the permit.

Applicable Requirement	Reason	
Sub-Chapter 1 General Provisions		
ARM 17.8.101 Definitions ARM 17.8.102 Incorporation by Reference – Publication Dates ARM 17.8.103 Incorporation by Reference and Availability of Referenced Documents	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.	
Sub-Chapter 2 Ambier	nt Air Quality	
ARM 17.8.201 Definitions ARM 17.8.202 Incorporation by Reference	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 17.8.204 Ambient Air Monitoring ARM 17.8.205 Enforceability ARM 17.8.206 Methods and Data ARM 17.8.210 Ambient Air Quality Standard for Sulfur Dioxide ARM 17.8.211 Ambient Air Quality Standard for Nitrogen Dioxide ARM 17.8.212 Ambient Air Quality Standard for Carbon Monoxide ARM 17.8.213 Ambient Air Quality Standard for Ozone ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter ARM 17.8.221 Ambient Air Quality Standard for Visibility ARM 17.8.222 Ambient Air Quality Standard for Lead ARM 17.8.223 Ambient Air Quality Standard for PM <sub>10</sub> ARM 17.8.230 Fluoride in Forage	These rules are always applicable to a major source and may contain specific requirements for compliance.	
Sub-Chapter 3 Emission Standards		
ARM 17.8.301 Definitions ARM 17.8.302 Incorporation by Reference	This rule consists of a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference.  These types of rules do not have specific requirements associated with them.	
ARM 17.8.322 Sulfur Oxide Emissions - Sulfur in Fuel	This facility burns both liquid and solid fuel at the facility. Therefore, this rule is applicable to	

Applicable Requirement	Reason	
	the facility.	
ARM 17.8.326 Prohibited Materials for Wood or Coal Residential Stoves	This regulation may not be applicable to the source at this time; however, it may become applicable during the life of the permit.	
Sub-Chapter 4 Stack Heights and	Dispersion Techniques	
ARM 17.8.401 Definitions	This rule consists of a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference.  These types of rules do not have specific requirements associated with them.	
ARM 17.8.402 Requirements ARM 17.8.403 Exemptions	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.	
Sub-Chapter 5 Air Quality Permit Application	, Operation and Open Burning Fees	
ARM 17.8.501 Definitions	This rule consists of a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference.  These types of rules do not have specific requirements associated with them.	
ARM 17.8.504 Air Quality Permit Application Fees ARM 17.8.505 Air Quality Operation Fees ARM 17.8.514 Air Quality Open Burning Fees ARM 17.8.515 Air Quality Open Burning Fees for Conditional, Emergency, Christmas Tree Waste, Commercial Film Production, and Firefighter Training Open Burning Permits	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span	
Sub-Chapter 6 Ope		
ARM 17.8.601 Definitions ARM 17.8.602 Incorporation by Reference	This rule consists of a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference.  These types of rules do not have specific requirements associated with them.	
ARM 17.8.606 Minor Open Burning Source Requirements ARM 17.8.611 Emergency Open Burning Permits ARM 17.8.612 Conditional Air Quality Open Burning Permits	The following regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.	
Sub-Chapter 7 Permit, Construction and Operation of Air Contaminant Sources		
ARM 17.8.740 <i>et seq.</i> Permit, construction and operation of air contaminant sources	The following regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.	
Sub-Chapter 8 Prevention of Significan	t Deterioration of Air Quality	
ARM 17.8.801 Definitions ARM 17.8.802 Incorporation by Reference	This rule consists of a statement of purpose, applicability statement, regulatory definition or	

TRD2782-09 13

Applicable Requirement	Reason	
	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	The following regulations may not be applicable to the source at this time, however, these regulations may become applicable during the life of the permit	
ARM 17.8.825 Sources Impacting Federal Class I Areas – Additional Requirements ARM 17.8.826 Public Participation	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.	
Sub-Chapter 9 Permit Requirements for Major Sta Locating Within Nonatt		
ARM 17.8.901 Definitions ARM 17.8.902 Incorporation by Reference	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 17.8.904 When Air Quality Permit Required 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 regulations are state regulations, which may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.	
Sub-Chapter 10 Preconstruction Permit Requireme Modifications Locating Within Attair		
ARM 17.8.1001 Definitions ARM 17.8.1002 Incorporation by Reference	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 17.8.1004 When Air Quality Permit Required ARM 17.8.1005 Additional Conditions of Montana Air Quality 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 regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.	
Sub-Chapter 11 Visibility Impact Assessment		
ARM 17.8.1101 Definitions ARM 17.8.1102 Incorporation by Reference ARM 17.8.1103 ApplicabilityVisibility Requirements	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	

TRD2782-09 14 Date of Decision

Applicable Requirement	Reason
	requirements associated with them.
ARM 17.8.1108 Notification of Permit Application ARM 17.8.1109 Adverse Impact and Federal Land Manager	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.
Federal Requirements	
40 CFR 50 National Primary and Secondary Ambient Air Quality Standards 40 CFR 51 Requirements for Preparation, Adoption, and Submittal of Implementation Plans 40 CFR 58 Ambient Air Quality Surveillance	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source
<ul> <li>40 CFR 52 Approval and Promulgation of Implementation Plans</li> <li>40 CFR 62 Approval and Promulgation of State Plans for Designated Facilities and Pollutants</li> <li>40 CFR 70 and 71 State Operating Permit Programs and EPA Regulations on Federal Operating Permit Programs</li> </ul>	These rules contain requirements for regulatory authorities and not major sources. These rules can be used to impose specific requirements on a major source.
40 CFR 60.11 Compliance with Standards and Maintenance Requirements 40 CFR 60.14 Modification 40 CFR 60.15 Reconstruction	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 61, Subpart M National Emissions Standards for Hazardous Air Pollutants – Asbestos	This is a federal regulation that has specific procedural requirements that may become relevant to the major source during the permit term.
40 CFR 63, Subpart A - General Provisions	These federal regulations consist of an applicability statement. These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.

#### SECTION V. FUTURE PERMIT CONSIDERATIONS

## A. MACT Standards (Part 63)

As of the issuance date of Operating Permit #OP2782-08, the Department is unaware of any other future MACT Standards that may be promulgated that will affect this facility. This facility contains an affected area source that is subject to 40 CFR 63, Subpart HH, *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* in accordance with new/modified regulations promulgated January 3, 2007. 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines has applicable requirements for engines at this facility.

## B. NESHAP Standards (Part 61)

The Department is unaware of any proposed or pending NESHAP standard that may be promulgated that will affect the Telstad Field Station.

## C. NSPS Standards

As of the issuance date of Operating Permit #OP2782-08, the Department is unaware of any proposed or pending NSPS Standards that may be promulgated that will affect the Telstad Field Station.

# D. Risk Management Plan

As of the issuance date of Operating Permit #OP2782-08, 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 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 emissions of the applicable regulated air pollutant that are greater than major source thresholds.

NWE does not currently have any emitting units that meet all the applicability criteria in ARM 17.8.1503 under Operating Permit #OP2782-08, and is therefore not currently required to develop a CAM Plan for the Telstad Field Station.

## 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.

Based on information provided by NWE, NWE's potential emissions fall below 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<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.