

**United States Environmental Protection Agency**  
**Region 8**  
**Air Program**  
**1595 Wynkoop Street**  
**Denver, Colorado 80202**



**AIR POLLUTION CONTROL**  
**TITLE V PERMIT TO OPERATE**

In accordance with the provisions of title V of the Clean Air Act and 40 CFR Part 71 and applicable rules and regulations,

**BP America Production Company**  
**Miera Compressor Facility**

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate at the following location:

**Southeast 1/4 of Section 8,**  
**Township 34N, Range 8W**  
**of the Southern Ute Indian Reservation**

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by EPA and citizens under the Clean Air Act.

A handwritten signature in black ink, appearing to read "Deborah Lebow Aal", written over a horizontal line.

Deborah Lebow Aal, Acting Director  
Air Program  
US EPA Region 8

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**AIR POLLUTION CONTROL  
TITLE V PERMIT TO OPERATE  
BP America Production Company  
Miera Compressor Facility**

Permit Number: V-SU-00039-2009.04  
Replaces Permit No.: V-SU-0039-09.03

Issue Date: May 20, 2011  
Effective Date: May 20, 2011  
Expiration Date: November 8, 2014

The permit number cited above should be referenced in the future correspondence regarding this facility.

**Permit History**

<b>Date of Action</b>	<b>Type of Action</b>	<b>Description of Action</b>	<b>Changes to Permit</b>
May 2004	Initial Permit	<b>Permit # V-SU-0039-04.00 with three revisions :</b>  <b>V-SU-0039-04.01</b> - Administrative Amendment  <b>V-SU-0039-04.02</b> - Administrative Amendment  <b>V-SU-0039-04.03</b> - Minor Modification	Change in Responsible Official  Change in Responsible Official and Tribal Contact  Addition and Adjustment of Requirements
September 2009  March 2010  July 2010  October 2010  May 2011	1 <sup>st</sup> Renewal Permit	<b>Permit # V-SU-0039-09.00 with three revisions :</b>  <b>V-SU-0039-09.01</b> – Minor Modification  <b>V-SU-0039-09.02</b> – Administrative Amendment  <b>V-SU-0039-09.03</b> – Administrative Amendment  <b>V-SU-00039-2009.04</b> – Minor Modification	Incorporation of NSPS JJJJ Requirements for C-400 engine  Removal of Condition II.D.3 – Source Test Plan  Correct NSPS JJJJ emission limits table heading for NOx and CO  Revised condition III.C.2 to include ASTM Method D6348-03

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## Abbreviations and Acronyms

AR	Acid Rain
ARP	Acid Rain Program
bbls	Barrels
BACT	Best Available Control Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System (includes COMS, CEMS and diluent monitoring)
COMS	Continuous Opacity Monitoring System
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
DAHS	Data Acquisition and Handling System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
EIP	Economic Incentives Programs
EPA	Environmental Protection Agency
FGD	Flue gas desulfurization
gal	gallon
GPM	Gallons per minute
H <sub>2</sub> S	Hydrogen sulfide
HAP	Hazardous Air Pollutant
hr	hour
Id. No.	Identification Number
IEU	Insignificant emission unit
kg	kilogram
lb	pound
MACT	Maximum Achievable Control Technology
MVAC	Motor Vehicle Air Conditioner
Mg	Megagram
MMBtu	Million British Thermal Units
mo	Month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMHC	Non-methane hydrocarbons
NO <sub>x</sub>	Nitrogen oxides
NSPS	New Source Performance Standard
NSR	New Source Review
pH	Negative logarithm of effective hydrogen ion concentration (acidity)
PM	Particulate matter
PM <sub>10</sub>	Particulate matter less than 10 microns in diameter
ppm	Parts per million
PSD	Prevention of Significant Deterioration
PTE	Potential to emit
psi	Pounds per square inch
psia	pounds per square inch absolute
RICE	Reciprocating Internal Combustion Engine
RMP	Risk Management Plan
scfm	Standard cubic feet per minute
SNAP	Significant New Alternatives Program
SO <sub>2</sub>	Sulfur dioxide
tpy	Tons per year
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

**TABLES**

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## **I. Source Identification and Unit-Specific Information**

### **I.A. General Source Information**

**Parent Company Name:** BP America Production Company

**Plant Name:** Miera Compressor Facility

**Plant Location:** SE 1/4 of Section 8, T34N, R8W  
Longitude - 107.739683  
Latitude - 37.198800

**Region:** 8

**State:** Colorado

**County:** La Plata

**Reservation:** Southern Ute Indian Reservation

**Tribe:** Southern Ute Indian Tribe

**Responsible Official:** Florida Operations Manager

**SIC Code:** 1311

**AFS Plant Identification Number:** 08-067-00357

**Other Clean Air Act Permits:** There are no other permits, such as non-attainment NSR or PSD, issued to this facility.



## **Description of Process:**

The Miera Compressor Facility (Miera), owned and operated by BP America Production Company (BP), is a natural gas compression facility located in the southwestern corner of Colorado within the exterior boundaries of the Southern Ute Indian Reservation.

The Miera facility provides field compression for natural gas wells in the area. Fruitland natural gas (coal bed methane) wells feed into a gathering pipeline system at the inlet of the facility. The natural gas produced is approximately 99% methane. This gas mixture is also water vapor saturated. The natural gas coming into the compressor station is at approximately 60 psi and 65 °F. These wells do not produce any condensate or natural gas liquids.

The natural gas entering the compressor station first passes through an inlet separator vessel to remove any free liquid water in the gas stream by gravity. The gas stream then passes to a distribution header, which distributes the gas to one of four compressors. On the inlet to each compressor there exists a filter vessel, which serves to filter out any solids such as coal dust in the gas. Each compressor package consists of a skid-mounted combination of engine and compressor. Under the current configuration, there are four reciprocating Caterpillar lean burn engines installed at Miera. These engines are fueled by natural gas.

The compressors raise the gas pressure from 60 psi to 350 psi. After compression the gas passes through an outlet coalescer vessel, which serves to remove any entrained droplets of lubricating oil carried over from the compressors. The gas then passes to the glycol dehydrators to remove water vapor in the gas. The gas is then metered and routed into a medium pressure line.

The PTE for the Miera facility, enforceable emission controls taken into consideration, are as follows:

- Nitrogen oxides (NO<sub>x</sub>) – 52.2 tpy
- Carbon monoxide (CO) – 57.8 tpy
- Volatile organic compounds (VOC) – 76.2 tpy
- Small particulates (PM<sub>10</sub>) – 2.3 tpy
- Lead – 0 tpy
- Sulfur dioxide (SO<sub>2</sub>) – 0.12 tpy
- Hazardous Air Pollutants (HAPs) – 10.3 tpy
- Largest single HAP (formaldehyde, CH<sub>2</sub>O) – 8.9 tpy

## **I.B. Source Emission Points**

The following table identifies and describes each emissions unit, such as process units and control devices.

**Table 1 - Emission Units  
BP America Production Company  
Miera Compressor Facility**

<b>Emission Unit Id.</b>	<b>Description</b>	<b>Control Equipment</b>
	Caterpillar 3606 TALE, natural gas fired, lean burn compressor engine, 1,850 horsepower	Waukesha-Pearce oxidation catalyst (672-OXMR)
C-100	Serial No. 3XF00261    Installed: 4/23/2008	Installed: 3/31/2004
C-200	Serial No. 4ZS00637    Installed: 2/22/2007	Installed: 3/31/2004
C-300	Serial No. 3XF00327    Installed: 5/14/2008	Installed: 3/31/2004
	Caterpillar 3606 TALE, natural gas fired, lean burn compressor engine, 1,850 horsepower	
C-400	Serial No. 3XF00183    Installed: 09/14/2009	None
	30 MMscf/d Glycol Dehydration Still Vent; 22 gpm lean glycol recirculation rate; 1.5 MMBtu/h Natural gas fired burners	
Dehy-1	Serial No. None    Installed: Prior to 2004	None
Dehy-2	Serial No. None    Installed: Prior to 2004	None

The following table identifies and describes the insignificant activities/emission units at the facility:

**Table 2 - Insignificant Emission Units  
BP America Production Company  
Miera Compressor Facility**

<b>Number of units</b>	<b>Description</b>
2	TEG dehydration unit regenerator burners (1.5 MMBtu/hr, each)
2	TEG storage tanks (1,360 gallons, each)
3	Produced water tanks (300 bbls, each)
4	Tank heaters (0.25 MMBtu/hr, each)
1	Antifreeze storage tank (500 gallons)
1	Used oil sump (95 bbls)
4	New lube oil storage tanks (500 gallons, each)
4	Used lube oil storage tanks (500 gallons, each)
1	Fresh water tank (400 bbls)
NA	Pigging operations (max of 2 MMscf/yr)
NA	Compressor blow down (max of 108 MMscf/yr)
NA	Process fugitives

## **II. Requirements for Engines- 40 CFR Part 60, Subpart JJJJ**

### **II.A. 40 CFR 60, Subpart A – Standards of Performance for New Stationary Sources, General Provisions [40 CFR 60.1 - 60.19]**

1. This facility has affected units subject to the requirements of 40 CFR part 60, subpart A as outlined in Table 3 of 40 CFR 60, subpart JJJJ. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR part 60.

[40 CFR 60.4246]

2. Requirements pursuant to 40 CFR 60, subpart A in section II of this permit are taken from 40 CFR part 60 of the Code of Federal Regulations as published on July 1, 2009.

### **II.B. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [40 CFR 60.4230 – 60.4248]**

1. This facility is subject to the requirements of 40 CFR part 60, subpart JJJJ. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR part 60, subpart JJJJ.

2. 40 CFR part 60, subpart JJJJ applies to the following engine:

C-400: 1,850 hp Caterpillar, natural gas-fired, lean-burn engine;  
modified after June 12, 2006; manufactured June 1998.

[40 CFR 60.4230(a)(5)]

3. The permittee shall demonstrate compliance with 40 CFR 60, subpart JJJJ according to the following method:

(a) Certified Engine:

- (i) Operate an engine certified according to procedures specified in 40 CFR 60, subpart JJJJ for the same model year; and
- (ii) Demonstrate compliance according to one of the methods specified in §60.4231(a); or

(b) Non-Certified Engine:

- (i) Operate a non-certified engine and demonstrate compliance with the emission standards specified in the emissions table in Section II.C of this permit and according to the testing procedures specified in §60.4244, as applicable; and

- (ii) Keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
- (iii) Conduct an initial performance test and subsequent performance testing according to 40 CFR 60.4244, every 8,760 hours of operation or 3 years, whichever comes first, thereafter to demonstrate compliance.

*[Explanatory Note: The performance testing requirements, as required for in 40 CFR 60, subpart JJJJ, can be found in the Appendix to this permit, Section VI.]*

[40 CFR 60.4243]

- 4. Requirements pursuant to 40 CFR 60, subpart JJJJ in Section II. of this permit are taken from the Federal Register as published on July 1, 2009 (73 FR 3568).

## **II.C. Emission Limits**

- 1. Emissions from engine unit C-400 shall not exceed the following limits:

Unit	Source of Emission Limit	NO <sub>x</sub>		CO		VOC	
		g/hp-hr	ppmvd (at 15% O <sub>2</sub> )	g/hp-hr	ppmvd (at 15% O <sub>2</sub> )	g/hp-hr	ppmvd (at 15% O <sub>2</sub> )
C-400	NSPS JJJJ – Manuf. prior to 07/01/2007	3.0	250	4.0	540	1.0	86
	NSPS JJJJ – Manuf. on or after 07/01/2007	2.0	160	4.0	540	1.0	86
	NSPS JJJJ – Manuf. on or after 07/01/2010	1.0	82	2.0	270	0.7	60

[40 CFR 60.4233(f)(4) & (f)(4)(i)]

## **II.D. Testing Requirements**

- 1. The permittee conducting performance tests must follow the procedures in 40 CFR 60.4244(a) through (f), and as outlined in Appendix B of Section VI of this permit.
- 2. Reference Method performance tests shall be conducted, according to 40 CFR 60.4244, upon startup and for all replacement engines for C-400 that are non-certified to measure NO<sub>x</sub>, CO, and VOC emissions to demonstrate compliance with the emission limits in Section II.C. In addition, the permittee must conduct subsequent performance tests on non-certified engines every 8,760 hours of operation or 3 years, which ever comes first.

[40 CFR 60.4243(b)(2)(ii)]

- (a) The performance tests for NO<sub>x</sub>, CO, and VOC shall be conducted in accordance with the test methods specified in Table 2 of 40 CFR 60, Subpart JJJ.

[40 CFR 60.4243(b)(2)(ii)]

## **II.E. Recordkeeping Requirements**

1. The permittee must keep records of the following for engine C-400:
  - (a) All notifications submitted to comply with this subpart and all documentation supporting any notification;
  - (b) Maintenance conducted on the engine;
  - (c) If C-400 is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048; and
  - (d) If C-400 engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

[40 CFR 60.4245(a)]

## **II.F. Notifications and Reporting Requirements** [40 CFR 60.4245 & 60.19]

1. The permittee must, for engines that have not been certified by an engine manufacturer to meet the emission standards in §60.4231(c), submit an initial notification as required in §60.7(a)(1). The notification must include the following information:
  - (a) Name and address of the owner or operator;
  - (b) The address of the affected source;
  - (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - (d) Emission control equipment; and
  - (e) Fuel used.
2. The permittee must submit a copy of each performance test as required by §60.4244 and Section II.D.1 of this permit within 60 days after the test has been completed.

[40 CFR 60.4245(c)]

[40 CFR 60.4245(d)]

### III. Synthetic Minor Limits for Engines

Requirements in this section have been created, at the permittee's request, specifically to recognize the existing oxidation catalysts for limiting the PTE of carbon monoxide and formaldehyde emissions from engines C-100, C-200, and C-300.

[CAA 304(f)(4), 40 CFR 71.6(b) and 71.7(e)(1)(i)(A)(4)(i) ]

#### III.A. Emission Limits

1. Carbon monoxide (CO) emissions from engine units C-100, C-200 and C-300, each equipped with an oxidation catalyst, shall not exceed 0.83 pounds per hour.
2. Facility-wide formaldehyde (CH<sub>2</sub>O) emissions shall not exceed 8.9 tons during any consecutive twelve (12) months.

#### III.B. Work Practice and Operational Requirements

1. Units C-100, C-200, and C-300 are Caterpillar 3606 TALE lean burn natural gas compressor engines each with 1,850 brake horsepower (bhp). These engine units shall each be equipped with a Waukesha-Pearce oxidation catalyst to control CO and CH<sub>2</sub>O.
2. The permittee shall install temperature-sensing devices (i.e. thermocouple or resistance temperature detectors) before the oxidation catalyst for units C-100, C-200, and C-300 in order to monitor the inlet temperature of the catalyst for each engine. Each temperature-sensing device shall be accurate to within plus or minus 0.75% of span.
3. All emission units at the Miera Compressor Facility shall be fired only with natural gas. The natural gas shall be pipeline-quality in all respects except that CO<sub>2</sub> concentration in the gas shall not be required to be within pipeline-quality.

*[The purpose of this permit condition is to ensure there are no contaminants in the fuel that might foul the oxidation converter. CO<sub>2</sub> is not a potential foulant of the oxidation catalyst.]*

4. The permittee shall follow, for each engine and any respective oxidation catalyst, the manufacturer's recommended maintenance schedule and procedures to ensure optimum performance of each engine and oxidation catalyst.
5. The engine exhaust temperature for units C-100, C-200, and C-300 at the inlet to the oxidation catalyst, shall be maintained at all times the engine unit operates at no less than 450°F and no more than 1,350°F.
6. If the catalyst inlet temperature on any engine deviates from the acceptable range listed for each engine in Section III.B.5 above, then the following actions shall be taken:
  - (a) Immediately upon determining a deviation of the catalyst inlet temperature,

corrective action shall be taken on that engine to assess performance problems and/or tuning issues and the oxidation catalyst shall be inspected for possible damage and problems affecting catalyst effectiveness (including, but not limited to, plugging, fouling, destruction, or poisoning of the catalyst).

- (b) If the problem can be corrected by following the engine and/or the oxidation catalyst manufacturer's recommended procedures, then the permittee shall correct the problem within twenty-four (24) hours of inspecting the engine and oxidation catalyst.
  - (c) If the problem can not be corrected using the manufacturer's recommended procedures, then the affected engine shall cease operating immediately and shall not be returned to routine service until the catalyst inlet temperature is measured and found to be within the acceptable temperature range for that engine. The permittee shall also notify EPA in writing of the problem within fifteen (15) working days of observing the problem and include in the notification the cause of the problem and a corrective action plan that outlines the steps and timeframe for bringing the inlet temperature range into compliance. (The corrective action may include removal and cleaning of the oxidation catalyst according to the manufacturer's methods or replacement of the oxidation catalyst.)
7. The pressure drop across each oxidation catalyst for units C-100, C-200, and C-300 shall be maintained to within 2 inches of water from the baseline pressure drop reading taken during the initial performance test.
- If the pressure drop exceeds 2 inches of water from the baseline pressure drop reading taken during the initial performance test, the cause will be investigated. Investigation may include monitoring CO emissions to ensure the oxidation catalyst is functioning and testing the pressure transducers. If the cause is determined to be the catalyst, then the catalyst shall be inspected and cleaned or replaced, if necessary.
8. The permittee's completion of any or all of the actions prescribed by Sections III.B.6(a) through (c) and III.B.7 of this permit shall not constitute, nor qualify as, an exemption from any CO and CH<sub>2</sub>O emission limits in this permit.

### **III.C. Testing Requirements** [40 CFR 71.6(a)(3)(i)(A) through (C)]

- 1. Performance tests shall be conducted for units C-100, C-200, and C-300 for measuring CO emissions from each engine to demonstrate initial compliance with the emission limits in Section III.A.1. The performance test for CO shall be conducted within ninety (90) calendar days of the effective date of this permit. The permittee may submit to EPA a written request for approval of an alternate testing method, but shall only use that alternate test method after obtaining written approval from EPA.
- 2. The performance tests for CO shall be conducted in accordance with the appropriate test methods specified in 40 CFR part 60, Appendix A. The permittee may submit to EPA a



written request for approval of an alternate testing method, but shall only use that alternate test method after obtaining written approval from EPA.

3. A performance test shall be conducted for units C-100, C-200, C-300, and C-400 for measuring CH<sub>2</sub>O emissions from the engines to demonstrate compliance with the facility-wide CH<sub>2</sub>O emission limit in Section III.A.2. The permittee may submit to EPA a written request for approval of an alternate testing method, but shall only use that alternate test method after obtaining written approval from EPA.
4. The performance tests for CH<sub>2</sub>O shall be conducted within ninety (90) calendar days of the effective date of this permit. The initial performance test for measuring CH<sub>2</sub>O emissions shall be conducted in accordance with the appropriate test methods specified in 40 CFR part 63. The permittee may submit to EPA a written request for approval of an alternate testing method, but shall only use that alternate test method after obtaining written approval from EPA.
5. The pressure drop across each oxidation catalyst and the inlet temperature to the oxidation catalyst for units C-100, C-200, and C-300 shall both be measured during the initial performance test for measuring CH<sub>2</sub>O emissions.
6. All tests for CO and CH<sub>2</sub>O emissions must meet the following requirements:
  - (a) All tests shall be performed within 10 percent of 100 percent peak (or the highest achievable) load.
  - (b) During each test run, data shall be collected on all parameters necessary to document how CO and CH<sub>2</sub>O emissions in pounds per hour were measured or calculated (such as test run length, minimum sample volume, volumetric flow rate, moisture and oxygen corrections, etc.).
  - (c) Each source test shall consist of at least three 1-hour or longer valid test runs. Emission results shall be reported as the arithmetic average of all valid test runs and shall be in terms of the emission limits (lbs/hr and g/hp-hr).
  - (d) A source test plan for CO and CH<sub>2</sub>O emissions shall be submitted to EPA for approval within forty-five (45) calendar days of the effective date of this permit. The source test plan shall include and address the following elements:
    - i. Purpose of the test,
    - ii. Engines and oxidation catalysts to be tested,
    - iii. Expected engine operating rate(s) during test,
    - iv. Schedule/dates for test,
    - v. Sampling and analysis procedures (sampling locations, test methods, laboratory identification),
    - vi. Quality assurance plan (calibration procedures and frequency, sample recovery and field documentation, chain of custody procedures), and
    - vii. Data processing and reporting (description of data handling and quality

control procedures, report content).

**III.D. Monitoring Requirements** [40 CFR 71.6(a)(3)(i)(A) through (C)]

1. The permittee shall measure CO emissions from units C-100, C-200, and C-300 at least quarterly to demonstrate compliance with the emission limits in Section III.A.1 above. To meet this requirement, the permittee shall measure CO emissions from units C-100, C-200, and C-300 using a portable analyzer and a monitoring protocol approved by EPA. The permittee shall submit the analyzer specifications and monitoring protocol to EPA for approval within forty-five (45) calendar days of the effective date of this permit. Monitoring for CO emissions shall commence during the first complete calendar quarter following the permittee's submittal of the initial performance test results for CO to EPA.
2. For any engine unit, if compliance with the CO emission limit in Section III.A.1 is demonstrated for six (6) consecutive quarters, then the required monitoring frequency shall change from quarterly to semi-annually. If noncompliance with the CO emission limit is demonstrated during the semi-annual monitoring, then the required monitoring frequency shall revert back to quarterly. Semi-annual monitoring may be resumed after six (6) consecutive quarters of monitoring results that demonstrate compliance with the CO emission limit.
3. The permittee shall measure CH<sub>2</sub>O emissions from units C-100, C-200, C-300, and C-400 at least annually to demonstrate compliance with the facility-wide CH<sub>2</sub>O emission limit in Section III.A.2 above. To meet this requirement, the permittee shall measure CH<sub>2</sub>O emissions from each engine using the performance test methods and requirements listed in Sections III.C.2 and 4 above and the test plan approved by EPA as required in Section III.C.4(d). Monitoring for CH<sub>2</sub>O emissions shall commence no sooner than the second calendar quarter following the permittee's submittal of the initial compliance test results for CH<sub>2</sub>O to EPA.
4. The engine exhaust temperature at the inlet to each oxidation catalyst shall be measured at least weekly. The pressure drop across each oxidation catalyst shall be measured at least weekly.

**III.E. Recordkeeping Requirements** [40 CFR 71.6(a)(3)(ii)]

1. At the end of the first full calendar month following the CH<sub>2</sub>O initial performance tests, facility-wide emissions of CH<sub>2</sub>O shall be calculated from the results of the initial CH<sub>2</sub>O performance tests required in Section III.C.2 for units C-100, C-200, C-300, and C-400 and from CH<sub>2</sub>O emissions from all other units, including insignificant emitting units, listed in Table 2 of this permit. These emissions shall be recorded.
2. Subsequent to the initial calculation, facility-wide emissions of CH<sub>2</sub>O shall be calculated and recorded at the end of each month, beginning with the first full calendar month after the initial calculation. Prior to twelve (12) full months of operation under the initial

part 71 operating permit, the permittee shall, at the end of each month, add the emissions for that month to the calculated emissions for all previous months since permit issuance and record the total. Thereafter, the permittee shall, at the end of each month, add the emissions for that month to the calculated emissions for the preceding eleven (11) months and record a new twelve (12) month total. Formaldehyde emissions from all controlled, uncontrolled, and insignificant emitting units (Tables 1 and 2) shall be included in the calculation.

3. The facility-wide emissions of CH<sub>2</sub>O shall be calculated, in tons per year (tpy), as follows:
  - (a) For the four engine units (C-100, C-200, C-300, and C-400), emissions for the month shall be calculated by multiplying the most recent CH<sub>2</sub>O annual test result for that engine, in pounds per hour, by the number of operating hours for that engine for that month. If data on operating hours are not available for that unit for that month, full-time operation of the unit for that month shall be assumed.
  - (b) For the remaining emitting units at the facility, except insignificant emitting units, emissions for the month for each unit shall be calculated by multiplying the CH<sub>2</sub>O emission factor for that unit, in pounds per hour by the number of operating hours for that unit for that month. If data on operating hours are not available for that unit for that month, full-time operation of the unit shall be assumed.
  - (c) Emissions for insignificant emission units for each month shall be recorded as 1/12 of the annual emission amount listed for IEUs on the most recent Form PTE of the part 71 documents submitted to EPA.
4. The permittee shall comply with the following recordkeeping requirements:
  - (a) Records shall be kept of all temperature measurements required by Sections III.C.3 and III.D.4 of this permit, as well as a description of any corrective actions taken pursuant to Section III.B.6 of this permit.
  - (b) Records shall be kept of vendor specifications to demonstrate that the accuracy of the temperature-sensing device at each oxidation catalyst is at least as accurate as that specified in Section III.B.2 of this permit.
  - (c) Records shall be kept of all pressure drop measurements required by Sections III.C.3 and III.D.4 of this permit, as well as a description of any corrective actions taken pursuant to Section III.B.7 of this permit.
  - (d) Records shall be kept that are sufficient to demonstrate, pursuant to Section III.B.3 of this permit, that the fuel for the engines is pipeline-quality natural gas in all respects, with the exception of CO<sub>2</sub> concentration in the natural gas.
  - (e) The permittee shall keep records of all required testing and monitoring in this

permit. The records shall include the following:

- i. The date, place, and time of sampling or measurements;
- ii. The date(s) analyses were performed;
- iii. The company or entity that performed the analyses;
- iv. The analytical techniques or methods used;
- v. The results of such analyses or measurements; and
- vi. The operating conditions as existing at the time of sampling or measurement.

**III.F. Reporting Requirements** [40 CFR 71.6(a)(3)(iii)]

The permittee shall submit to EPA a written report of the results of the initial performance tests and temperature and pressure drop measurements required in Section III.C of this permit. This report shall be submitted within ninety (90) calendar days of the date of testing completion.

## IV. Facility-Wide Requirements

Conditions in this section of the permit apply to all emissions units located at the facility, including any units not specifically listed in Tables 1 and 2 of Section I.B.

[40 CFR 71.6(a)(1)]

### IV.A. General Recordkeeping Requirements [40 CFR 71.6(a)(3)(ii)]

1. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. These records shall be made available upon request by EPA. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
2. Records shall be kept, as required by the Off Permit Changes condition of this permit which are made in accordance with the approved Alternative Operating Scenario condition of this permit.
3. The permittee is an owner or operator of glycol dehydration units that are exempt from the control requirements under §63.764(e)(1) of 40 CFR part 63, subpart HH. The permittee shall retain the GRI-GLYCalc determination used to demonstrate that actual average benzene emissions are below 1 tpy for each unit.

[40 CFR 63.772(b) and 63.774(d)(1)]

4. If the permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more HAPs is not subject to a relevant standard or other requirement established under 40 CFR part 63, the permittee shall keep a record of the applicability determination on site at the Operations Center for a period of five (5) years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall include an analysis (or other information) that demonstrates why the permittee believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) shall be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis shall be performed in accordance with requirements established in subparts of 40 CFR part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any.

[40 CFR 63.10(b)(3)]

#### **IV.B. General Reporting Requirements** [40 CFR 71.6(a)(3)(iii)]

1. The permittee shall submit to EPA reports of any monitoring results and recordkeeping required under this permit semi-annually by April 1<sup>st</sup> and October 1<sup>st</sup> of each year. The report due on April 1<sup>st</sup> shall cover the prior six-month period from July 1<sup>st</sup> through December 31<sup>st</sup>. The report due on October 1<sup>st</sup> shall cover the prior six-month period from January 1<sup>st</sup> to June 30<sup>th</sup>. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with Section V.E.1 of this permit.

*[Explanatory note: To help part 71 permittees meet reporting responsibilities, EPA has developed a form "SIXMON" for six-month monitoring reports. The form may be found on the EPA website at: <http://www.epa.gov/air/oaqps/permits/p71forms.html>]*

2. "Deviation" means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with §71.6(a)(3)(i) and (a)(3)(ii). For a situation lasting more than twenty-four (24) hours which constitutes a deviation, each twenty-four (24) hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:
  - (a) A situation where emissions exceed an emission limitation or standard;
  - (b) A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met;
  - (c) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or
  - (d) A situation in which an exceedance or an excursion, as defined in 40 CFR part 64 occurs.
3. The permittee shall submit to EPA, as part of the semi-annual monitoring reports required by Section IV.B.1 above, a report of any instances where a catalyst inlet temperature deviates from the acceptable range listed in Section III.B.5 and where the pressure drop across a catalyst deviates from the acceptable reading listed in Section III.B.7, as well as a description of any corrective actions taken pursuant to these permit conditions. If no such instances have been detected, then a statement shall be provided to say so.
4. The permittee shall promptly report to the EPA all other deviations from permit requirements, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" is defined as follows:

- (a) Any definition of “prompt” or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit;
  - (b) Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
    - i. For emissions of a HAP or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within twenty-four (24) hours of the occurrence.
    - ii. For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two (2) hours in excess of permit requirements, the report must be made within forty-eight (48) hours.
    - iii. For all other deviations from permit requirements, the report shall be submitted with the semi-annual monitoring report required in this section.
5. If any of the conditions in IV.B.4(b) i or ii are met, the source must notify EPA by telephone (1-800-227-8917) or facsimile (303-312-6064) based on the timetables listed above. *[Notification by telephone or fax must specify that this notification is a deviation report for a part 71 permit.]* A written notice, certified consistent with Section V.E.1 of this permit must be submitted within ten (10) working days of the occurrence. All deviations reported under this section must also be identified in the 6-month report required under permit Section IV.B.1.

*[Explanatory note: To help part 71 permittees meet reporting responsibilities, EPA has developed a form “PDR” for prompt deviation reporting. The form may be found on the EPA website at: <http://www.epa.gov/air/oaqps/permits/p71forms.html>]*

#### **IV.C. Alternative Operating Scenarios [40 CFR 71.6(a)(9)]**

##### **Engine Replacement**

1. Replacement of a permitted engine with an engine of the same make, model, horsepower rating, and configured to operate in the same manner as the engine being replaced, and which satisfies all of the provisions for Off Permit Changes in Section V.Q., including the provisions specific to engine replacement, shall be considered an allowed alternative operating scenario under this permit.
2. Any emission limits, requirements, control technologies, testing, or other provisions that apply to engines that are replaced under this Alternative Operating Scenarios section shall also apply to the replacement engines. A replacement engine shall be considered a new unit and thus subject to the initial compliance testing required by Sections II.D and/or III.C and all other conditions applicable to the engine.

3. Replacement of an existing permitted engine with an engine subject to 40 CFR part 60, subpart IIII is not allowed under this alternative operating scenario.
4. Replacement of an existing permitted engine not already subject to 40 CFR part 60, subpart JJJJ with an engine subject to 40 CFR part 60, subpart JJJJ is not allowed under this alternative operating scenario.
5. Replacement of an existing permitted engine with an engine subject to 40 CFR part 63, subpart ZZZZ is not allowed under this alternative operating scenario.

*[Explanatory Note: This section was included to allow for off permit replacement of engines that may have existing federally enforceable limits. For replacement engines which trigger new applicable requirements (i.e., NSPS, NESHAP, etc.), the minor permit modification process (Section V.I of this permit) shall be utilized to maintain the permitted emission limits of the replaced engine and incorporate the new applicable requirements.]*

#### **IV.D. Stratospheric Ozone and Climate Protection** [40 CFR part 82]

The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, subpart F:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### **IV.E. Permit Shield** [40 CFR 71.6(f)(3)]

Nothing in this permit shall alter or affect the following:

1. The liability of a permittee for any violation of applicable requirements prior to or at the time of permit issuance;
2. The ability of EPA to obtain information from a source pursuant to section 114 of the CAA; or
3. The provisions of section 303 of the CAA (emergency orders), including the authority of EPA under that section.



## V. Part 71 Administrative Requirements

### V.A. **Annual Fee Payment** [40 CFR 71.6(a)(7) and 40 CFR 71.9]

1. The permittee shall pay an annual permit fee in accordance with the procedures outlined below.  
[40 CFR 71.9(a)]
2. The permittee shall pay the annual permit fee each year no later than April 1<sup>st</sup>.  
[40 CFR 71.9(h)]
3. The fee payment shall be in United States currency and shall be paid by money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the order of the U.S. Environmental Protection Agency.  
[40 CFR 71.9(k)(1)]
4. The permittee shall send fee payment and a completed fee filing form to

#### **For regular U.S. Postal Service mail**

U.S. Environmental Protection Agency  
FOIA and Miscellaneous Payments  
Cincinnati Finance Center  
P.O. Box 979078  
St. Louis, MO 63197-9000

#### **For non-U.S. Postal Service Express mail**

(FedEx, Airborne, DHL, and UPS)  
U.S. Bank  
Government Lockbox 979078  
U.S. EPA FOIA & Misc. Payments  
1005 Convention Plaza  
SL-MO-C2-GL  
St. Louis, MO 63101

[40 CFR 71.9(k)(2)]

*[Explanatory note: The fee filing form “FF” may be found on EPA website at:  
<http://www.epa.gov/air/oagps/permits/p71forms.html>]*

5. The permittee shall send an updated fee calculation worksheet form and a photocopy of each fee payment check (or other confirmation of actual fee paid) submitted annually by the same deadline as required for fee payment to the address listed in Section V.A.4. of this permit.  
[40 CFR 71.9(h)(1)]

*[Explanatory note: The fee calculation worksheet form “FEE” may be found on EPA website at:  
<http://www.epa.gov/air/oagps/permits/p71forms.html>]*

6. Basis for calculating annual fee:

- (a) The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all “regulated pollutants (for fee calculation)” emitted from the source by the presumptive emissions fee (in dollars/ton) in effect at the time of calculation.

[40 CFR 71.9(c)(1)]

- i. “Actual emissions” means the actual rate of emissions in tpy of any regulated pollutant (for fee calculation) emitted from a part 71 source over the preceding calendar year. Actual emissions shall be calculated using each emissions unit’s actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.

[40 CFR 71.9(c)(6)]

- ii. Actual emissions shall be computed using methods required by the permit for determining compliance, such as monitoring or source testing data.

[40 CFR 71.9(h)(3)]

- iii. If actual emissions cannot be determined using the compliance methods in the permit, the permittee shall use other federally recognized procedures.

[40 CFR 71.9(e)(2)]

*[Explanatory note: The presumptive fee amount is revised each calendar year to account for inflation, and it is available from EPA prior to the start of each calendar year.]*

- (b) The permittee shall exclude the following emissions from the calculation of fees:

- i. The amount of actual emissions of each regulated pollutant (for fee calculation) that the source emits in excess of 4,000 tpy;

[40 CFR 71.9(c)(5)(i)]

- ii. Actual emissions of any regulated pollutant (for fee calculation) already included in the fee calculation; and

[40 CFR 71.9(c)(5)(ii)]

- iii. The quantity of actual emissions (for fee calculation) of insignificant activities [defined in §71.5(c)(11)(i)] or of insignificant emissions levels from emissions units identified in the permittee’s application pursuant to §71.5(c)(11)(ii).

[40 CFR 71.9(c)(5)(iii)]

7. Fee calculation worksheets shall be certified as to truth, accuracy, and completeness by a responsible official. *[The fee calculation worksheet form "FEE" already incorporates a section to help permittees meet this responsibility.]*  
[40 CFR 71.9(h)(2)]
8. The permittee shall retain fee calculation worksheets and other emissions-related data used to determine fee payment for five (5) years following submittal of fee payment. *[Emission-related data include, for example, emissions-related forms provided by EPA and used by the permittee for fee calculation purposes, emissions-related spreadsheets, and emissions-related data, such as records of emissions monitoring data and related support information required to be kept in accordance with §71.6(a)(3)(ii)].*  
[40 CFR 71.9(i)]
9. Failure of the permittee to pay fees in a timely manner shall subject the permittee to assessment of penalties and interest in accordance with §71.9(l).  
[40 CFR 71.9(l)]
10. When notified by EPA of underpayment of fees, the permittee shall remit full payment within thirty (30) days of receipt of notification.  
[40 CFR 71.9(j)(2)]
11. A permittee who thinks an EPA assessed fee is in error and who wishes to challenge such fee, shall provide a written explanation of the alleged error to EPA along with full payment of the EPA assessed fee.  
[40 CFR 71.9(j)(3)]

**V.B. Annual Emissions Inventory** [40 CFR 71.9(h)(1) and (2)]

The permittee shall submit an annual emissions report of its actual emissions for both criteria pollutants and regulated HAPS for this facility for the preceding calendar year for fee assessment purposes. The annual emissions report shall be certified by a responsible official and shall be submitted each year to EPA by April 1<sup>st</sup>. The annual emissions report shall be submitted to EPA at the address listed in Section V.A.4 of this permit.

*[Explanatory note: An annual emissions report, required at the same time as the fee calculation worksheet by §71.9(h), has been incorporated into the fee calculation worksheet form "FEE" as a convenience to permittees.]*

**V.C. Compliance Requirements** [40 CFR 71.6(a)(6)(i) and (ii), and sections 113(a) and 113(e)(1) of the Act, and 40 CFR 51.212, 52.12, 52.33, 60.11(g), and 61.12]

1. Compliance with the Permit
  - (a) The permittee must comply with all conditions of this part 71 permit. Any permit noncompliance constitutes a violation of the CAA and is grounds for enforcement

action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[40 CFR 71.6(a)(6)(i)]

- (b) It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

[40 CFR 71.6(a)(6)(ii)]

- (c) For the purpose of submitting compliance certifications in accordance with Section V.C.3 of this permit, or establishing whether or not a person has violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[Section 113(a) and 113(e)(1) of the Act, 40 CFR 51.212, 52.12, 52.33, 60.11(g), and 61.12]

## 2. Compliance Schedule

- (a) For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements.

[40 CFR 71.5(c)(8)(iii)(A)]

- (b) For applicable requirements that will become effective during the permit term, the source will meet such requirements on a timely basis.

[40 CFR 71.5(c)(8)(iii)(B)]

## 3. Compliance Certifications

- (a) The permittee shall submit to EPA a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices annually each year no later than April 1<sup>st</sup>, and shall cover the preceding calendar year. The compliance certification shall be certified as to truth, accuracy, and completeness by a responsible official consistent with §71.5(d).

[40 CFR 71.6(c)(5)]

- (b) The certification shall include the following:

- i. Identification of each permit term or condition that is the basis of the certification;
- ii. The identification of the method(s) or other means used for determining the compliance status of each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a

minimum, the methods and means required in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the CAA, which prohibits knowingly making a false certification or omitting material information;

- iii. The status of compliance with the terms and conditions of the permit for the period covered by the certification based on the method or means designated in (b) above. The certification shall identify each deviation and take it into account in the compliance certification;
- iv. Such other facts as the EPA may require to determine the compliance status of the source; and
- v. Whether compliance with each permit term was continuous or intermittent.

[40 CFR 71.6(c)(5)(iii)]

*[Explanatory note: To help part 71 permittees meet reporting responsibilities, EPA has developed a reporting form for annual compliance certifications. The form may be found on EPA website at: <http://www.epa.gov/air/oagps/permits/p71forms.html>]*

**V.D. Duty to Provide and Supplement Information** [40 CFR 71.6(a)(6)(v), 71.5(a)(3), and 71.5(b)]

- 1. The permittee shall furnish to EPA, within a reasonable time, any information that EPA may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the EPA copies of records that are required to be kept pursuant to the terms of the permit, including information claimed to be confidential. Information claimed to be confidential must be accompanied by a claim of confidentiality according to the provisions of 40 CFR part 2, subpart B.

[40 CFR 71.6(a)(6)(v) and 71.5(a)(3)]

- 2. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. In addition, a permittee shall provide additional information as necessary to address any requirements that become applicable after the date a complete application is filed, but prior to release of a draft permit.

[40 CFR 71.5(b)]

**V.E. Submissions** [40 CFR 71.5(d), 71.6(c)(1) and 71.9(h)(2)]

- 1. Any document (application form, report, compliance certification, etc.) required to be submitted under this permit shall be certified by a responsible official as to truth, accuracy, and completeness. Such certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

*[Explanatory note: EPA has developed a reporting form “CTAC” for certifying truth, accuracy, and completeness of part 71 submissions. The form may be found on EPA website at: <http://www.epa.gov/air/oaqps/permits/p71forms.html>]*

2. Any documents required to be submitted under this permit, including reports, test data, monitoring data, notifications, compliance certifications, fee calculation worksheets, and applications for renewals and permit modifications shall be submitted to:

Part 71 Permit Contact  
Air Program, 8P-AR  
U.S. Environmental Protection Agency,  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

**V.F. Severability Clause** [40 CFR 71.6(a)(5)]

The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

**V.G. Permit Actions** [40 CFR 71.6(a)(6)(iii)]

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**V.H. Administrative Permit Amendments** [40 CFR 71.7(d)]

1. The permittee may request the use of administrative permit amendment procedures for a permit revision that:
  - (a) Corrects typographical errors;
  - (b) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - (c) Requires more frequent monitoring or reporting by the permittee;
  - (d) Allows for a change in ownership or operational control of a source where the EPA determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the EPA;

- (e) Incorporates into the part 71 permit the requirements from preconstruction review permits authorized under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of §71.7 and 71.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in §71.6; or
- (f) Incorporates any other type of change which EPA has determined to be similar to those listed above in subparagraphs (a) through (e) above. *[Note to permittee: If subparagraphs (a) through (e) above do not apply, please contact EPA for a determination of similarity prior to submitting your request for an administrative permit amendment under this provision].*

**V.I. Minor Permit Modifications** [40 CFR 71.7(e)(1)]

1. The permittee may request the use of minor permit modification procedures only for those modifications that:
  - (a) Do not violate any applicable requirement;
  - (b) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
  - (c) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
  - (d) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
    - i. A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I; and
    - ii. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the CAA;
  - (e) Are not modifications under any provision of title I of the CAA; and
  - (f) Are not required to be processed as a significant modification.

[40 CFR 71.7(e)(1)(i)(A)]
2. Notwithstanding the list of changes ineligible for minor permit modification procedures in paragraph 1 above, minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions

trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by EPA.

[40 CFR 71.7(e)(1)(i)(B)]

3. An application requesting the use of minor permit modification procedures shall meet the requirements of §71.5(c) and shall include the following:

- (a) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- (b) The source's suggested draft permit;
- (c) Certification by a responsible official, consistent with §71.5(d), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- (d) Completed forms for the permitting authority to use to notify affected States as required under §71.8.

[40 CFR 71.7(e)(1)(ii)]

4. The source may make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions authorized by §71.7(e)(1)(iv)(A) through (C), the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

[40 CFR 71.7(e)(1)(v)]

5. The permit shield under §71.6(f) may not extend to minor permit modifications.

[40 CFR 71.7(e)(2)(vi)]

**V.J. Group Processing of Minor Permit Modifications** [40 CFR 71.7(e)(2)]

1. Group processing of modifications by EPA may be used only for those permit modifications:
  - (a) That meet the criteria for minor permit modification procedures under Section V.I.1 of this permit; and



- (b) That collectively are below the threshold level of 10% of the emissions allowed by the permit for the emissions unit for which the change is requested, 20% of the applicable definition of major source in §71.2, or 5 tpy, whichever is least.

[40 CFR 71.7(e)(2)(i)]

- 2. An application requesting the use of group processing procedures shall be submitted to EPA, shall meet the requirements of §71.5(c), and shall include the following:

- (a) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- (b) The source's suggested draft permit;
- (c) Certification by a responsible official, consistent with §71.5(d), that the proposed modification meets the criteria for use of group processing procedures and a request that such procedures be used;
- (d) A list of the source's other pending applications awaiting group processing, and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the threshold set under Section 1.(b) above; and
- (e) Completed forms for the permitting authority to use to notify affected states as required under §71.8.

[40 CFR 71.7(e)(2)(ii)]

- 3. The source may make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions authorized by §71.7(e)(1)(iv)(A) through (C), the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

[40 CFR 71.7(e)(2)(v)]

- 4. The permit shield under §71.6(f) may not extend to group processing of minor permit modifications.

[40 CFR 71.7(e)(2)(vi)]

**V.K. Significant Permit Modifications** [40 CFR 71.7(e)(3)]

1. The permittee must request the use of significant permit modification procedures for those modifications that:
  - (a) Do not qualify as minor permit modifications or as administrative amendments;
  - (b) Are significant changes in existing monitoring permit terms or conditions; or
  - (c) Are relaxations of reporting or recordkeeping permit terms or conditions.

[40 CFR 71.7(e)(3)(i)]

2. Nothing herein shall be construed to preclude the permittee from making changes consistent with part 71 that would render existing permit compliance terms and conditions irrelevant.

[40 CFR 71.7(e)(3)(i)]

3. Permittees must meet all requirements of part 71 for applications, public participation, and review by affected states and tribes for significant permit modifications. For the application to be determined complete, the permittee must supply all information that is required by §71.5(c) for permit issuance and renewal, but only that information that is related to the proposed change.

[40 CFR 71.7(e)(3)(ii), 71.8(d), and 71.5(a)(2)]

**V.L. Reopening for Cause** [40 CFR 71.7(f)]

The permit may be reopened and revised prior to expiration under any of the following circumstances:

1. Additional applicable requirements under the Act become applicable to a major part 71 source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to §71.7(c)(3);
2. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
3. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
4. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

**V.M. Property Rights** [40 CFR 71.6(a)(6)(iv)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

**V.N. Inspection and Entry** [40 CFR 71.6(c)(2)]

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow EPA or an authorized representative to perform the following:

1. Enter upon the permittee's premises where a part 71 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. As authorized by the CAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**V.O. Emergency Provisions** [40 CFR 71.6(g)]

1. In addition to any emergency or upset provision contained in any applicable requirement, the permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (b) The permitted facility was at the time being properly operated;
  - (c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
  - (d) The permittee submitted notice of the emergency to EPA within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements for prompt notification of deviations.

2. In any enforcement preceding the permittee attempting to establish the occurrence of an emergency has the burden of proof.
3. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

**V.P. Transfer of Ownership or Operation** [40 CFR 71.7(d)(1)(iv)]

A change in ownership or operational control of this facility may be treated as an administrative permit amendment if the EPA determines no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to EPA.

**V.Q. Off Permit Changes** [40 CFR 71.6(a)(12) and 71.6(a)(3)(ii)]

The permittee is allowed to make certain changes without a permit revision, provided that the following requirements are met and that all records required by this section are kept for a period of five (5) years:

1. Each change is not addressed or prohibited by this permit;
2. Each change shall meet with all applicable requirements and shall not violate any existing permit term or condition;
3. Changes under this provision may not include changes subject to any requirement of 40 CFR parts 72 through 78 or modifications under any provision of title I of the CAA;
4. The permittee must provide contemporaneous written notice to EPA of each change, except for changes that qualify as insignificant activities under §71.5(c)(11). The written notice must describe each change, the date of the change, any change in emissions, pollutants emitted and any applicable requirements that would apply as a result of the change;
5. The permit shield does not apply to changes made under this provision;
6. The permittee must keep a record describing all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes; and
7. For replacement of an existing permitted compressor engine with an engine of the same make, model, horsepower rating, and configured to operate in the same manner as the

engine being replaced, in addition to satisfying all other provisions for Off Permit Changes, the permittee satisfies the following provisions:

- (a) The replacement engine employs air emissions control devices, monitoring, record keeping and reporting that are equivalent to those employed by the engine being replaced;
- (b) The replacement of the existing engine does not constitute a major modification or major new source as defined in Federal PSD regulations (40 CFR 52.21);
- (c) No new applicable requirements, as defined in 40 CFR 71.2, are triggered by the replacement; and
- (d) The following information is provided in a written notice to EPA prior to the change, in addition to the standard information listed above for contemporaneous written notices for off permit changes:
  - i. Make, model number, serial number, horsepower rating and configuration of the existing engine and the replacement engine;
  - ii. Manufacture date, commence construction date (per the definition in 40 CFR 60.2, 60.4230(a), and 63.2), installation date, and start-up date of the replacement engine;
  - iii. If applicable, documentation of the cost to rebuild a replacement engine versus the cost to purchase a new engine in order to support claims that an engine is not “reconstructed,” as defined in 40 CFR 60.15 and 40 CFR 63.2;
  - iv. 40 CFR part 60, subpart IIII (CI Engine NSPS) non-applicability documentation as appropriate;
  - v. 40 CFR part 60, subpart JJJJ (SI Engine NSPS) non-applicability documentation as appropriate;
  - vi. 40 CFR part 63, subpart ZZZZ (RICE MACT) non-applicability documentation for major sources, as appropriate;
  - vii. 40 CFR part 63, subpart ZZZZ (RICE MACT) non-applicability documentation for area sources, as appropriate;
  - viii. Documentation to demonstrate that the replacement does not constitute a major new source or major modification, as defined in Federal PSD rules (40 CFR 52.21), as follows:
    - A. If the replacement will not constitute a “physical change or change in the method of operation” as described in §52.21(b)(2)(i), an explanation of how that conclusion was reached shall be provided.
    - B. If the replacement will constitute a “physical change or change in the method of operation” as described §52.21(b)(2)(i), the following information shall be provided:

- (1) If the existing source is a “major stationary source” as defined in §52.21(b)(1): For each “regulated NSR pollutant” as defined in §52.21(b)(50), a demonstration (including all calculations) that the replacement will not be a “major modification” as defined in §52.21(b)(2).

A modification is major only if it causes a “significant emissions increase” as defined in §52.21(b)(40), and also causes a “significant net emissions increase” as defined in §§52.21(b)(3) and (b)(23).

The procedures of §52.21(a)(2)(iv) shall be used to calculate whether or not there will be a significant emissions increase. If there will be a significant emissions increase, then calculations shall be provided to demonstrate there will not be a significant net emissions increase. These latter calculations shall include all source wide contemporaneous and creditable emission increases and decreases, as defined in §52.21(b)(3), summed with the PTE of the replacement unit(s).

If netting is used to demonstrate that the replacement will not constitute a “major modification,” verification shall be provided that the replacement engine(s) or turbine(s) employ emission controls at least equivalent in control effectiveness to those employed by the engine(s) or turbine(s) being replaced.

PTE of replacement unit(s) shall be determined based on the definition of PTE in §52.21(b)(4). For each “regulated NSR pollutant” for which the PTE is not “significant,” calculations used to reach that conclusion shall be provided.

- (2) If the existing source is not a “major stationary source” as defined in §52.21(b)(1): For each “regulated NSR pollutant,” a demonstration (including all calculations) that the replacement engine(s) or turbine(s), by itself, will not constitute a “major stationary source” as defined in §52.21(b)(1)(i).

8. The notice shall be kept at the Operations Center and made available to EPA on request, in accordance with the general recordkeeping provision of this permit; and
9. Submittal of the written notice required above shall not constitute a waiver, exemption, or shield from applicability of any PSD permitting requirements under 40 CFR 52.21 that would be triggered by the replacement of any one engine, or by replacement of multiple

engines.

**V.R. Permit Expiration and Renewal** [40 CFR 71.5(a)(1)(iii), 71.5(a)(2), 71.5(c)(5), 71.6(a)(11), 71.7(b), 71.7(c)(1), 71.7(c)(3)]

1. This permit shall expire upon the earlier occurrence of the following events:
  - (a) Five (5) years elapses from the date of issuance; or
  - (b) The source is issued a part 70 or part 71 permit under an EPA approved or delegated permit program.

[40 CFR 71.6(a)(11)]
2. Expiration of this permit terminates the permittee's right to operate unless a timely and complete permit renewal application has been submitted at least six (6) months but not more than eighteen (18) months prior to the date of expiration of this permit.

[40 CFR 71.5(a)(1)(iii)]
3. If the permittee submits a timely and complete permit application for renewal, consistent with §71.5(a)(2), but EPA has failed to issue or deny the renewal permit, then all the terms and conditions of the permit, including any permit shield granted pursuant to §71.6(f) shall remain in effect until the renewal permit has been issued or denied.

[40 CFR 71.7(c)(3)]
4. The permittee's failure to have a part 71 permit is not a violation of this part until EPA takes final action on the permit renewal application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit any additional information identified as being needed to process the application by the deadline specified in writing by EPA.

[40 CFR 71.7(b)]
5. Renewal of this permit is subject to the same procedural requirements that apply to initial permit issuance, including those for public participation, affected State, and tribal review.

[40 CFR 71.7(c)(1)]
6. The application for renewal shall include the current permit number, description of permit revisions and off permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

[40 CFR 71.5(a)(2) and 71.5(c)(5)]

## **VI. Appendix to the Part 71 Permit**

### **VI.A. Inspection Information**

1. Directions to Facility:

Take U.S. Highway 550 south and east from Durango for 4.9 miles. Stay straight and continue on U.S. Highway 160 east for 3.0 miles.

Turn right onto CO-172 and continue 3.3 miles. Turn left onto County Road 222 then turn right heading east on County Road 222 following this winding road for 1.4 miles.

Immediately past the octagonal log home with the green roof, turn right and drive down the road a distance of 1.5 miles, right past the barn, over the Florida River, up the hill, bearing right at the “Y” to the Miera Compressor Facility.

2. Location of the Miera Compressor Facility

Longitude - 107.739683

Latitude - 37.198800

3. Safety Considerations:

Hard hat, eye protection, safety shoes, hearing protection, and FRC (Fire Retardant Clothing).

### **VI.B. NSPS JJJJ Testing Requirements for Owners and Operators**

#### Testing Requirements for Owners and Operators

Sec. 60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in Sec. 60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in Sec. 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.



(c) You must conduct three separate test runs for each performance test required in this section, as specified in Sec. 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NO<sub>x</sub> mass per unit output emission limitation, convert the concentration of NO<sub>x</sub> in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NO<sub>x</sub> in g/HP-hr.

C<sub>d</sub> = Measured NO<sub>x</sub> concentration in parts per million by volume (ppmv).  $1.912 \times 10^{-3}$  = Conversion constant for ppm NO<sub>x</sub> to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

C<sub>d</sub> = Measured CO concentration in ppmv.  $1.164 \times 10^{-3}$  = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C<sub>d</sub> = VOC concentration measured as propane in ppmv.  $1.833 \times 10^{-3}$  = Conversion constant for ppm VOC measured

as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \quad (\text{Eq. 4})$$

Where:

$RF_i$  = Response factor of compound i when measured with EPA Method 25A.

$C_{Mi}$  = Measured concentration of compound i in ppmv as carbon.

$C_{Ai}$  = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \quad (\text{Eq. 5})$$

Where:

$C_{i\text{ corr}}$  = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

$C_{i\text{ meas}}$  = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \quad (\text{Eq. 6})$$

Where:

$C_{Peq}$  = Concentration of compound i in mg of propane equivalent per DSCM.