Colorado Department of Public Health and Environment

OPERATING PERMIT

Bill Barrett Corporation
Mamm Creek Compressor Station

Issued: July 1, 2012

AIR POLLUTION CONTROL DIVISION
COLORADO OPERATING PERMIT

FACILITY NAME:	Mamm Creek Compressor Station	OPERATING PERMIT NUMBER
FACILITY ID:	045/0186	**07OPGA293**
ISSUE DATE:	July 1, 2012	
EXPIRATION DATE:	July 1, 2017	
MODIFICATIONS:	See Appendix F of Permit	

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO:

Bill Barrett Corporation
1099 18th Street, Suite 2300
Denver, CO 80246

PLANT SITE LOCATION:

Mamm Creek Compressor Station
SESW, Section 30 – T6S-R92W
Garfield County , CO

INFORMATION RELIED UPON

Operating Permit Application Received:	June 4, 2007
And Additional Information Received:	May 6, 2009 and May 14, 2009

Nature of Business:	Natural Gas Compression
Primary SIC:	1311

RESPONSIBLE OFFICIAL

Name:	Duane Zavadil
Title:	Sr. Vice President, Government and Regulatory Affairs
Phone:	(303) 312-8128

FACILITY CONTACT PERSON

Name:	Peg A. Young
Title:	Environmental, Health and Safety Coordinator
Phone:	(303) 312-8120

SUBMITTAL DEADLINES –

Semi-Annual Monitoring Periods:	July 1 – December 31, January 1 – June 30
Semi-Annual Monitoring Reports:	Due February 1 & August 1, 2013 & subsequent years
Annual Compliance Periods:	July 1 – June 30
Annual Compliance Certification:	Due August 1, 2013 & subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance report must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports.

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SECTION I - General Activities and Summary

1. Permitted Activities

1.1 The Mamm Creek Compressor Station is a natural gas compression facility as defined under Standard Industrial Classification 1311. The facility gathers gas from surrounding well sites via a gathering pipeline system. The gas undergoes a natural separation process in the inlet separator that separates the gas from the liquids. The liquids go to the on-site storage tanks. The gas then goes to the compression stage where it is compressed from field pressure to approximately 1000psi. The compressed gas then goes through the TEG dehydration units to remove water to meet pipeline specifications. The dehydrated gas is then routed to the sales gas pipeline.

The eleven (11) Waukesha engines are rated at 1680 hp and are four-cycle, rich burn, natural gas-fired, reciprocating internal combustion engines, equipped with non-selective catalytic reduction (NSCR) units and air-to-fuel ratio controllers to control emissions. The four Natco glycol dehydration units are equipped with flash tank, gas glycol pump, natural gas-fired reboiler and associated still-vent. There are four BTEX units (condensers) on a common header shared by the four dehydration units. Flash tanks streams are routed to either the fuel gas line to the reboiler or to the tanks. Six 400-bbl fixed roof tanks (currently, only 5 are installed) are used for storage of condensate prior to custody transfer. The tanks vapors and condensed still vent vapors are routed back to the inlet with the vapor recovery unit (VRU) or combusted in the flare.

The facility is located approximately 4 miles southwest of Silt in Garfield County on County Road 3333. The area in which the plant operates is designated as attainment for all criteria pollutants.

There are no affected states within 50 miles of the plant. The following Federal Class I designated area is within 100 kilometers of the plant: Black Canyon of the Gunnison National Park, West Elk Wilderness Area, Flattops Wilderness Area, Maroon Bells – Snowmass Wilderness Area, Colorado National Monument, and the Gunnison Gorge Recreation Area. Colorado National Monument and the Gunnison Gorge Recreation Area are not Federal Class I Areas, but have been designated by the State to have the same sulfur dioxide increment as a Federal Class I area.

1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.

1.3 The Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for purposes of this Operating Permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 06GA0062.

1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Permit Condition Number(s): Section II - Conditions 1.10, 2.9 and 4.4 and Section IV - Conditions 3.g (last paragraph), 14 and 18 (as noted).

1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit. Either electronic or hard copy records are acceptable.

2. Alternative Operating Scenarios (ver 12/10/2008)

The following Alternative Operating Scenario (AOS) for the temporary and permanent replacement of natural gas fired reciprocating internal combustion engines has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility-Alternative Operating Scenarios, Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration, and it has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any engine replacement performed in accordance with this AOS, and the permittee shall be allowed to perform such engine replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.1 Engine Replacement

The following AOS is incorporated into this permit in order to deal with a compressor engine breakdown or periodic routine maintenance and repair of an existing onsite engine that requires the use of either a temporary or permanent replacement engine. “Temporary” is defined as in the same service for 90 operating days or less in any 12 month period. “Permanent” is defined as in the same service for more than 90 operating days in any 12 month period. The 90 days is the total number of days that the engine is in operation. If the engine operates only part of a day, that day shall count as a single day towards the 90-day total. The compliance demonstrations and any periodic monitoring required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit.

The results of all tests and the associated calculations required by this AOS shall be submitted to the Division within 60 calendar days of the test. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The permittee shall maintain a log on-site and contemporaneously record the start and stop date of any engine replacement, the manufacturer, date of manufacture, model number, horsepower, and serial number of the engine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement engine. In

addition to the log, the permittee shall maintain a copy of all Applicability Reports required under Condition 2.1.2 and make them available to the Division upon request.

2.1.1 The permittee may temporarily replace an existing compressor engine that is subject to the emission limits set forth in this permit with an engine that is of the same manufacturer, model, and horsepower or a different manufacturer, model, or horsepower as the existing engine without modifying this permit, so long as the emissions from the temporary replacement engine comply with the emission limitations for the existing permitted engine as determined in Condition 2.2. Measurement of emissions from the temporary replacement engine shall be made as set forth in Condition 2.2.

The permittee may **temporarily** replace a grandfathered or permit exempt engine or an engine that is not subject to emission limits without modifying this permit. In this circumstance, potential annual emissions of NO_X and CO from the temporary replacement engine must be less than or equal to the potential annual emissions of NO_X and CO from the original grandfathered or permit exempt engine or for the engine that is not subject to emission limits, as determined by applying appropriate emission factors (e.g. AP-42 or manufacturer's emission factors)

2.1.2 The permittee may **permanently** replace the existing compressor engine for the emission points specified in Table 1 with the manufacturer, model, and horsepower engines listed in Table 1 without modifying this permit so long as the emissions from the permanent replacement engine comply with 1) the permitted annual emission limitations for the existing engine, 2) any permitted short-term emission limitations for the existing permitted engine, and 3) the applicable emission limitations as set forth in Appendix G. Measurement of emissions from the permanent replacement engine and compliance with the applicable emission limitations shall be made as set forth in Condition 2.2.

An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division for the permanent replacement engine within 15 calendar days of commencing operation of the replacement engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the permittee is exercising an alternative operating scenario and is installing a permanent replacement engine, and a copy of the relevant Applicability Reports for the replacement engine. Example Applicability Reports can be found in Appendix G. This submittal shall be accompanied by a certification from the Responsible Official indicating that "based on the information and belief formed after reasonable inquiry, the statements and information included in the submittal are true, accurate and complete".

This AOS cannot be used for permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

The permittee shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent engine replacement.

2.2 Portable Analyzer Testing

Note: In some cases there may be conflicting and/or duplicative testing requirements due to overlapping Applicable Requirements. In those instances, please contact the Division Field Services Unit to discuss streamlining the testing requirements.

Note that the testing required by this Condition may be used to satisfy the periodic testing requirements specified by the permit for the relevant time period (i.e. if the permit requires quarterly portable analyzer testing, this test conducted under the AOS will serve as the quarterly test and an additional portable analyzer test is not required for another three months).

The permittee may conduct a reference method test, in lieu of the portable analyzer test required by this Condition, if approved in advance by the Division.

The permittee shall measure nitrogen oxide (NO_X) and carbon monoxide (CO) emissions in the exhaust from the replacement engine using a portable flue gas analyzer *within seven (7) calendar days of commencing operation of the replacement engine*.

All portable analyzer testing required by this permit shall be conducted using the Division's Portable Analyzer Monitoring Protocol (ver March 2006 or newer) as found on the Division's website at: http://www.cdphe.state.co.us/ap/down/portanalyzeproto.pdf

Results of the portable analyzer tests shall be used to monitor the compliance status of this unit.

For comparison with an annual (tons/year) or short term (lb/unit of time) emission limit, the results of the tests shall be converted to a lb/hr basis and multiplied by the allowable operating hours in the month or year (whichever applies) in order to monitor compliance. If a source is not limited in its hours of operation the test results will be multiplied by the maximum number of hours in the month or year (8760), whichever applies.

For comparison with a short-term limit that is either input based (lb/mmBtu), output based (g/hp-hr) or concentration based (ppmvd @ 15% O_2) that the existing unit is currently subject to or the replacement engine will be subject to, the results of the test shall be converted to the appropriate units as described in the above-mentioned Portable Analyzer Monitoring Protocol document.

If the portable analyzer results indicate compliance with both the NO_X and CO emission limitations, in the absence of credible evidence to the contrary, the source may certify that the engine is in compliance with both the NO_X and CO emission limitations for the relevant time period.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, if the portable analyzer results fail to demonstrate compliance with either the NO_X or CO emission limitations, the engine will be considered to be out of compliance from the date of the portable analyzer test until a portable analyzer test indicates compliance with both the NO_X and CO emission limitations or until the engine is taken offline.

2.3 Applicable Regulations for Permanent Engine Replacements

2.3.1 Reasonably Available Control Technology (RACT): Reg 3, Part B § II.D.2

All permanent replacement engines that are located in an area that is classified as attainment/maintenance or nonattainment must apply Reasonably Available Control Technology (RACT) for the pollutants for which the area is attainment/maintenance or nonattainment. Note that both VOC and NO_X are precursors for ozone. RACT shall be applied for any level of emissions of the pollutant for which the area is in attainment/maintenance or nonattainment, except as follows:

In the Denver Metropolitan PM_{10} attainment/maintenance area, RACT applies to PM_{10} at any level of emissions and to NO_X and SO_2, as precursors to PM_{10}, if the potential to emit of NO_X or SO_2 exceeds 40 tons/yr.

For purposes of this AOS, the following shall be considered RACT for natural-gas fired reciprocating internal combustion engines:

VOC: The emission limitations in NSPS JJJJ
CO: The emission limitations in NSPS JJJJ
NO_X: The emission limitations in NSPS JJJJ
SO_2: Use of natural gas as fuel
PM_{10}: Use of natural gas as fuel

As defined in 40 CFR Part 60 Subparts GG (§ 60.331) and 40 CFR Part 72 (§ 72.2), natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet.

2.3.2 Control Requirements and Emission Standards: Regulation No. 7, Sections XVI. and XVII.E (State-Only conditions).

Control Requirements: Section XVI

Any permanent replacement engine located within the boundaries of an ozone nonattainment area is subject to the applicable control requirements specified in Regulation No. 7, section XVI, as specified below:

Rich burn engines with a manufacturer's design rate greater than 500 hp shall use a non-selective catalyst and air fuel controller to reduce emission.

Lean burn engines with a manufacturer's design rate greater than 500 hp shall use an oxidation catalyst to reduce emissions.

The above emission control equipment shall be appropriately sized for the engine and shall be operated and maintained according to manufacturer specifications.

The source shall submit copies of the relevant Applicability Reports required under Condition 2.1.2.

Emission Standards: Section XVII.E – State-only requirements

Any permanent engine that is either constructed or relocated to the state of Colorado from another state, after the date listed in the table below shall operate and maintain each engine according to the manufacturer's written instructions or procedures to the extent practicable and consistent with technological limitations and good engineering and maintenance practices over the entire life of the engine so that it achieves the emission standards required in the table below:

Max Engine HP	Construction or Relocation Date	Emission Standards in G/hp-hr		
		NO_X	CO	VOC
100<Hp<500	January 1, 2008	2.0	4.0	1.0
	January 1, 2011	1.0	2.0	0.7
500≤Hp	July 1, 2007	2.0	4.0	1.0
	July 1, 2010	1.0	2.0	0.7

The source shall submit copies of the relevant Applicability Reports required under Condition 2.1.2.

2.3.3 NSPS for spark ignition internal combustion engines: 40 CFR 60, Subpart JJJJ

A permanent replacement engine that is manufactured on or after 7/1/09 for emergency engines greater than 25 hp, 7/1/2008 for engines less than 500 hp, 7/1/2007 for engines greater than or equal to 500 hp except for lean burn engines greater than or equal to 500 hp and less than 1,350 hp, and 1/1/2008 for lean burn engines greater than or equal to 500 hp and less than 1,350 hp are subject 40 CFR 60, Subpart JJJJ. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in the Applicability Reports required under Condition 2.1.2. Any testing required by the NSPS is in addition to that required by this AOS. Note that the initial test required by NSPS Subpart JJJJ can serve as the testing required by this AOS under Condition 2.2, if approved in advance by the Division, provided that such test is conducted within the time frame specified in Condition 2.2.

Note that under the provisions of Regulation No. 6. Part B, section I.B. that Relocation of a source from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of Regulation No. 6 (i.e., the date that the source is first relocated to Colorado becomes equivalent to the manufacture date for purposes of determining the applicability of NSPS JJJJ requirements).

However, as of November 1, 2008 the Division has not yet adopted NSPS JJJJ. Until such time as it does, any engine subject to NSPS will be subject only under Federal law. Once the Division adopts NSPS JJJJ, there will be an additional step added to the determination of the NSPS. Under the provisions of Regulation No. 6, Part B, § I.B (which is referenced in Part A), any engine relocated from outside of the State of

Colorado into the State of Colorado is considered to be a new source, subject to the requirements of NSPS JJJJ.

2.3.4 Reciprocating internal combustion engine (RICE) MACT: 40 CFR Part 63, Subpart ZZZZ

2.3.4.1 Area Source for HAPs

A permanent replacement engine located at an area source that commenced construction or reconstruction after June 12, 2006 as defined in § 63.2, will meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart JJJJ. An analysis of the applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in the Applicability Reports required under Condition 2.1.2. Any testing required by the MACT is in addition to that required by this AOS. Note that the initial test required by the MACT can serve as the testing required by this AOS under Condition 2.2, if approved in advance by the Division, provided that such test is conducted within the time frame specified in Condition 2.2.

2.3.4.2 Major Source for HAPs

A permanent replacement engine that is located at major source is subject to the requirements in 40 CFR Part 63 Subpart ZZZZ as follows:

Existing, new or reconstructed spark ignition 4 stroke rich burn engines with a site rating of more than 500 hp are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ.

New or reconstructed (construction or reconstruction commenced after 12/19/02) 2 stroke and 4 stroke lean burn engines with a site rating of more than 500 hp are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ.

New or reconstructed (construction or reconstruction commenced after 6/12/06) 4 stroke lean burn engines with a site rating of greater than or equal to 250 but less or equal to 500 hp and were manufactured on or after 1/1/08 are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ.

New or reconstructed (construction or reconstruction commenced after 6/12/06) 2 stroke lean burn or 4 stroke rich burn engines with a site rating of 500 hp or less will meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ.

New or reconstructed (construction or reconstruction commenced after 6/12/06) 4 stroke lean burn engines with a site rating of less than 250 hp will meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ.

An analysis of the applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in the Applicability Reports required under Condition 2.1.2. Any testing required by the MACT is in addition to that required by this AOS. Note that the initial test required by the MACT can serve as the testing required by this AOS under Condition 2.2, if approved in advance by the Division, provided that such test is conducted within the time frame specified in Condition 2.2.

2.3.5 Additional Sources

The replacement of an existing engine with a new engine is viewed by the Division as the installation of a new emissions unit, not "routine replacement" of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; an engine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite engine has to go through the appropriate Construction/Operating permitting process prior to installation.

Table 1
Internal Combustion Engine Information for the AOS

Emission Point	Replacement Engine	Periodic Monitoring?	Subject to CAM?
ENG 1 - 11	Eleven (11) Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, with Non-Selective Catalyst Reduction	Portable Monitoring Quarterly	Yes, on renewal

3. Prevention of Significant Deterioration

3.1 Based on the information provided by the applicant, this source is categorized as a minor stationary source for PSD as of the issue date of this permit. Any future modification which is major by itself (Potential to Emit of > 250 TPY or 100,000 TPY CO_2e) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

3.2 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

4. Accidental Release Prevention Program (112(r))

4.1 Based on the information provided by the applicant, the facility is not subject to the provisions of the Accidental Release Prevention Program (section 112(r) of the Federal Clean Air Act).

5. Compliance Assurance Monitoring (CAM)

5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

Pre-controlled NO_X and CO emissions from each of the eleven (11) Waukesha 7044 GSIE engines are above the major source level and pre-controlled VOC emissions from each of the four (4) Natco glycol dehydration units are above the major source level. The control devices on the engines and dehydrators are used to meet their NO_X, CO and VOC emission limitations, therefore CAM applies to these units. However, since controlled emissions from the engines and dehydrators are below the major source level, CAM does not apply until the renewal of this permit.

6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Facility ID	AIRS ID	Description	Pollution Control
ENG 1	005	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-15392/1	Non-Selective Catalyst Reduction
ENG 2	006	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-15391/1	Non-Selective Catalyst Reduction
ENG 3	009	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-15772/1	Non-Selective Catalyst Reduction
ENG 4	010	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-16144/1	Non-Selective Catalyst Reduction
ENG 5-8	015	Four (4) Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engines, 1680 HP, SN: C-16352/1, C-16351/1, C-16767/1, C-16765/1	Non-Selective Catalyst Reduction
ENG 9	016	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-16763/1	Non-Selective Catalyst Reduction
ENG 10	017	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-17387/1	Non-Selective Catalyst Reduction
ENG 11	018	Waukesha 7044 GSIE, 4-Cycle Rich Burn, Spark Ignition, Air-To-Fuel Ratio Controlled, Natural Gas Fired Internal Combustion Engine, 1680 HP, SN: C-17387/2	Non-Selective Catalyst Reduction
TEG 1	007	Natco Triethylene Glycol Dehydrator, 25mmscfd, natural gas-fired reboiler, equipped with a flash tank, gas glycol pump and associated still vent, SN N18E69401-01	Condenser, VRU, flare
TEG 2	008	Natco Triethylene Glycol Dehydrator, 25mmscfd, natural gas-fired reboiler, equipped with a flash tank, gas glycol pump and associated still vent, SN HS8H05201-02	Condenser, VRU, flare
TEG 3	013	Natco Triethylene Glycol Dehydrator, 25mmscfd, natural gas-fired reboiler, equipped with a flash tank, gas glycol pump and associated still vent, SN EL2G393A04-01	Condenser, VRU, flare
TEG 4	014	Natco Triethylene Glycol Dehydrator, 25MMscf/d, natural gas-fired reboiler, equipped with a flash tank, gas glycol pump and associated still vent, SN EL2G392A04-01	Condenser, VRU, flare
TANKS	004	Condensate Tank Battery, consisting of six (6) Vertical Fixed Roof Storage Tanks, 16,800 gallon capacity each	VRU, flare
FUG 1	011	Fugitive VOC from Equipment Leaks	None
FLARE	012	Natco Flare	N/A
Loadout	019	Condensate Truck Loadout	None

SECTION II - Specific Permit Terms

1. ENG 1 - 4: Four (4) Waukesha Compressor Engines, Rated at 1680 HP Each

Note: These limitations apply to **each engine**

Parameter	Permit Condition Number	Limitations	Compliance Emission Factor (lb/MMBtu)	Monitoring Method	Monitoring Interval
NO_X	1.1	12.2 TPY	0.213	Recordkeeping & Calculation 12 month rolling	Monthly
CO		16.2 TPY	0.283		
VOC	1.2	3.3 TPY	0.057		
HAPs	1.3	8 TPY single 20 TPY combined	AP-42		
Natural Gas Consumption	1.4	114.5 MMscf/yr			
Btu Content of Natural Gas	1.5			ASTM, EPA or other Division Approved Methods	Annually
Opacity	1.6	Not to Exceed 20% Except as Provided for Below		Fuel Restriction	Only Natural Gas is Used a Fuel
		For Startup – Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes			
Stack Height	1.7	> 25 feet		One time	
MACT Subpart ZZZZ	1.8	Limit Formaldehyde concentrations to 2.7 ppmvd @ 15% O_2 or Reduce Formaldehyde by 76%		See Condition 1.8	
MACT Subpart A	1.9			See Condition 1.9	
[State-Only] Control Device	1.10			See Condition 1.10	

1.1 Emissions of Nitrogen Oxides (NO_X) and Carbon Monoxide (CO) from **each engine** shall not exceed the limitations stated above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3, to remove the monthly limits). Compliance with the emission limitations shall be monitored as follows:

1.1.1 Except as provided below, the emission factors listed above (from catalyst manufacturer in units of g/hp-hr, converted to lb/MMBtu based on an engine heat rate of 7,780 Btu/hp-hr) have been approved by the Division and shall be used to calculate emissions from these engines.

Monthly emissions shall be calculated by the end of the subsequent month using the above emission factor, the natural gas consumption (as required by Condition 1.4) and the Btu content of the natural gas (as required by Condition 1.5) in the equation below

$$\text{tons/mo} = \frac{[\text{EF (lb/MMBtu) x fuel use (MMscf/mo) x heat content of fuel (MMBtu/MMscf)}]}{\text{2000 lb/ton}}$$

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

If the results of the portable analyzer testing conducted under the provisions of Condition 1.1.2 show that either the NO_X or CO emission rates/factors are greater than the emission rates/factors listed above, and in the absence of subsequent testing results to the contrary (as approved by the Division), the permittee shall apply for a modification to this permit to reflect, at a minimum, the higher emission rates/factors within 60 days of the completion of the test**.**

1.1.2 Portable monitoring shall be conducted quarterly as required by Condition 9.

1.2 Volatile Organic Compounds (VOC) emissions from **each engine** shall not exceed the annual emission limitation stated above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3 to remove the monthly limits). Monthly emissions shall be calculated by the end of the subsequent month using the above emission factor (from manufacturer in units of g/hp-hr, converted to lb/MMBtu based on an engine heat rate of 7,780 Btu/hp-hr) the monthly natural gas consumption (as required by Condition 1.4) and the Btu content of the natural gas (as required by Condition 1.5) in the equation below:

$$\text{tons/mo} = \frac{[\text{EF (lb/MMBtu) x fuel use (MMscf/mo) x heat content of fuel (MMBtu/MMscf)}]}{\text{2000 lb/ton}}$$

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.3 **Facility wide emissions** of Hazardous Air Pollutants (HAPs) shall not exceed the above limitations (Colorado Construction Permit 06GA0062). Compliance with the facility wide HAPs limits shall be monitored by calculating monthly emissions of individual HAP above the de minimus reporting level by the end of the subsequent month. Emissions of individual HAPs from **each engine** shall be calculated using AP-42 emission factors (AP-42, Section 3.2, dated 7/00, Table 3.2-3), the monthly natural gas consumption (as required by Condition 1.4), the Btu content of the natural gas (as required by Condition 1.5) and the appropriate control efficiency in the equation below:

$$\text{tons/mo} = \frac{[\text{EF (lb/MMBtu) x fuel use (MMSCF/mo) x Btu content of gas (MMBtu/mo) x Control Efficiency}]}{\text{2000 lb/ton}}$$

A control efficiency of 76% for formaldehyde and 50% for all other HAPs may be applied.

Monthly HAP (individual HAP and total HAP) emissions from **each engine** shall be used in a twelve month rolling total of facility wide emissions as specified in Condition 8.1.

1.4 Natural gas consumption from **each engine** shall not exceed the above limitation (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3 to remove the monthly limits). On the first working day of each month, facility-wide natural gas consumption shall be recorded using the existing fuel meter. The natural gas use shall be measured no more than one (1) hour from the time that run time hours have been recorded. Allocation of natural gas to each engine will be calculated using the following calculation:

Records of calculations shall be kept in a log to be made available to the Division upon request. Monthly natural gas consumption from **each engine** shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month, a new twelve month total shall be calculated using the previous twelve months data.

1.5 The Btu content of the natural gas used to fuel these engines shall be verified annually using the appropriate ASTM Methods or equivalent, if approved in advance by the Division. The Btu content of the natural gas shall be based on the lower heating value of the fuel. Calculation of monthly emissions shall be made using the heat content derived from the most recent required analysis.

1.6 Visible emissions shall not exceed 20% opacity (Colorado Construction Permit 06GA0062 and Colorado Regulation No. 1, Section II.A.1) except during periods of startup when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to **each engine.** In the absence of credible evidence to the contrary, compliance with the opacity limit shall be presumed since only natural gas is permitted to be used as fuel for these engines.

1.7 The stack height on **each** of these units shall be at least 25 feet above ground level. (Colorado Construction Permit 06GA0062)

1.8 **[Federal-Only]** These engines are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", as follows:

Note that as of the issuance date of this permit [July 1, 2012], the provisions in 40 CFR Part 63 Subpart ZZZZ (those provisions published in the August 20, 2010 Federal Register) have not been adopted in Colorado Regulation No. 6, Part A and Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements, these requirements will become both state and federally enforceable. If there is a

change in federal law which renders ineffective or alters the applicable requirements of this Subpart ZZZZ, the source shall follow the effective federal rules.

1.8.1 This facility must comply with the applicable limitations no later than October 19, 2013. (§63.6595(a)(1))

1.8.2 Formaldehyde emission from these engines shall be limited to 2.7 ppmvd at 15% O_2 **or** reduced by 76 percent or more (Table 2d of Subpart ZZZZ, Item 10.a or 10.b).

1.8.3 For the non-selective catalytic reduction device installed to meet the requirement in Condition 1.8.2, the following operating requirements shall apply:

1.8.3.1 Maintain each catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test and

1.8.3.2 Maintain the temperature of each engine's exhaust so the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.

<u>Performance Tests</u>

1.8.4 Initial performance tests must be conducted within 180 days after the compliance date specified in Condition 1.8.1 according to the provisions of §63.7(a)(2). (§63.6612(a))

1.8.4.1 An initial performance test is not required on a unit which a performance test has previously been conducted, provided the test meets the conditions described in §63.6612(b)(1) through (4). (§63.6612(b))

1.8.5 Performance tests must be conducted using the appropriate ASTM methods or equivalent, if approved in advance by the EPA, as described in Table 4 to Subpart ZZZZ, according to the following protocol:

1.8.5.1 Select the sampling port location and the number of traverse points

a. Sampling sites must be located at the inlet and outlet of the control device

1.8.5.2 Measure O_2at the inlet and outlet of the control device

a. Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration

1.8.5.3 Measure moisture content at the inlet and outlet of the control device

a. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration

1.8.5.4 Measure formaldehyde at the inlet and the outlet of the control device

a. Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs

Demonstrating Compliance

1.8.6 Initial compliance with the requirement to limit concentration **or** reduce formaldehyde emissions in Condition 1.8.2 is demonstrated by achieving the following:

1.8.6.1 The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average formaldehyde concentration, corrected to 15% O2, dry basis, from the initial performance test is less than or equal to the emission limitation; (Table 5 of Subpart ZZZZ, Item 7.a.i or 10.a.i) and

1.8.6.2 A CPMS has been installed to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); (Table 5 of Subpart ZZZZ, Item 7.a.ii or 10.a.ii) and

1.8.6.3 The catalyst pressure drop and catalyst inlet temperature have been recorded during the initial performance test. (Table 5 of Subpart ZZZZ, Item 7.a.iii or 10.a.iii)

1.8.7 Demonstrate continuous compliance with the limitations in Condition 1.8.2 using the following methods described in Table 6 of Subpart ZZZZ. (§63.6640(a)):

1.8.7.1 Conduct performance tests according to Condition 1.8.5 every 8,760 hours or 3 years, whichever comes first, to demonstrate that the required formaldehyde concentration or percent reduction is achieved; (Table 6 of Subpart ZZZZ, Item 10.a.i) and

1.8.7.2 Collect the catalyst inlet temperature data according to §63.6625(b); (Table 6 of Subpart ZZZZ, Item 10.a.ii) and

1.8.7.3 Reduce these data to 4-hour rolling averages; (Table 6 of Subpart ZZZZ, Item 10.a.iii) and

1.8.7.4 Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; (Table 6 of Subpart ZZZZ, Item 10.a.iv) and

1.8.7.5 Measure the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. (Table 6 of Subpart ZZZZ, Item 10.a.v)

Notification and Reporting Requirements

1.8.8 Submit compliance reports semiannually according to the requirements in §63.6650(b). The report must contain the following:

1.8.8.1 If there are no deviations from any emission limitations or operating limitations, include a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), include a statement that there were not periods during which the

CMS was out-of-control during the reporting period. (Table 7 of Subpart ZZZZ, Item 1.a)

1.8.8.2 If there is a deviation from any emission limitation or operating limitation during the reporting period, include the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), include the information in §63.6650(e). (Table 7 of Subpart ZZZZ, Item 1.b)

1.8.8.3 If there was a malfunction during the reporting period, include the information in §63.6650(c)(4). (Table 7 of Subpart ZZZZ, Item 1.c)

1.8.9 Submit a Notification of Compliance Status according to §63.6645(h).

1.8.10 Submit all notifications that are applicable in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), (g) and (h). (§63.6645(a))

1.8.11 Keep records of the maintenance conducted on the engine in order to demonstrate that the engine was operated and maintained according to the maintenance plan. (§66.6655(e)).

General Requirements

1.8.12 Compliance with the emission limitations and operating limitations in this subpart must be achieved at all times. (§63.6605(a))

1.8.13 At all times the engines must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§63.6605(b))

Maintenance Requirements

1.8.14 Comply with the monitoring, installation, collection, and maintenance requirements in §63.6625.

1.8.15 Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. (§63.6625(h))

1.9 These engines are subject to the requirements in 40 CFR part 63 Subpart A "General Provisions", as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following

1.9.1 Prohibited activities and circumvention in § 63.4.

1.9.2 Performance testing in §63.7.

1.9.3 Monitoring in §63.8.

1.9.4 Notification in §63.9.

1.9.5 Recordkeeping and reporting in §63.10.

1.10 **[State Only]** Each engine shall be equipped with both a non-selective catalytic reduction system and an air fuel controller (Colorado Regulation No. 7, Section XVII.E.3.a.(i)). Note: Upon compliance with the MACT Subpart ZZZZ requirements as identified in Condition 1.8, the engines are exempt from this Condition 1.10 (Colorado Regulation No. 7 Section XVII.B.4).

1.10.1 All control equipment required by Condition 1.10 shall be operated and maintained pursuant to manufacturer specifications or equivalent to the extent practicable, and consistent with technological limitations and good engineering and maintenance practices. Manufacturer specifications or equivalent shall be kept on file.

1.10.2 Parameters associated with the air-to-fuel ratio controller (AFR) and non-selective catalyst reduction unit shall be monitored as follows:

1.10.2.1 The millivolt reading (AFR) will be monitored and recorded monthly to assess the air to fuel ratio controller operating condition. Recording of the millivolt reading shall be used to verify that the AFR controller is operated in accordance with the manufacturer's recommendations.

1.10.2.2 The pressure drop across the catalyst shall be monitored and recorded monthly.

1.10.2.3 The catalyst inlet temperature shall be monitored and recorded monthly and kept within the manufacturer's specified range. The manufacturer's recommendations on the catalyst inlet temperature shall be made available to the Division upon request.

When portable monitoring is scheduled, the above parameters shall be recorded during the portable monitoring event.

1.10.3 The oxygen concentration in the engine exhaust gas shall be measured and recorded during each portable monitoring event required by Condition 1.1.2.

2. ENG 5 - 11: Seven (7) Waukesha Compressor Engines, Rated at 1680 HP Each

Note: These limitations apply to **each** engine

Parameter	Permit Condition Number	Limitations	Compliance Emission Factor (lb/MMBtu)	Monitoring Method	Monitoring Interval
NO_X	2.1	24.3 TPY	0.425	Recordkeeping & Calculation 12 month rolling	Monthly
CO		24.3 TPY	0.425		
VOC	2.2	3.3 TPY	0.057		
HAPs	2.3	8 TPY single 20 TPY combined	AP-42		
Natural Gas Consumption	2.4	114.5 MMscf/yr			
Btu Content of Natural Gas	2.5			ASTM, EPA or other Division Approved Methods	Annually
Opacity	2.6	Not to Exceed 20% Except as Provided for Below		Fuel Restriction	Only Natural Gas is Used a Fuel
		For Startup – Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes			
Stack Height	2.7	> 25 feet		One time	
MACT Subpart ZZZZ	2.8	Compliance with MACT met by complying with NSPS Subpart JJJJ		See Condition 2.8	
[State-Only] Control Device	2.9			See Condition 2.9	
Monitoring	2.10			See Condition 2.10	

2.1 Emissions of NO_X and CO from **each engine** shall not exceed the limitations stated above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3, to remove the monthly limits). Compliance with the emission limitations shall be monitored as follows:

2.1.1 Except as provided below, the emission factors listed above (from catalyst manufacturer in units of g/hp-hr, converted to lb/MMBtu based on an engine heat rate of 7,780 Btu/hp-hr) have been approved by the Division and shall be used to calculate emissions from these engines.

Monthly emissions shall be calculated by the end of the subsequent month using the above emission factor, the natural gas consumption (as required by Condition 2.4) and the Btu content of the natural gas (as required by Condition 2.5) in the equation below

$$\text{tons/mo} = \frac{[\text{EF (lb/MMBtu) x fuel use (MMscf/mo) x heat content of fuel (MMBtu/MMscf)}]}{2000 \text{ lb/ton}}$$

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

If the results of the portable analyzer testing conducted under the provisions of Condition 2.1.2 show that either the NO_X or CO emission rates/factors are greater than the emission rates/factors listed above, and in the absence of subsequent testing results to the contrary (as approved by the Division), the permittee shall apply for a modification to this permit to reflect, at a minimum, the higher emission rates/factors within 60 days of the completion of the test**.**

2.1.2 Portable monitoring shall be conducted quarterly as required by Condition 9.

2.2 VOC emissions from **each engine** shall not exceed the annual emission limitation stated above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3 to remove the monthly limits). Monthly emissions shall be calculated by the end of the subsequent month using the above emission factor (from manufacturer (in units of g/hp-hr, converted to lb/MMBtu based on an engine heat rate of 7,780 Btu/hp-hr), the monthly natural gas consumption (as required by Condition 2.4) and the Btu content of the natural gas (as required by Condition 2.5) in the equation below:

$$\text{tons/mo} = \frac{[\text{EF (lb/MMBtu) x fuel use (MMscf/mo) x heat content of fuel (MMBtu/MMscf)}]}{2000 \text{ lb/ton}}$$

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

2.3 **Facility wide emissions** of HAPs shall not exceed the above limitations (Colorado Construction Permit 06GA0062). Compliance with the facility wide HAPs limits shall be monitored by calculating monthly emissions of individual HAP above the de minimus reporting level by the end of the subsequent month. Emissions of individual HAPs from **each engine** shall be calculated using AP-42 emission factors (AP-42, Section 3.2, dated 7/00, Table 3.2-3), the monthly natural gas consumption (as required by Condition 2.4), the Btu content of the natural gas (as required by Condition 2.5) and the appropriate control efficiency in the equation below:

$$\text{tons/mo} = \frac{[\text{EF (lb/MMBtu) x fuel use (MMSCF/mo) x Btu content of gas (MMBtu/mo) x Control Efficiency}]}{2000 \text{ lb/ton}}$$

A control efficiency of 76% for formaldehyde and 50% for all other HAPs may be applied.

Monthly HAP (individual HAP and total HAP) emissions from **each engine** shall be used in a twelve month rolling total of facility wide emissions as specified in Condition 8.1.

2.4 Natural gas consumption from **each engine** shall not exceed the above limitation (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3 to remove the monthly limits). On the first working day of each month, facility-wide natural gas consumption shall be recorded using existing the fuel meter. The natural gas use shall be measured no more than one (1) hour from the time that run time hours have been recorded. Allocation of natural gas to each engine will calculated using following equation:

Records of calculations shall be kept in a log to be made available to the Division upon request. Monthly natural gas consumption from **each engine** shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month, a new twelve month total shall be calculated using the previous twelve months data.

2.5 The Btu content of the natural gas used to fuel these engines shall be verified annually using the appropriate ASTM Methods or equivalent, if approved in advance by the Division. The Btu content of the natural gas shall be based on the lower heating value of the fuel. Calculation of monthly emissions shall be made using the heat content derived from the most recent required analysis.

2.6 Visible emissions shall not exceed 20% opacity (Colorado Construction Permit 06GA0062 and Colorado Regulation No. 1, Section II.A.1) except during periods of startup when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to **each engine.** In the absence of credible evidence to the contrary, compliance with the opacity limit shall be presumed since only natural gas is permitted to be used as fuel for these engines.

2.7 The stack height on **each** of these units shall be at least 25 feet above ground level. (Colorado Construction Permit 06GA0062)

2.8 **[Federal-Only]** These engines are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", as follows:

Note that as of the date of revised permit issuance [July 1, 2012] the requirements in 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ (those provisions published in the August 20, 2010 Federal Register) have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements, these requirements will become both state and federally enforceable. If there is a change in federal law which renders ineffective or alters the applicable requirements of this Subpart ZZZZ, the source shall follow the effective federal rules.

An affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart JJJJ. No further requirements apply for such engines under this part. (§ 63.6590(c))

Note that these engines are not subject to the requirements in NSPS Subpart JJJJ (engines manufactured prior to July 1, 2007), and no further requirements apply under MACT Subpart ZZZZ.

2.9 **[State Only]** Each engine shall be equipped with both a non-selective catalytic reduction system and an air fuel controller (Colorado Regulation No. 7, Section XVII.E.3.a.(i)).

2.9.1 All control equipment required by Condition 2.9 shall be operated and maintained pursuant to manufacturer specifications or equivalent to the extent practicable, and consistent with technological limitations and good engineering and maintenance practices. Manufacturer specifications or equivalent shall be kept on file.

2.10 Parameters associated with the air-to-fuel ratio controller (AFR) and non-selective catalyst reduction unit shall be monitored as follows:

2.10.1 The millivolt reading (AFR) will be monitored and recorded monthly to assess the air to fuel ratio controller operating condition. Recording of the millivolt reading shall be used to verify that the AFR controller is operated in accordance with the manufacturer's recommendations.

2.10.2 The pressure drop across the catalyst shall be monitored and recorded monthly.

2.10.3 The catalyst inlet temperature shall be monitored and recorded monthly and kept within the manufacturer's specified range. The manufacturer's recommendations on the catalyst inlet temperature shall be made available to the Division upon request.

When portable monitoring is scheduled, the above parameters shall be recorded during the portable monitoring event.

2.10.4 The oxygen concentration in the engine exhaust gas shall be measured and recorded during each portable monitoring event required by Condition 2.1.2.

3. TEG 1 - 4: Four (4) Natco TEG Dehydrators, Rated at 25 MMscf/d Each

Note: These limitations apply to **each** glycol dehydrator.

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
VOC	3.1	9.5 TPY	GLYCalc 4.0 or higher	Parametric 12 month rolling	Daily and Monthly
HAPs		8 TPY single 20 TPY combined			
Natural Gas Processed - Throughput	3.2	9,215 MMscf/yr		Recordkeeping & Calculation 12 month rolling	Monthly
Lean Glycol Pumping Rate	3.3	7.5 gallons per min		Recordkeeping	Monthly
Extended Gas Analysis	3.4			EPA Reference Methods	Annually
Days/Hours of Operation	3.5			Recordkeeping	See Condition 3.5
Control System	3.6	95% Reduction of VOC		See Condition 3.6	
MACT Subpart HH	3.7	< 1984 lb/yr benzene		See Condition 3.7	

3.1 VOC and HAP emissions from **each dehydrator** shall not exceed the annual emission limitation stated above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3 to remove the monthly limits). Emissions of VOC and HAPs will be calculated monthly using the Gas Research Institute's GLYCalc (Version 4.0 or higher) Model. Parametric monitoring of the triethylene glycol circulation rate, condenser outlet temperature, inlet gas pressure and temperature, reboiler temperature and pressure, and flash tank temperature and pressure will be performed to verify input to this model. Values recorded shall be representative of how the unit operated during the period. Recording interval for all parameters, except the condenser outlet temperature and lean glycol circulation rate, will be on a weekly basis. The condenser outlet temperature and lean glycol circulation rate shall be recorded manually or automatically on a daily basis. Monthly calculation of emissions using GLYCalc will be conducted by the end of the subsequent month utilizing the gas data from the last analysis conducted as required by Condition 3.3 and the average value of the monitored parameters.

Monthly HAP (individual HAP and total HAP) emissions from **each dehy** shall be used in a twelve month rolling total of facility wide emissions as specified in Condition 8.1. Monthly VOC emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data

3.2 The gas processed by the glycol dehydration unit shall not exceed the limitations listed above (Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3 to

remove monthly limits). The gas throughput to the dehydration unit shall be calculated daily according to following equation:

Records of calculations shall be kept in a log to be made available to the Division upon request. The daily gas throughput rate shall be used in the monthly GLYCalc runs required by Condition 3.1. A twelve month rolling total will be maintained to monitor compliance with annual limitations.

3.3 The maximum pumping rate of lean glycol for **each dehy** shall not exceed 7.5 gallons per minute (a pump stroke correlation can be used) (Colorado Construction Permit 06GA0062). Monthly records of the actual pumping rate shall be maintained by the permittee and made available to the Division for inspection upon request.

3.4 Samples of inlet gas shall be collected and analyzed (extended gas analysis) annually to determine C_1 to C_6, n-hexane, benzene, toluene, ethyl benzene and total xylene (BTEX) composition. If any of the analyses indicates the BTEX constituent concentrations exceed the values listed in the table below, frequency of extended gas analyses will revert to quarterly. The first quarterly sample shall be taken three months after the sample that indicated a BTEX constituent exceeded the parameters in the table was taken. Frequency of sampling and analysis will move to semi-annually after four (4) subsequent analyses and to annually after two (2) subsequent semi-annual analyses indicate that the BTEX constituents remain at or below the values in the table below.

Constituent	**Value**	**Units**	**Criteria**
Benzene	153	parts per million	At or Below
Toluene	200	parts per million	At or Below
Ethyl Benzene	10	parts per million	At or Below
Xylene	89	parts per million	At or Below

3.5 Days and hours of operation shall be monitored and recorded monthly in a log that is to be made available to the Division upon request. Days of operation shall be used to calculate an average daily gas throughput as specified in Condition 3.2. Hours of operation for the month shall be used in the GLYCalc runs required by Condition 3.1.

3.6 This emissions unit is designed with a control system, which shall be capable of reducing the emissions of volatile organic compounds by at least 95%. The VRU/flare shall be operated at all times when gases, vapors and fumes are vented through the closed-vent system. The total facility run time and VRU and flare operating time shall be monitored and recorded. (Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3).

3.7 The glycol dehydration units are subject to the requirements in 40 CFR Part 63 Subpart HH, "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas

Production Facilities", as adopted by reference in Colorado Regulation No. 8, Part E, Section III, including, but not limited to the following:

3.7.1 These dehydrators are exempt from all requirements, save recordkeeping in §63.774(d)(1), provided the criterion in Condition 3.7.1.1 below is met: (§63.764(e)(1))

3.7.1.1 The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere shall be less than 0.90 megagram per year, or 1984 lb per year, as determined by the procedures specified in Condition 3.7.3 (§63.764 (e)(1)(ii)).

3.7.2 Records shall be kept of the actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with Condition 3.7.3 §63.772(b)(2) (§63.774(d)(1)(ii)).

3.7.3 The determination of actual average benzene emissions from this glycol dehydration unit shall be made using the procedure described in Condition 3.7.3.1 below. Emissions shall be determined with federally enforceable controls in place.

3.7.3.1 The actual average benzene emissions shall be determined using the model GRI-GLYCalc, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc, Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI–95/0368.1) (Colorado Construction Permit 06GA0062 and §63.772(b)(2)(i)).

4. TANKS: Condensate Tank Battery, Six (6) Storage Tanks, 400 bbl Capacity Each

Note: These limitations apply to the tank battery as a unit rather than to the individual tanks. At the time of issuance of this permit, only five of the six permitted tanks were installed.

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
VOC	4.1	20.4 TPY	E&P TANKS	Recordkeeping 12 month rolling	Monthly
HAPs		8 TPY single 20 TPY combined			
E&P Tanks Input Parameters	4.2			Recordkeeping, Sampling, and Analysis	See Condition 4.2
Condensate Throughput	4.3	54,750 bbl/yr		Recordkeeping	Monthly
[State-Only] Emission Reduction	4.4	95% VOC control		See Condition 4.4	
Control system monitoring	4.5	See Condition 4.5		See Condition 4.5	

4.1 VOC and HAP emissions from the tank battery shall not exceed the limitations above (Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3). Compliance with the annual limit shall be monitored on a rolling 12-month total. By the end of each month a new twelve month total is calculated based on the previous twelve months data. Monthly emissions of VOC and HAPs shall be calculated using API's E&P Tanks Version 2.0 or higher. Emissions for each month shall be calculated using the input parameters and the sales oil properties specified in Condition 4.2, the monthly quantity of condensate sold as determined by Condition 4.3. Records of the actual emissions shall be maintained and made available to the Division for inspection upon request.

Monthly HAP (individual HAP and total HAP) emissions from the tank battery shall be used in a twelve month rolling total of facility wide emissions as specified in Condition 8.1.

4.2 The input parameters to E&P Tanks shall be monitored as follows:

4.2.1 Monthly averages of the following monitored values shall be determined for use as inputs to the Tanks model. Monthly average values shall be representative of the unit's operation during the month. The recorded values for separator temperature and pressure shall be used to calculate emissions as required by Condition 4.1.

Parameter	Monitoring Frequency
Separator Temperature	Weekly
Separator Pressure	Weekly

4.2.2 For purposes of calculating emissions as required by Condition 4.1, the permittee shall use the historical monthly mean temperature recorded at the Garfield County Regional Airport (RIL). The appropriate atmospheric pressure based on the unit's elevation shall be used. Upon request, the Division may accept alternative temperature data provided the data is representative of actual conditions and is from a reputable source.

4.2.3 The permittee shall sample and analyze liquids annually for the compositional E&P Tanks input requirements. The 'low pressure oil' condensate sample must be collected and analyzed per Division approved methods as specified in Permit Section Memo 05-01 (http://www.cdphe.state.co.us/ap/down/ps05-01.pdf). The stream shall be sampled at the outlet of the separator, prior to flashing, or at another appropriate location if approved by the Division. Sampling must occur when the systems are operating such that any xylene and/or methanol injections that occur upstream of the facility are captured by the sampling. A copy of the procedures used to obtain and analyze the samples as well as records of the analyses shall be maintained and made available to the Division upon request.

4.2.4 The average monthly RVP from loadout sampling shall be used to calculated an API Gravity and shall be used to calculate emissions as required by Condition 4.1.

4.3 The quantity of condensate processed through the tank battery shall not exceed the above limit (Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3). The quantity of condensate processed through the tank battery shall be monitored and recorded monthly and used to calculate emissions as required by Condition 4.1. Records of tank throughput shall be kept in a log to be made available to the Division upon request. The monthly quantity of condensate processed shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months' data.

4.4 **[State-only]** The condensate tanks covered by this permit are subject to Regulation 7, Section XVII.C. - Emission reduction from condensate storage tanks at oil and gas exploration and production operations, natural gas compressor stations, natural gas drip stations and natural gas processing plants (Colorado Regulation No. 7 Section XVII.B & C). These requirements include, but are not limited to:

4.4.1 Beginning May 1, 2008, owners or operators of all atmospheric condensate storage tanks with uncontrolled actual emissions of volatile organic compounds equal to or greater than 20 tons per year based on a rolling twelve-month total shall operate air pollution control equipment that has an average control efficiency of at least 95% for VOCs on such tanks. (Colorado Regulation No. 7 Section XVII.C.1).

4.4.2 **Monitoring**: The owner or operator of any condensate storage tank that is required to control volatile organic compound emissions pursuant to this section XVII.C. shall visually inspect or monitor the Air Pollution Control Equipment to ensure that it is operating at least as often as condensate is loaded out from the tank, unless a more frequent inspection or monitoring schedule is followed. In addition, if a flare or other

combustion device is used, the owner or operator shall visually inspect the device for visible emissions at least as often as condensate is loaded out from the tank. (Colorado Regulation No. 7 Section XVII.C.3).

4.4.3 **Recordkeeping**: The owner or operator of each condensate storage tank shall maintain the following records for a period of five years (Colorado Regulation No. 7 Section XVII.C.4):

4.4.3.1 **XVII.C.4.a.** Monthly condensate production from the tank.

4.4.3.2 **XVII.C.4.b** For any condensate storage tank required to be controlled pursuant to this section XVII.C., the date, time and duration of any period where the air pollution control equipment is not operating. The duration of a period of non-operation shall be from the time that the air pollution control equipment was last observed to be operating until the time the equipment recommences operation.

4.4.3.3 **XVII.C.4.c.** For tanks where a flare or other combustion device is being used, the date and time of any instances where visible emissions are observed from the device.

4.4.4 General Provisions:

4.4.4.1 All air pollution control equipment required by Condition 4.4 shall be operated and maintained pursuant to manufacturer specifications or equivalent to the extent practicable, and consistent with technological limitations and good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications or equivalent on file. In addition, all such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by Condition 4.4.1 and to handle reasonably foreseeable fluctuations in emissions of volatile organic compounds during normal operations. Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable (Colorado Regulation No. 7 Section XVII.B.1.a).

4.4.4.2 All condensate collection, storage, processing and handling operations, regardless of size, shall be designed, operated and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the extent reasonably practicable (Colorado Regulation No. 7 Section XVII.B.1.b).

4.5 Emission Control or Recycling Equipment Monitoring Requirements:

4.5.1 Thief hatch seals shall be inspected for integrity annually and replaced as necessary.

4.5.2 Thief hatch covers shall be weighted and properly seated.

4.5.3 Pressure relief valves (PRV) shall be inspected annually for proper operation and replaced as necessary.

4.5.4 PRVs shall be set to release at a pressure that will ensure flashing, working and breathing losses (as applicable) are routed to the control device under normal operating conditions.

4.5.5 Annual inspections shall be documented with an indication of status, a description of any problems found, and their resolution.

5. FUG 1: Fugitive VOC Emissions from Equipment Leaks

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
VOC	5.1	29.1 TPY See Table 5-2	See Table 5-1	Recordkeeping & Calculation 12 month rolling	Monthly

5.1 VOC emissions shall not exceed the limitations above (Colorado Construction Permit 06GA0062). Emissions shall be calculated using the emission factors and equations listed below. Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data. The records shall be kept and made available for Division review upon request.

Emission Factors for individual types of components in lb/component-hr from the reference *Protocol for Equipment Leak Emission Estimates, EPA, November 1995, EPA-453/R-95-017, Table 2-4*. These emission factors are fixed until changed by established permit modification procedures.

Table 5-1

Component	Emission Factors (lb/component-hr)		
	Gas Service	Heavy Oil Service	Light Oil Service
Valves	9.92×10^{-3}	1.85×10^{-5}	5.51×10^{-3}
Connectors	4.41×10^{-4}		4.63×10^{-4}
Flanges	8.60×10^{-4}		2.43×10^{-4}
Open-Ended Lines	4.41×10^{-3}		3.09×10^{-3}
Other*	1.94×10^{-2}		1.65×10^{-2}

*Other equipment type includes compressors, pressure relief valves, relief valves, diaphragms, drains, dump arms, hatches, instrument meters, polish rods, and vents.

Calculation of annual emissions of VOC per component:

Component count × 8760 hrs/year × VOC content (wt%) × EF

The total fugitive VOC emissions shall be the sum of emissions for each component

5.1.1 The most recent extended gas analysis as required under Condition 3.1 (dehy gas) and Condition 4.2 (condensate) of this permit shall be used to determine the appropriate weight %VOC to use in the above equation. The weight %VOC shall not exceed the limitations listed in Table 5-2 below.

5.1.2 A component count shall be limited to a maximum equipment configuration as listed in the Table 5-2 below (Colorado Construction Permit 06GA0062). Any additions to the component count at this facility will be considered and reviewed as a permit modification. An initial physical hard-count of facility components shall be conducted within 180 days of issuance of this permit and every five years subsequent to monitor compliance with this condition. Records of the component counts shall be kept and made available for Division review upon request.

Table 5-2

Component	Component Count		
	Gas Service	Heavy Oil Service	Light Oil Service
Valves	620	20	460
Connectors	110		80
Flanges	1200		220
Open-Ended Lines	70		45
Other*	170		115
VOC Content (wt%)	18.0	100.0	13.0

*Other equipment type includes compressors, pressure relief valves, relief valves, diaphragms, drains, dump arms, hatches, instrument meters, polish rods, and vents.

6. FLARE: Natco Flare

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor (lb/MMBtu)	Monitoring	
				Method	Interval
NO_X	6.1	4.9 TPY	0.138	Recordkeeping & Calculation 12 month rolling	Monthly
CO		9.8 TPY	0.2755		
Gas Throughput	6.2	105,705 MMBtu/yr			
Pilot Flame Presence	6.3	At all times		Recordkeeping	Continuously
Opacity	6.4	Not to exceed 30%		EPA Method 9	Annually
Hours of Operation	6.5			Recordkeeping	Monthly

6.1 Emissions of NO_X and CO from the flare shall not exceed the limitations stated above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3, to remove the monthly limits). Compliance with the emission limitations shall be calculated as follows:

$$\text{Tons/mo} = \frac{[\text{EF (lb/MMBtu) x Fuel Combusted (MMscf/d) x Heat Value (Btu/SCF)*Hours of Operation (hr/mo)}]}{\text{24 (hr/d) x 2000 (lb/ton)}}$$

The fuel combusted and heat content for the above equation shall be determined from the modeling outputs for the tanks and the dehydrators. Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

6.2 The quantity of gas combusted shall not exceed the above limitation (Colorado Construction Permit 06GA0062). The quantity of gas combusted by the flare (both pilot and waste gas) shall be calculated and recorded monthly. This combusted gas throughput shall be used to calculate monthly emissions to be used in a rolling twelve month total as specified in Condition 6.1. Records of gas combusted shall be kept in a log to be made available to the Division upon request. Monthly gas combustion by the flare shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month, a new twelve month total shall be calculated using the previous twelve months data.

6.3 Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. Records of the times and duration of all periods of pilot flame outages shall be maintained and made available to the Division upon request.

6.4 The flares shall not exceed 30% opacity for a period or periods aggregating more than six minutes in any sixty consecutive minutes (Colorado Regulation No. 1, II.A.5). Compliance with the opacity requirement shall be monitored by conducting a non-Method 9 visible emission observation annually when the flare is combusting waste gas. The annual observation shall last a minimum of five minutes. If no visible emissions are present during this observation, in the

absence of credible evidence to the contrary, the flare will be considered in compliance with the above opacity requirement. If visible emissions are noted during the observation then an EPA Reference Method 9 opacity observation shall be performed to determine compliance with the opacity standard.

The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

6.5 Hours of operation shall be recorded monthly. Hours of operation shall be used to calculate monthly emissions to be used in a rolling twelve month total as specified in Condition 6.1. The flare shall be operated at all times when emissions may be vented to them.

7. Condensate Truck Loadout

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
VOC	7.1	2.9 TPY	2.48 lb/1000 gallons loaded	Recordkeeping & Calculation 12 month rolling	Monthly
Condensate Throughput	7.2	2,300,000 gallons/yr			

7.1 VOC emissions from condensate truck loading shall not exceed the limitations stated above (Construction Permit 06GA0062). VOC emissions shall be calculated monthly using the compliance emission factor above (calculated from methodology in AP 42 Chapter 5-2) in the following equation:

$$\text{tons/mo} = \frac{\text{EF (lb/Mgallons) x Condensate Throughput (gallon/mo)}}{\text{1000 gallons x 2000 (lb/ton)}}$$

Monthly emissions of VOC will be used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months' data.

7.2 The quantity of condensate loaded into trucks shall not exceed the limitations stated above (Construction Permit 06GA0062 as modified under the provisions of Section II, Condition 1.3). The quantity of condensate loaded into trucks shall be monitored and recorded monthly and used to calculate emissions as required by Condition 5.1. Monthly condensate throughput shall be the sum of all loading activities within that month. This sum will be used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month total

shall be calculated using the previous twelve months' data. Records of condensate throughput shall be kept in a log to be made available to the Division upon request.

8. Facility Wide

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
HAPs	8.1	8 TPY single 20 TPY combined		Recordkeeping & Calculation 12 month rolling	Monthly
Insignificant Activities	8.2	CO: 5.2 tons/yr		Recordkeeping	Annually
Maintenance Practices	8.3			See Condition 8.3	
Fence and Signs	8.4			See Condition 8.4	

8.1 Facility-wide HAP emissions shall not exceed limitation above (Colorado Construction Permit 06GA0062). HAPs calculated in accordance with Conditions 1.1, 2.1, 3.1 and 4.1 shall be summed and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months' data.

8.2 CO emissions from insignificant activities at the facility shall not exceed the limitation listed above (Colorado Construction Permit 06GA0062, as modified under the provisions of Section I, Condition 1.3). CO emissions from each equipment listed as insignificant activity shall be calculated and summed annually to monitor compliance with the annual limitation.

8.3 All equipment at this facility shall be operated and maintained in accordance with internal operating and maintenance standards, which shall consider manufacturer's recommendations and good engineering practices, at all times, including periods of start-up, shut-down and malfunction. This includes but is not limited to: inspecting and replacing engine catalysts as necessary, replacing O_2 sensors on the engines' air-to-fuel ratio controller approximately every 2200 run hours, periodically inspecting and adjusting dehy components and annually testing relief valves. Any maintenance performed on the permitted equipment shall be documented and made available to the Division upon request.

8.4 This facility shall be completely enclosed by a fence and posted with no trespassing signs that preclude public access to this site as described in NO_X modeling analysis for this facility. This requirements is imposed as a result of the modeled ambient air NO_X impacts that result from the facility operations (Colorado Construction Permit 06GA0062)

9. Portable Monitoring (ver 6/1/06)

Emission measurements of nitrogen oxides (NO_X) and carbon monoxide (CO) shall be conducted quarterly using a portable flue gas analyzer. At least one calendar month shall separate the quarterly tests. Note that if the engine is operated for less than 100 hrs in any quarterly period, then the portable monitoring requirements do not apply. The quarterly tests need not be on a calendar basis provided a test is conducted at least once in every 3 month period. An EPA Reference Method test can replace a required portable analyzer test if conducted within the same test period as the portable analyzer test it replaces.

All portable analyzer testing required by this permit shall be conducted using the Division's Portable Analyzer Monitoring Protocol (ver March 2006 or newer) as found on the Division's website at: http://www.cdphe.state.co.us/ap/down/portanalyzeproto.pdf

Results of the portable analyzer tests shall be used to monitor the compliance status of this unit. For comparison with an annual or short term emission limit, the results of the tests shall be converted to a lb/hr basis and multiplied by the allowable operating hours in the month or year (whichever applies) in order to monitor compliance. If a source is not limited in its hours of operation the test results will be multiplied by the maximum number of hours in the month or year (8760), whichever applies.

If the portable analyzer results indicate compliance with both the NO_X and CO emission limitations, in the absence of credible evidence to the contrary, the source may certify that the engine is in compliance with both the NO_X and CO emission limitations for the relevant time period.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, if the portable analyzer results fail to demonstrate compliance with either the NO_X or CO emission limitations, the engine will be considered to be out of compliance from the date of the portable analyzer test until a portable analyzer test indicates compliance with both the NO_X and CO emission limitations or until the engine is taken offline.

For comparison with the emission rates/factors, the emission rates/factors determined by the portable analyzer tests and approved by the Division shall be converted to the same units as the emission rates/factors in the permit. If the portable analyzer tests shows that either the NO_X or CO emission rates/factors are greater than the relevant ones set forth in the permit, and in the absence of subsequent testing results to the contrary (as approved by the Division), the permittee shall apply for a modification to this permit to reflect, at a minimum, the higher emission rate/factor within 60 days of the completion of the test.

Results of all tests conducted shall be kept on site and made available to the Division upon request.

SECTION III - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B; § 25-7-114.4(3)(a), C.R.S.

1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

Emission Unit	Applicable Requirement	Justification
TANKS - Condensate Tank Battery	40 CFR 60 Subpart K, Ka	All tanks storing volatile organic liquids were constructed after July 23, 1984, therefore, are not affected facilities under this rule.
TANKS - Condensate Tank Battery	40 CFR 60 Subpart Kb	All tanks storing volatile organic liquids are less than 75 cubic meters, therefore, are not affected facilities under this rule.
Facility	40 CFR 60 Subpart KKK	This site does not meet the definition of a natural gas processing plant, therefore, is not an affected facility under this rule.
Facility	Regulation No. 3, Part D	This facility is not a major source as defined in this regulation therefore, is not subject to this part of the regulation.
Facility	Regulation No. 7, Sections III, IV, VI, VII, VIII, XII, XVI, XVIII	This facility is not located in a non-attainment area, therefore, is not subject to these sections of the regulation.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;

2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;

2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to §25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;

2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.

2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition	Streamlined (Subsumed) Requirements
Section II, Condition 3.6	Regulation No. 7, Section XVII.D [Reduce emissions by 90%] **- State-only Requirement**

SECTION IV - General Permit Conditions (ver 5/22/2012)

1. Administrative Changes

Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

2. Certification Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.

c. Compliance certifications shall contain:

(i) the identification of each permit term and condition that is the basis of the certification;

(ii) the compliance status of the source;

(iii) whether compliance was continuous or intermittent;

(iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.

d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. Common Provisions

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II.E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

(i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;

(ii) approves the use of an equivalent method;

(iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or

(iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for test methods applicable to such facility;

(ii) Safe sampling platform(s);

(iii) Safe access to sampling platform(s); and

(iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

(i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;

(ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;

(iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded;

(iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

(v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation (if at all possible);

(vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;

(viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and

(x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan 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. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

(i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;

(ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;

(iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;

(v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation (if at all possible);

(vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,

(viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.

b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.

d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division 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 Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.

e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.

f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.E

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 the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, 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 emission standards, or other requirements in the permit; and

d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions 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 emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

6. Emission Controls for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, “asbestos control.”

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S §§ 25-7-114.1(6) and 25-7-114.7

a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.

b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.

c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;

b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;

d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

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

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permit shield shall not apply to any off-permit change.

16. Opacity

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.- II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.

b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the 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; or

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 hazardous air pollutant 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 shall be made within 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 hours in excess of permit requirements, the report shall be made within 48 hours; and

(iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.

c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. *[Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.]* A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:

(i) date, place as defined in the Operating Permit, and time of sampling or measurements;

(ii) date(s) on which analyses were performed;

(iii) the company or entity that performed the analysis;

(iv) the analytical techniques or methods used;

(v) the results of such analysis; and

(vi) the operating conditions at the time of sampling or measurement.

b. 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. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.

c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.

d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.

e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.

b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines 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 whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.

c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.

d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.

b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

   Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be

transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

c. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.

d. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.

e. Beer production and associated beer container storage and transfer operations involving volatile organic compounds with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

OPERATING PERMIT APPENDICES

A - INSPECTION INFORMATION
B - MONITORING AND PERMIT DEVIATION REPORT
C - COMPLIANCE CERTIFICATION REPORT
D - NOTIFICATION ADDRESSES
E - PERMIT ACRONYMS
F - PERMIT MODIFICATIONS
G - ENGINE AOS APPLICABILITY REPORTS

*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

APPENDIX A - Inspection Information

1. Directions to Plant:

From Rifle, CO drive south past the airport
Turn right on CR 3333 (Hunter Mesa Road)
The facility is on the left and right next to road.

2. Safety Equipment Required:

Fire Retardant Clothing (exterior layer); Eye Protection; Hard Hat; Safety Shoes; Hearing Protection

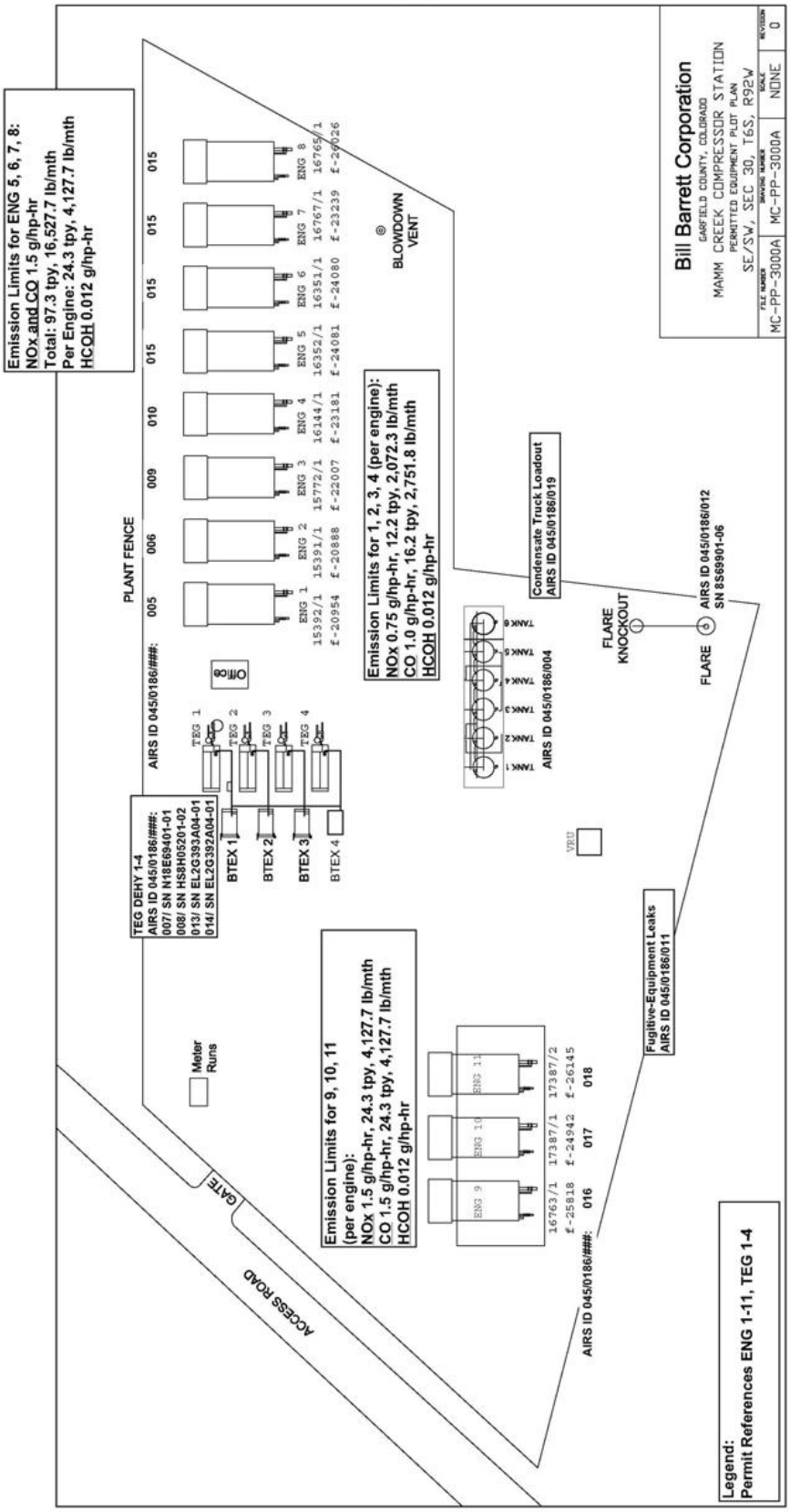
3. Facility Plot Plan:

The attached Figure (following page) shows the plot plan as submitted in the May 6, 2009 Title V Operating Permit Application.

4. List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

- Five (5) 0.75 MMBtu/hr Heater
- One (1) 0.75 MMBtu/hr Heater (Not Installed)
- Four (4) Dehydrator Reboiler 0.75 MMBtu/hr Heater
- Pneumatic Devices
- Chemical storage tanks or containers that hold less than 500 gallons, and which have a daily throughput less than 25 gallons.
- Chemical storage areas where chemicals are stored in closed containers, and where total storage capacity does not exceed 5000 gallons.
- Oil production wastewater (produced water tanks), containing less than 1% by volume crude oil.
- Storage tanks of capacity < 40,000 gallons of lubricating oils


Emission Limits for ENG 5, 6, 7, 8:
NOx and CO 1.5 g/hp-hr
Total: 97.3 tpy, 16,527.7 lb/mth
Per Engine: 24.3 tpy, 4,127.7 lb/mth
HCOH 0.012 g/hp-hr
PLANT FENCE
AIRS ID 045/0186/####:
005
006
009
010
015
ENG 1
ENG 2
ENG 3
ENG 4
ENG 5
ENG 6
ENG 7
ENG 8
15392/1
15391/1
15772/1
16144/1
16352/1
16351/1
16767/1
16765/1
f-20954
f-20888
f-22007
f-23181
f-24081
f-24080
f-23239
f-26026
BLOWDOWN VENT
Emission Limits for 1, 2, 3, 4 (per engine):
NOx 0.75 g/hp-hr, 12.2 tpy, 2,072.3 lb/mth
CO 1.0 g/hp-hr, 16.2 tpy, 2,751.8 lb/mth
HCOH 0.012 g/hp-hr
Bill Barrett Corporation
GARFIELD COUNTY, COLORADO
MAMM CREEK COMPRESSOR STATION
PERMITTED EQUIPMENT PLOT PLAN
SE/SW, SEC 30, T6S, R92W
FILE NUMBER
MC-PP-3000A
DRAWING NUMBER
MC-PP-3000A
SCALE
NONE
REVISION
0
Condensate Truck Loadout
AIRS ID 045/0186/019
AIRS ID 045/0186/012
SN 8S69901-06
FLARE
KNOCKOUT
FLARE
TANK 1
TANK 2
TANK 3
TANK 4
TANK 5
TANK 6
AIRS ID 045/0186/004
Office
TEG 1
TEG 2
TEG 3
TEG 4
TEG DEHY 1-4
AIRS ID 045/0186/####:
007/ SN N18E69401-01
008/ SN HS8H05201-02
013/ SN EL2G3933A04-01
014/ SN EL2G3932A04-01
BTEX 1
BTEX 2
BTEX 3
BTEX 4
VRU
Meter Runs
Emission Limits for 9, 10, 11
(per engine):
NOx 1.5 g/hp-hr, 24.3 tpy, 4,127.7 lb/mth
CO 1.5 g/hp-hr, 24.3 tpy, 4,127.7 lb/mth
HCOH 0.012 g/hp-hr
ENG 9
ENG 10
ENG 11
16763/1
17387/1
17387/2
f-25818
f-24942
f-26145
AIRS ID 045/0186/####:
016
017
018
Fugitive-Equipment Leaks
AIRS ID 045/0186/011
GATE
ACCESS ROAD
Legend:
Permit References ENG 1-11, TEG 1-4

APPENDIX B

Reporting Requirements and Definitions

with codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

(A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);

(B) fails to notify or report as required under the Act; or

(C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits.

All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

Report #2: Permit Deviation Report (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of

such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

(1) A situation where emissions exceed an emission limitation or standard contained in the permit;

(2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;

(3) 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,

(4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = Standard:	When the requirement is an emission limit or standard
2 = Process:	When the requirement is a production/process limit
3 = Monitor:	When the requirement is monitoring
4 = Test:	When the requirement is testing
5 = Maintenance:	When required maintenance is not performed
6 = Record:	When the requirement is recordkeeping
7 = Report:	When the requirement is reporting
8 = CAM:	A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.
9 = Other:	When the deviation is not covered by any of the above categories

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the

permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.[1]
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

[1] For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

Startup, Shutdown, Malfunctions and Emergencies

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergency Provisions

Under the Emergency provisions of Part 70 certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

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 preventative maintenance, careless or improper operation, or operator error.

Monitoring and Permit Deviation Report - Part I

1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Bill Barrett Mamm Creek
OPERATING PERMIT NO: 07OPGA293
REPORTING PERIOD:_____ (see first page of the permit for specific reporting period and dates)

Operating Permit Unit ID	Unit Description	Deviations noted During Period?[1]		Deviation Code [2]	Malfunction/Emergency Condition Reported During Period?	
		YES	NO		YES	NO
ENG 1	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 2	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 3	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 4	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 5	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 6	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 7	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 8	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 9	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 10	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
ENG 11	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP					
TEG 1	Natco Triethylene Glycol Dehydrator, 25MMscf/d					
TEG 2	Natco Triethylene Glycol Dehydrator, 25MMscf/d					
TEG 3	Natco Triethylene Glycol Dehydrator, 25MMscf/d					
TEG 4	Natco Triethylene Glycol Dehydrator, 25MMscf/d					
TANKS	Condensate Tank Battery, 6 storage tanks, 16,800 gallon capacity each					
FUG 1	Fugitive VOC from Equipment Leaks					
FLARE	Natco Flare					
Loadout	Condensate Truck Loadout					
	General Conditions					
	Insignificant Activities					

[1] See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

[2] Use the following entries, as appropriate

1 = Standard:	When the requirement is an emission limit or standard
2 = Process:	When the requirement is a production/process limit
3 = Monitor:	When the requirement is monitoring
4 = Test:	When the requirement is testing
5 = Maintenance:	When required maintenance is not performed
6 = Record:	When the requirement is recordkeeping
7 = Report:	When the requirement is reporting
8 = CAM:	A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.
9 = Other:	When the deviation is not covered by any of the above categories

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: Bill Barrett Mamm Creek
OPERATING PERMIT NO: 07OPGA293
REPORTING PERIOD:

Is the deviation being claimed as an: Emergency _____ Malfunction_____ N/A _____

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction _____

Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Operating Permit Condition Number Citation

Explanation of Period of Deviation

Duration (start/stop date & time)

Action Taken to Correct the Problem

Measures Taken to Prevent a Reoccurrence of the Problem

Dates of Malfunctions/Emergencies Reported (if applicable)

Deviation Code _____ Division Code QA: _____

SEE EXAMPLE ON THE NEXT PAGE

EXAMPLE

FACILITY NAME: Acme Corp.
OPERATING PERMIT NO: 96OPZZXXX
REPORTING PERIOD: 1/1/04 - 6/30/06

Is the deviation being claimed as an: Emergency _____ Malfunction __XX____ N/A

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Asphalt Plant with a Scrubber for Particulate Control - Unit XXX

Operating Permit Condition Number Citation

Section II, Condition 3.1 - Opacity Limitation

Explanation of Period of Deviation

Slurry Line Feed Plugged

Duration

START- 1730 4/10/06
END- 1800 4/10/06

Action Taken to Correct the Problem

Line Blown Out

Measures Taken to Prevent Reoccurrence of the Problem

Replaced Line Filter

Dates of Malfunction/Emergencies Reported (if applicable)

5/30/06 to J. Garcia, APCD

Deviation Code _____ Division Code QA: _____

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: Bill Barrett Mamm Creek

FACILITY IDENTIFICATION NUMBER: 045/0186

PERMIT NUMBER: 07OPGA293

REPORTING PERIOD:_____ (see first page of the permit for specific reporting period and dates)

All information for the Title V Semi-Annual Deviation Reports must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

STATEMENT OF COMPLETENESS

I have reviewed the information being submitted in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this submittal are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in Sub-Section 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of Sub-Section 25-7 122.1, C.R.S.

_____

Printed or Typed Name | Title

_____

Signature of Responsible Official | Date Signed

Note: Deviation reports shall be submitted to the Division at the address given in Appendix D of this permit. No copies need be sent to the U.S. EPA.

APPENDIX C

Required Format for Annual Compliance Certification Reports

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Bill Barrett Mamm Creek
OPERATING PERMIT NO: 07OPGA293
REPORTING PERIOD:

I. Facility Status

___ During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

___ With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported [1]		Monitoring Method per Permit?[2]		Was compliance continuous or intermittent?[3]	
		Previous	Current	YES	NO	Continuous	Intermittent
ENG 1	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 2	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 3	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 4	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 5	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 6	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 7	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 8	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 9	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
ENG 10	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						

Operating Permit Unit ID	Unit Description	Deviations Reported [1]		Monitoring Method per Permit?[2]		Was compliance continuous or intermittent?[3]	
		Previous	Current	YES	NO	Continuous	Intermittent
ENG 11	Waukesha 7044 GSIE, 4SRB, Natural Gas Fired RICE, 1680 HP						
TEG 1	Natco TEG Dehydrator, 25MMscf/d						
TEG 2	Natco TEG Dehydrator, 25MMscf/d						
TEG 3	Natco TEG Dehydrator, 25MMscf/d						
TEG 4	Natco TEG Dehydrator, 25MMscf/d						
TANKS	Condensate Tank Battery, six storage tanks, 16,800 gallon capacity each						
FUG 1	Fugitive VOC from Equipment Leaks						
FLARE	Natco Flare						
Loadout	Condensate Truck Loadout						
	General Conditions						
	Insignificant Activities						

[1] If deviations were noted in a previous deviation report , put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

[2] Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

[3] Note whether the compliance status with each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

[4] Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II. Status for Accidental Release Prevention Program:

A. This facility _____ is subject _____ is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act)

B. If subject: The facility _____ is _____ is not in compliance with all the requirements of section 112(r).

1. A Risk Management Plan _____ will be _____ has been submitted to the appropriate authority and/or the designated central location by the required date.

III. Certification

All information for the Annual Compliance Certification must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

_____

Printed or Typed Name Title

_____

Signature Date Signed

NOTE: All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

APPENDIX D

Notification Addresses

1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment
Air Pollution Control Division
Operating Permits Unit
APCD-SS-B1
4300 Cherry Creek Drive S.
Denver, CO 80246-1530

ATTN: Matt Burgett

2. **United States Environmental Protection Agency**

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice
Mail Code 8ENF-T
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, Colorado 80202-1129

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance
Air and Radiation Programs, 8P-AR
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, Colorado 80202-1129

APPENDIX E

Permit Acronyms

Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate (MMBtu/hr)
FR -	Federal Register
G -	Grams
Gal -	Gallon
GPM -	Gallons per Minute
HAPs -	Hazardous Air Pollutants
HP -	Horsepower
HP-HR -	Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)
LAER -	Lowest Achievable Emission Rate
LB -	Pounds
M -	Thousand
MM -	Million
MMscf -	Million Standard Cubic Feet
MMscfd -	Million Standard Cubic Feet per Day
N/A or NA -	Not Applicable
NOx -	Nitrogen Oxides
NESHAP -	National Emission Standards for Hazardous Air Pollutants
NSPS -	New Source Performance Standards
P -	Process Weight Rate in Tons/Hr
PE -	Particulate Emissions
PM -	Particulate Matter
PM_{10} -	Particulate Matter Under 10 Microns

PSD -	Prevention of Significant Deterioration
PTE -	Potential To Emit
RACT -	Reasonably Available Control Technology
SCC -	Source Classification Code
SCF -	Standard Cubic Feet
SIC -	Standard Industrial Classification
SO_2 -	Sulfur Dioxide
TPY -	Tons Per Year
TSP -	Total Suspended Particulate
VOC -	Volatile Organic Compounds

APPENDIX F

Permit Modifications

DATE OF REVISION	TYPE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION

APPENDIX G

Engine AOS Applicability Reports

ver 12/10/08

Note: A MS Word version of this Appendix can be found at:

http://www.cdphe.state.co.us/ap/oilgaspermitting.html

DISCLAIMER:

These are only example reports and do not cover all possible requirements.

Engine AOS Applicability Report Certification Language

All information for the Applicability Reports must be certified by either 1) for Operating Permits, a Responsible Official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. or 2) for Construction and General Permits, the person legally authorized to act on behalf of the source. This signed certification document must be packaged with the documents being submitted.

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete. Further, I agree that by signing and submitting these documents I agree that any new requirements identified in the Applicability Report(s) shall be considered to be Applicable Requirements as defined in Colorado Regulation No. 3, section I.B.9., and that such requirements shall be enforceable by the Division and its agents and shall be considered to be revisions to the underlying permit(s) referenced in the Report(s) until such time as the Permit is revised to reflect the new requirements.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

Printed or Typed Name

Title

Signature

Date Signed

Colorado Regulation No. 7
Sections XVI and XVII.E

DISCLAIMER: This is only an example report and does not cover all possible Reg 7 requirements.

Company: Acme Gas Processing
Source ID: 999/1234/001
Permit #: 93OPXX999
Date: October 1, 2008

Determination of compliance and reporting requirements for a

Manufacturer: BestEngineCompany
Model: 777 LowNox
Nameplate HP: 1340
Construction date: July 1, 2007

Note: If the engine is exempt from a requirement due to construction date or was relocated from within Colorado, supporting documentation must be provided.

Determination of Regulation No. 7 requirements:

Regulation No. 7, § XVI

☐ Does not apply to this engine. Engine is not located in the ozone nonattainment area or does not have a manufacturer's design rate greater than 500 horsepower or did not commence operation on or after June 1, 2004.

☐ Does apply to this engine and applicable emissions controls have been installed.

Regulation No. 7, § XVII.E

☐ Does not apply to this engine. Engine does not have a maximum horsepower greater than 100 or the construction or relocation date precedes the applicability dates.

☐ Does apply to this engine. The following emission limits apply to the engine:

NO_X (g/hp-hr): 2.0
CO (g/hp-hr): 4.0
VOC (g/hp-hr): 1.0

Max Engine HP	Construction or Relocation Date	Emission Standards in g/hp-hr		
		NO_X	CO	VOC
100<Hp<500	January 1, 2008	2.0	4.0	1.0
	January 1, 2011	1.0	2.0	0.7
500≤Hp	July 1, 2007	2.0	4.0	1.0
	July 1, 2010	1.0	2.0	0.7

NSPS JJJJ Example Report Format

DISCLAIMER: This is only an example report and does not cover all possible JJJJ requirements.

Note that as of September 1, 2008 that the Division has not yet adopted NSPS JJJJ. Until such time as it does, any engine subject to NSPS will be subject only under Federal law. Once the Division adopts NSPS JJJJ, there will be an additional step added to the determination of the NSPS. Under the provisions of Regulation No. 6, Part B, § I.B (which is referenced in Part A), any engine relocated from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of NSPS JJJJ.

NSPS Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Company:	Acme Gas Processing
Source ID:	999/1234/001
Permit #:	93OPXX999
Date:	October 1, 2008

Manufacturer:	BestEngineCompany
Model:	777 LowNox
Nameplate HP:	1340
Engine Type:	2 Stroke Rich Burn
Manufacture Date:	July 1, 2007
Date Engine Ordered:	April 1, 2007

Note: If the engine is exempt from a requirement due to construction/manufacture date, supporting documentation must be provided.

Upon adoption of NSPS Subpart JJJJ into Colorado Regulation No. 6, Part A, if the engine is exempt because the engine was relocated within the state of Colorado, supporting documentation must be provided.

☐ NSPS JJJJ **does not apply** to this engine.

☐ NSPS JJJJ **does apply** to this engine.

Note: Using the format below, the source must submit to the Division an analysis of all of the NSPS JJJJ applicable requirements that apply to this specific engine. **The analysis below is an example only**, based on a hypothetical engine that is a rich burn engine, greater than 500 HP, with a manufacture date after July 1, 2007.

Determination of NSPS JJJJ requirements:

60.4230 Applicability

(a)(4)(i) Applies to this engine since it is a rich burn engine, greater than 500 HP, with a manufacture date after July 1, 2007.

60.4233 Emission Standards for Owners and Operators

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than 100 HP must comply with the standards in Table 1.

Non-Emergency SI, Natural Gas, HP≥500, Manufactured after 7/1/2007

NO_x	2.0 g/HP-hr or 160 ppmvd@15% O_2
CO	4.0 g/HP-hr or 540 ppmvd@15% O_2
VOC	1.0 g/HP-hr or 86 ppmvd@15% O_2

Other Requirements for Owners and Operators

60.4234 Emission standards must be met for the lifetime of the engine.
60.4235 N/A - Sulfur content of gasoline.
60.4236 N/A (for now) - After July 1, 2009 owners and operators may not install engines with a power rating ≥ 500HP that do not meet the emissions standards in 60.4230.
60.4237 N/A - Emergency Engines.

60.4238 - 60.4242 Compliance Requirements for Manufacturers – (Not Applicable)

60.4243 Compliance Requirements for Owners and Operators

(b)(2)(ii) To maintain compliance with the emission limits in 60.4233, owners of SI ICE ≥ 500HP must:

- Keep a maintenance plan;
- Keep records of conducted maintenance;
- Maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions;
- Conduct an initial performance test; and
- Conduct subsequent performance tests every 8,760 hours or every three years, which ever comes first, in order to demonstrate compliance with the emission limits.

(g) Air to fuel ratio controllers (AFRCs) must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

60.4244 Testing Requirements for Owners and Operators

(a) Each performance test must be conducted within 10% of the highest achievable load and must comply with the testing requirements listed in 60.8 and Table 2 of NSPS JJJJ.

(b) Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 60.8(c). If the engine is non-operational when a performance test is due, the engine does not need to be started up just to test it, but will need to be tested immediately upon startup.

(c) Three separate test runs must be conducted for each performance test as specified by 60.8(f). Each run must be within 10% of max load and be at least 1 hour in duration.

(d) To determine compliance with the NO_x, CO, and VOC mass per unit output emission limitations, the measured concentration must be converted using the equations outlined in this section of NSPS JJJJ.

60.4245 Notification, Reports, and Records for Owners and Operators

(a) Owners of all stationary SI ICE must keep records of the following:
(1) All notifications submitted to comply with this subpart;
(2) Maintenance conducted on the engine;
(3) N/A - Manufacturer information for certified engines, and
(4) Documentation that shows non-certified engines are in compliance with the emission standards.

(b) N/A – For emergency engines only.

(c) Owners of non-certified engines ≥ 500HP must submit an initial notification as required in 60.7(a)(1) which includes the following information:
(1) Name and address of the owner or operator;
(2) The address of the affected source;
(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
(4) Emission control equipment; and
(5) Fuel used.

CONCLUSION OF FINDINGS (EXAMPLE ONLY)

In general, Acme's 1,235HP, Waukesha 7042 GSI engine is subject to the emissions limitations summarized in Table 1 of NSPS JJJJ. ACME will meet these emission limitations using an AFRC and a non-selective catalytic converter (NSCR). These emission rates will be met throughout the life of the engine. A maintenance plan will be kept and all maintenance activities will be recorded. Compliance with the emission limits will be confirmed by the initial performance tests, which shall be conducted following the procedures outlined in 60.4244. Copies of performance test results will be submitted within 60 days of the completion of each test. Since this is an uncertified engine, an initial notification will be submitted including all of the requested information in 40.4245 within 30 days of startup. ACME will keep records of all compliance related materials.

MACT ZZZZ *Area Source* Example Report Format

DISCLAIMER: This is only an example report and does not cover all possible ZZZZ requirements.

MACT Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Company:	Acme Gas Processing
Source ID:	999/1234/001
Permit #:	93OPXX999
Date:	October 1, 2008

Manufacturer:	Best Engine Company
Model:	777 LowNox
Nameplate HP:	1340
Engine Type:	2 Stroke Rich Burn
Manufacture Date:	July 1, 2007
Date Engine Ordered:	April 1, 2007

Note: If the engine is exempt from a requirement due to construction/reconstruction date, supporting documentation must be provided.

☐ MACT ZZZZ **does not apply** to this engine.

☐ MACT ZZZZ **does apply** to this engine.

Note: Using the format below, the source must submit to the Division an analysis of all of the area source MACT ZZZZ applicable requirements that apply to this specific engine. **The analysis below is an example only**, based on a hypothetical new engine located at an area source of HAP emissions.

Determination of MACT ZZZZ requirements:

63.6585 Applicability

This subpart is applicable to Acme's engine since they are going to be operating a new stationary reciprocating internal combustion engine (RICE) at an area source of HAP emissions.

63.6590 What Parts of My Plant Does This Subpart Cover?

(c) A new or reconstructed stationary RICE located at an area source of HAP emissions that is subject to 40 CFR Part 60, must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 subpart JJJJ.

CONCLUSION OF FINDINGS (EXAMPLE ONLY)

Since this engine is subject to NSPS JJJJ, no additional requirements apply under MACT ZZZZ.

MACT ZZZZ *Major Source* Example Report Format

DISCLAIMER: This is only an example report and does not cover all possible ZZZZ requirements.

MACT Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Company:	Acme Gas Processing
Source ID:	999/1234/001
Permit #:	93OPXX999
Date:	October 1, 2008

Manufacturer:	BestEngineCompany
Model:	777 LowNox
Nameplate HP:	1340
Engine Type:	2 Stroke Rich Burn
Manufacture Date:	July 1, 2007
Date Engine Ordered:	April 1, 2007

Note: If the engine is exempt from a requirement due to construction/reconstruction date, supporting documentation must be provided.

☐ MACT ZZZZ **does not apply** to this engine.

☐ MACT ZZZZ **does apply** to this engine.

Note: Using the format below, the source must submit to the Division an analysis of all of the major source MACT ZZZZ applicable requirements that apply to this specific engine. **The analysis below is an example only**, based on a hypothetical new engine located at a major source of HAP emissions.

Determination of MACT ZZZZ requirements:

63.6585 Applicability

This subpart is applicable to Acme's engine since they are going to be operating a new stationary reciprocating internal combustion engine (RICE) at a major source of HAP emissions.

63.6590 What Parts of My Plant Does This Subpart Cover?

This subpart covers Acme's new stationary reciprocating internal combustion engine.

63.6595 When do I have to comply with this Subpart?

(a)(5) The engine must comply with the applicable emission limitations and operating limitations upon startup.

63.6600 Emission and operating limitations for RICE site rated at more than 500 hp

(a) The engine is subject to the emission limits in table 1a and the operating limits in table 1b. ACME will meet the emission limitations by reducing formaldehyde emissions by 76 percent and will maintain the catalyst such that the pressure drop does not change by more than 2 inches of H_2O at 100 % load plus or minus 10 percent from the pressure drop measured during the initial performance test and will maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 750 º F and less than or equal to 1250 º F.

The engine will be equipped with non-selective catalytic reduction and an air fuel controller to meet the emission limitations.

63.6601 & 63.6611 Requirements for 4SLB engines between 250 and 200 hp

These requirements do not apply.

63.6605 General Requirements

(a) The engine will comply with the emission and operating limitations at all times, except during periods of startup, shutdown and malfunction (SSM)

(b) The engine, including air pollution control and monitoring equipment shall be operating in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during SSM.

63.6610 Initial performance test

(a) the performance tests specified in Table 4 (select sampling port and measure O_2, moisture and formaldehyde at inlet and outlet of the control device) shall be conducted within 180 days of startup.

(b) & (c) not applicable construction did not commence between 12/19/02 and 6/15/04.

(d) previous performance tests have not been conducted on this unit within two years, therefore, this provision does not apply.

63.6615 Subsequent performance tests

Subsequent tests will be conducted as specified in Table 3. No additional testing is required for 4SRB engines meeting the formaldehyde percent reduction requirements.

63.6620 Performance test procedures

(b) tests must be conducted at 100 % load plus or minus 10%

(c) tests may not be conducted during periods of SSM.

(d) must conduct three 1-hr test runs

(e) equation (e)(1) shall be used to determine compliance with the percent reduction requirement.

(f), (g) & (h) Not applicable

(i) engine load during test shall be determined as specified in this paragraph.

63.6625 Monitoring, installation, operation and maintenance requirements

(a), (c) & (d) Not applicable

(b) a continuous parameter monitoring system (CPMS) shall be installed to measure the catalyst inlet temperature. The CPMS will meet the requirements in § 63.8

63.6630 Demonstrating initial compliance

(a) initial compliance shall be determined in accordance with table 5 (initial performance test must indicate formaldehyde reduction of 76 percent or more, a CPMS must be installed to measure inlet temperature of the catalyst and the pressure drop and catalyst inlet temperature must be recorded during the initial performance test).

(b) pressure differential will be established during the initial performance test.

(c) Notification of compliance status will be submitted and will contain the results of the initial compliance demonstration.

63.6635 Monitoring to demonstrate continuous compliance

(b) except for monitor malfunctions, associated repairs, and required QA/QC activities monitoring must be continuous at all time the engine is operating.

(c) data recorded during monitoring malfunctions, associated repairs and required QA/QC activities must not be used in data averages and calculations to report operating levels, however, all the valid data collected during other periods shall be used.

63.6640 Demonstrating continuous compliance

(a) continuous compliance will be demonstrated as specified in table 6 (collect catalyst inlet temperature data, reduce that data to 4-hr rolling average and maintain the 4-hr rolling averages to within the operating limitation and measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop meets the operating limitation.

(b) deviations from the emission and operating limitations must be reported per § 63.6550. If catalyst is changed the operating parameters established during the initial performance test must be re-established.
When operating parameters re-established a performance test must also be conducted.

63.6645 Notifications

(a) Submit notifications in §§ 63.7(b) & (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) thru (e) & (g) & (h) that apply by dates specified.

(b) Not applicable. Acme unit started after effective dated for Subpart ZZZZ.

(c) Submit initial notification within 120 days after becoming subject to Subpart ZZZZ.

(d) thru (f) Not applicable. Acme engine greater than 500 hp and subject to requirements in Subpart ZZZZ.

(g) & (h) Submit notification of intent to conduct performance test and notification of compliance status.

63.6650 Reports

(a) Submit reports required by table 7 (compliance report and SSM reports (if actions inconsistent with SSM plan)

(b) Not applicable, an alternate schedule for report submittal has been approved. Reports will be submitted with title v reports

(c) Compliance reports to contain the following information: company name and address, statement by responsible official certifying accuracy, date of report and beginning and end of reporting period, if SSM the information in 63.10(d)(5)(i), if no deviations a statement saying that, if no periods when CPMS out of control a statement saying that.

(d) Not applicable, using CPMS

(e) For each deviation the information in (e)(1) thru (e)(12) shall be provided.

(f) Applicable. Compliance reports are submitted with title v reports. Compliance reports under Subpart ZZZZ include all necessary info for title v deviation report with respect to Subpart ZZZZ requirements.

(g) Not applicable. Acme engine not firing landfill or digester gas.

63.6655 Recordkeeping

(a) Retain records as follows: copy of each notification and report (including all documentation supporting any initial notification or notification of compliance status), records in 63.6(e)(iii) thru (v) related to SSM, and records of performance tests and evaluations.

(b) CPMS records including records in 63.10(b)(2)(vi) thru (xi), previous versions of the performance evaluation plan required by 63.8(d)(3) and requests for alternatives to the relative accuracy test for CPMS as required by 63.8(f)(6)(i).

(c) Not applicable. Acme engine not firing landfill or digester gas.

(d) Will keep records required in Table 6 (monthly pressure drop readings, 4-hr averages of catalyst inlet temperature) to show continuous compliance with emission and operating limits.

63.6660 Form and length of records

(a) records must be in a form suitable and readily available for expeditions review

(b) records must be retained for five years

(c) records must be retained on-site for first 2 years, may be retained off-site for the remaining 3 years

63.6665 General Provisions

This engine must comply with the general provisions as indicated in Table 8.

CONCLUSION OF FINDINGS (EXAMPLE ONLY)

Since this engine is subject to the requirements of MACT Subpart ZZZZ. The engine will be installed with a non-selective catalyst to meet the formaldehyde reduction requirement of 76% or more. An initial performance test will be conducted within 180 days of startup to demonstrate compliance with the formaldehyde percent reduction requirement. During the initial performance test, the pressure drop across the catalyst will be measured. A CPMS will be installed to measure the catalyst inlet temperature. Continuous compliance will be demonstrated by keeping the 4-hr rolling averages of catalyst inlet temperature within the operating limitations and recording the pressure drop across the catalyst monthly and demonstrating that the pressure drop is within the operating limitation.

Records, notifications and reports will be submitted as required. To that end required reports and notifications include initial notification, notice of intent to conduct performance test, notification of compliance status, SSM reports (if required) and semi-annual compliance reports.