UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www2.epa.gov/aboutepa/epa-region-8-mountains-and-plains

Ref: 8P-AR

Ms. Lori Marquez
ConocoPhillips Company
3401 E. 30th Street, P.O. Box 4289
Farmington, New Mexico 87499

APR 11 2014

Re: ConocoPhillips Company
Argenta Compressor Station
Permit # SMNSR-SU-000030-2011.001
Synthetic Minor New Source Review Permit

Dear Ms. Marquez:

The Environmental Protection Agency (EPA) has completed its review of ConocoPhillips Company's request to obtain a synthetic minor permit to construct pursuant to the Tribal Minor New Source Review Permit Program at 40 CFR Part 49 (MNSR) for the Argenta Compressor Station. Based on the information submitted in your application the EPA hereby issues the enclosed final MNSR permit to construct. Please review each condition carefully and note any restrictions placed on this source.

A 30-day public comment period was held from November 21, 2013 to December 23, 2013. The EPA received comments from the ConocoPhillips Company on December 22, 2013. No other comments were received during the public comment period. The EPA's response to the public comments is also enclosed. The final permit will be effective on May 11, 2014.

Pursuant to §49.159, within 30 days after the final permit decision has been issued, any person who commented on the specific terms and conditions of the draft permit, may petition the Environmental Appeals Board to review any term or condition of the permit.

Any person who failed to comment on the specific terms and conditions of this permit may petition for administrative review only to the extent that the changes from the draft to the final permit or other new grounds were not reasonably ascertainable during the public comment period.

The 30-day period within which a person may request review begins with this notice of the final permit decision. If an administrative review of the final permit is requested, the specific terms and conditions of the permit that is the subject of the request for review must be stayed.

If you have any questions concerning the enclosed final permit please contact Claudia Smith of my staff at (303) 312-6520.

Sincerely,

Debra H. Thomas
Acting Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance (OPRA)

Enclosures

cc: Brenda Jarrell, Air Quality Program Director, Southern Ute Indian Tribe Environmental Program

Enclosure - Response to Comments

Comments from ConocoPhillips Company (ConocoPhillips) on Proposed Permit to Construct for the Argenta Compressor Station pursuant to the Tribal Minor New Source Review Permit Program at 40 CFR Part 49 (MNSR)

1. Correction

   The upper temperature limit of the engine exhaust entering the catalytic control system in condition C.3(c), was corrected to 1,350 ºF.

2. Clarification

   The EPA added language to the performance testing requirements in condition C.4(a) to allow the use of EPA-approved American Society for Testing and Materials (ASTM) test methods. This is consistent with language in other MNSR permits for similar emission units that the EPA is in the process of issuing.

3. Emission Limits

   ConocoPhillips requested an increase to the CH_2O emission limit requirement for each of the approved engines in the permit from 0.10 pounds per hour (lb/hr) to 0.15 lb/hr. According to ConocoPhillips the engines have consistently met the CH_2O 0.15 lb/hr emission limit. The 0.15 lb/hr originated in a Part 71 permit to establish the facility as a minor source of hazardous air pollutants. The requirements of the compliance agreement imply that these established limits are to continue in this permit. However, the application for this MNSR permit incorrectly stated that the emission limit was 0.10 lb/hr and this error was carried over to the proposed permit.

   This correction has been made to the final permit.

4. Control requirements

   (a) ConocoPhillips requested that the EPA clarify that the requirement to equip the engines with a catalytic control system capable of reducing uncontrolled emissions of CO by at least 88% and CH_2O emissions by at least 90% at maximum operating, does not apply when the engines operate below 90% of capacity at site elevation.

   In addition, ConocoPhillips requested a relaxation of the required 90% CH_2O destruction efficiency of the catalytic control system. Performance testing results and maintenance of the engines and catalytic control systems for the years 2011, 2012, and 2013, provided by ConocoPhillips indicate that the catalytic control systems have achieved CH_2O reduction efficiencies from 70% to 90%. Yet, the engines consistently meet the emission limit of 0.15 lb/hr.

   The EPA has removed the control efficiency requirements in condition C.3(a) *as they are a redundant emission limit requirement. The emission rate limitations are already enforceable through the monitoring, recordkeeping, and report requirements in the permit.*

(b) ConocoPhillips requested that the EPA change the break-in period for each overhauled or replaced engine, where a catalytic control system is not required, from days to operating hours in permit condition C.3(h). ConocoPhillips also requested that EPA make it clear that this condition applies to each overhauled or replaced engine individually. Related to this requested change in the break-in period, ConocoPhillips requested that the reporting requirement of condition C.6(h), also represent the change to the break-in period.

The EPA has agreed to change the break-in period to 200 operating hours. The change has been made to conditions C.3(h) and C.6(h). *The requested clarification that the break-in period applies to each engine is already specified in this condition.*

5. Monitoring Requirements

(a) ConocoPhillips requested changes to the monitoring requirements presented in this permit asserting that the monitoring is different than what was established in the Part 71 operating permit where the original conditions were created. The following requests were made:

(i) ConocoPhillips requested that the EPA change the frequency of exhaust temperature monitoring from continuous to every 7 calendar days.

This requested change has not been made to the final permit. An explanation of this decision has been provided below.

(ii) ConocoPhillips requested that the EPA change the frequency of portable analyzer monitoring for NO_X and CO emissions.

This requested change has not been made to the final permit. An explanation of this decision has been provided below.

The original conditions in the Title V permit were established in September of 2006. Since that time, the EPA's experience with implementation of the requirements has necessitated the need to enhance the monitoring of emission limits and operational requirements to provide stronger enforceability and assurance of compliance with the limits. The MNSR regulations at §§49.158(c)(2)(ii) and (iii) provides the EPA with the discretion to require any additional requirements, including control technology requirements, based on the specific circumstances of the source.

(a) ConocoPhillips requested the removal of the requirement in condition C.5(f), that a portable analyzer test for NOx and CO emissions be conducted every time a catalyst is changed out as this condition overlaps with Condition C.4(a)(iii), which requires a performance test be performed within 90 days of a catalyst change out.

The EPA agrees that this requirement redundant. It has been removed from this condition.

(b) ConocoPhillips requested a change to condition C.5(k), to clarify that the company may submit new portable analyzer specifications and monitoring protocols for EPA approval.

This condition seems to imply that only the EPA can require the submittal of a new protocol.

The EPA agrees that a clarification to this condition is warranted. The condition now contains language clarifying that the Permittee may initiate a change in protocols.

(c) ConocoPhillips requested that artificial engine loading not be considered engine tuning or an adjustment to engine settings which, according to condition C.5(g), may not be performed immediately prior to or during periodic monitoring of NO_X and CO emissions. According to the company, engines at this facility do not operate continuously at maximum capacity due to operational design and field conditions. To meet the requirement that all engine monitoring be performed at maximum engine capacity, the engine must be artificially loaded.

The EPA has clarified the language in C.5(g) to exempt artificial loading from being considered tuning or adjustments. In addition, the EPA has changed condition C.5(f)(i) to allow for periodic monitoring at the engine's operating load rather than full load which is a true representation of the operating conditions which can change more frequently than annually.

(d) ConocoPhillips requested a change to condition C.5(g) to specify the timeframe for the restriction of engine tuning and adjustments to engine settings, catalytic control system settings, or process or operational parameters prior to testing. The permit currently states that tuning and adjustment may not be made immediately prior to engine testing.

The EPA agrees that a clarification to this restriction is warranted. The language has been changed to specify that tuning and adjustment may not be made the day of engine testing or during engine testing.

(e) ConocoPhillips requested that conditions C.5(b)(i) and C.5(e)(i), specify the timeframe required for initiating an investigation of a deviation of the temperature range limitations for an engine's exhaust and a deviation of pressure drop limitations across an oxidation catalyst bed. These conditions require that an investigation be initiated immediately upon discovery of the violation.

The EPA agrees that a clarification to these conditions is warranted. Conditions C.5(b)(i) and C.5(e)(i) now specify that inspections should be initiated with 24 hours of determining that a deviation has occurred.

(f) ConocoPhillips requested that flexibility be provided to the required pressure drop readings across an oxidation catalyst bed in condition C.5(d). One option for the determination of the pressure drop is using a 12-hour average, where continuous readings are being utilized on the day of testing rather than a one-time reading. However, continuous pressure drop readings will not necessarily be performed over 12 hours on the day of testing.

The EPA agrees that a change to this condition is warranted. The condition now allows an average of readings based on the length of time the continuous readings are made on the day of testing.

(g) ConocoPhillips requested that the monitoring and recordkeeping requirements of condition D.2, clarify that the natural gas throughput measurements for the dehydration system be based on the combined throughput of all five (5) dehydration units at the facility.

This requested change has not been made. Condition D.1(a), already defines the dehydration system as consisting of all five (5) dehydration units, combined.

(h) ConocoPhillips requested that the requirement of condition D.2, to measure and record the natural gas processed through the dehydration system each time a dehydration unit in the system is installed, moved, or replaced be removed as it is unnecessary when there is already a requirement to measure natural gas processed on a monthly basis.

The EPA agrees that this requirement should be removed. It has been removed from the final permit.

(i) ConocoPhillips requested the removal of condition H.4(b), from the permit. This is a requirement to promptly report any equipment leaks discovered during the semi-annual monitoring of leaks. ConocoPhillips believes the annual reporting of leak detection and repair records required in condition H.3 are sufficient for reporting purposes.

The EPA agrees that the requested change to the final permit is warranted, but has also added clarifying language to condition H.3. that the annual LDAR report shall include any necessary repairs due to VOC leaks.

(j) ConocoPhillips requested the option to use a technology equivalent to an infrared camera for the detection of leaks at the facility in conditions F.2(a) and F.2(b). These conditions only allow for the use of infrared technology.

This requested change has not been made to the final permit. This is a condition transferred from the compliance agreement. Any new monitoring technique and associated protocol must be approved by the EPA pursuant to condition C.5(k) which requires the submittal of portable analyzer testing protocols to the EPA for approval.

(k) ConocoPhillips requested a clarification of the timeframe within which the company must submit revised leak detection and repair protocol upon the EPA's request in condition F.6. This condition does not specify a timeframe.

This requested change has not been made to the final permit. Any request by the EPA for the submittal of a new protocol will include the deadline for submittal.

(l) ConocoPhillips requested a change in the requirement to commence leak detection and repair upon approval of the protocol by the EPA in condition F.7. The company would prefer that the condition require the continued use of the existing EPA approved protocol required by the compliance agreement. ConocoPhillips is concerned that the permit requirement implies that a new protocol must be submitted for approval which will disrupt the current system and schedule already approved by the EPA.

This requested change has not been made to the final permit. Condition F.5, of the permit allows for the continued use of the protocol that has already been approved by the EPA. Thus, there should be no disruption to the current system or schedule currently in use.

6. Testing requirements

(a) ConcocoPhillips requested a direct reference to the emissions limits of the permit in condition C.4(d)(v), to clarify the exact location.

This requested change has not been made to the final permit. There is only one location in the permit where emission limits reside. The permit clearly states, in the table of contents and the body of the permit, where these conditions are located.

(b) ConocoPhillips requested that artificial engine loading not be considered engine tuning or an adjustment to engine settings which, according to condition C.4(b), may not be performed immediately prior to or during performance testing of NO_X and CO emissions from the engines. According to the company, engines at this facility do not operate continuously at maximum capacity due to operational design and field conditions. To meet the requirement that all engine testing be performed at maximum engine capacity, the engine must be artificially loaded.

The EPA has clarified the language to exempt artificial loading from being considered tuning or adjustments.

(c) ConocoPhillips requested a change to condition C.4(b), to specify the timeframe for the restriction of engine tuning and adjustments to engine settings, catalytic control system settings, or process or operational parameters prior to testing. The permit currently states that tuning and adjustment may not be made immediately prior to engine testing. Specifically, the company requested that this restriction apply 24 hours prior to engine testing.

The EPA agrees that a clarification to this restriction is warranted. The language has been changed to specify that tuning and adjustment may not be made the day of engine testing or during engine testing.

(d) ConocoPhillips requested a change to condition C.4(d)(vii), to clarify that the company may submit new performance test plans for EPA approval. This condition seems to imply that only the EPA can require the submittal of new plans.

The EPA agrees that a clarification to this condition is warranted. The condition now contains language clarifying that the Permittee may initiate a change in performance test plans.

(e) ConocoPhillips requested the addition of language to clarify notification requirements when testing must be rescheduled in condition C.4(e). The company has requested that the company be allowed to notify the EPA 1 week prior to the scheduled testing if the testing cannot be performed.

The EPA agrees that this addition to this condition is warranted. The new language allows the cancelation of testing 1 week prior to the scheduled test.

7. Pneumatic controller requirements

ConocoPhillips requested the removal of conditions E.2 and E.3 for pneumatic controllers from the permit as the requirements in these conditions have already been met. In addition, the company feels that these conditions are excessive compared to the compliance agreement requirement and the requirements of the New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission and Distribution at 40 CFR Part OOOO (NSPS OOOO). Condition E.2 requires that each pneumatic controller at the facility be operated and maintained in accordance with manufacturer specifications. Condition E.3, requires that records be kept of the date of installation of the controllers, the manufacturer specifications of the controllers, and all scheduled maintenance and repairs on the controllers.

This requested change has not been made to the final permit.

The EPA's experience is that the operation and maintenance requirements in condition E.2 can reasonably be expected to be achieved for all equipment.

The recordkeeping requirements in condition E.3, are requirements of the compliance agreement, and by extension this MNSR permit, and continue to apply regardless of the current compliance status. Further, the MNSR regulations at §§49.158(c)(2)(ii) and (iii) provide the EPA with the discretion to require any additional requirements based on the specific circumstances of the source. The EPA's ongoing experience with implementation of the permitting programs under the Clean Air Act since the compliance agreement was initially filed has led to the need to enhance requirements to provide stronger enforceability and assurance of compliance with the requirements.

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

Air Pollution Control
Synthetic Minor Source Permit to Construct

40 CFR 49.151

 # SMNSR-SU-000030-2011.001

Permit to Construct to establish legally and practically enforceable limitations and requirements on sources at an existing facility.

Permittee:

ConocoPhillips Company

Permitted Facility:

Argenta Compressor Station
Southern Ute Indian Reservation
La Plata County, Colorado

Summary

On August 30, 2011, the EPA received an application from ConocoPhillips Company (ConocoPhillips) requesting a synthetic minor permit for the Argenta Compressor Station in accordance the requirements of the Tribal Minor New source Review Permit Program at 40 CFR Part 49 (MNSR).

The Argenta Compressor Station is located within the exterior boundaries of the Southern Indian Reservation in Colorado and dehydrates and compresses natural gas. The natural gas entering the compressor station flows through an inlet separator and mist screens where most of the water is removed. The water produced by this step is transferred to an on-site storage tank. The natural gas is further dried in a glycol dehydration system before leaving the facility.

This permit does not authorize the construction of any new emission sources, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is intended only to incorporate required and requested emission limits and provisions from the following documents:

A. A March 28, 2008, operating permit the EPA issued to ConocoPhillips for the Argenta Compressor Station in accordance with the Title V Operating Permit Program at 40 CFR Part 71 (Part 71).

B. A February 4, 2010, Federal Compliance Agreement and Final Order (CAFO) between the EPA and ConocoPhillips. (Docket No.: CAA-08-2010-0007)

C. An August 30, 2011, application from ConocoPhillips requesting a synthetic minor permit for the Argenta Compressor.

The transfer of the requirements from the Part 71 permit and the CAFO, in addition to the incorporation of limits requested by ConocoPhillips in the application into a single permit, consolidates the requirements originating from these documents into one permit.

The EPA determined that this approval will not contribute to NAAQS violations, or have potentially adverse effects on ambient air.

Table of Contents

I. Conditional Permit to Construct

A. General Information

Facility:	ConocoPhillips Argenta Compressor Station
Permit Number:	SMNSR-SU-000030-2011.001
SIC Code and SIC Description:	1311- Crude Petroleum and Natural Gas

Site Location:	Corporate Office Location
Argenta Compressor Station	ConocoPhillips Company
SW ¼, SE ¼ Sec 4 T33N R10W	San Juan Business Unit
Southern Ute Indian Reservation	P.O. Box 4289
La Plata County, CO	Farmington, NM 87499

The equipment listed in this permit may only be operated by the ConocoPhillips Company at the following location:

Latitude 37.12944, Longitude -107.93722

B. Applicability

1. This Conditional Permit to Construct is being issued under the authority of the MNSR permit program.

2. The requirements in this permit have been created, at the Permittee's request and pursuant to Consent Agreement and Final Order #CAA-08-2010-0007, to establish legally and practically enforceable requirements for: Limiting nitrogen oxide (NO_x), carbon monoxide (CO), and formaldehyde (CH_2O) engine emissions; limiting the amount of natural gas dehydrated at the facility; upgrading pneumatic controls; and implementing a leak detection and repair (LDAR) program.

3. Any conditions for this facility or any specific units at this facility established pursuant to any Conditional Permit to Construct issued under the authority of the Prevention of Significant Deterioration Permit Program at 40 CFR Part 52 (PSD) or the MNSR permit program shall continue to apply.

4. By issuing this permit, the EPA does not assume any risk of loss which may occur as a result of the operation of the permitted facility by the Permittee, Owner, and/or Operator, if the conditions of this permit are not met by the Permittee, Owner, and/or Operator.

C. Requirements for Engines

1. Construction and Operational Limits

   The Permittee shall install and operate emission controls as specified in this permit on four (4) reciprocating internal combustion engines each meeting the following specifications:

   (a) Operated as a 4-stroke lean-burn;

   (b) Fired with natural gas; and

(c) Limited to a maximum site rating of 1,330 horsepower (hp).

(a) Only the approved natural gas-fired reciprocating internal combustion engines that are operated and controlled as specified in this permit may be installed and operated.

2. Emission Limits

(a) Emissions from each engine shall not exceed the following:

(i) NO_X: 5.28 pounds per hour (lb/hr);
(ii) CO: 1.27 lb/hr; and
(iii) CH_2O: 0.15 lb/hr.

(b) Emission limits shall apply at all times, unless otherwise specified in this permit.

3. Control and Operational Requirements

(a) The Permittee shall ensure that the engines are equipped with a catalytic control system capable of reducing the uncontrolled emissions of CO and CH_2O to meet the emission limits specified in this permit.

(b) The Permittee shall install, operate, and maintain temperature sensing devices (i.e., thermocouple or resistance temperature detectors) before the catalytic control system on each engine in order to continuously monitor the exhaust temperature at the inlet of the catalyst bed. Each temperature sensing device shall be calibrated and operated by the Permittee according to manufacturer specifications or equivalent specifications developed by the Permittee or vendor.

(c) Except during startups, not to exceed 30 minutes, the engine exhaust temperature of each engine, at the inlet to the catalyst bed, shall be maintained at all times the engines operate with an inlet temperature of at least 450° F and no more than 1,350°F.

(d) During operation, the pressure drop across the catalyst bed on each engine shall be maintained to within ± 2 inches of water from the baseline pressure drop measured during the most recent performance test. The baseline pressure drop for the catalyst bed shall be determined at 100% ± 10% of the engine load measured during the most recent performance test.

(e) The Permittee shall only fire each engine with natural gas. The natural gas shall be pipeline-quality in all respects except that the carbon dioxide (CO_2) concentration in the gas is not required to be within pipeline-quality.

(f) The Permittee shall follow, for each engine and its respective catalytic control system, the manufacturer recommended maintenance schedule and procedures or equivalent maintenance schedule and procedures developed by the Permittee or vendor to ensure optimum performance of each engine and its respective catalytic control system.

(g) The Permittee may rebuild an existing permitted engine or replace an existing permitted engine with an engine of the same horsepower rating, and configured to operate in the same manner as the engine being rebuilt or replaced. Any emission limits, requirements,

control technologies, testing or other provisions that apply to the permitted engines that are rebuilt or replaced shall also apply to the rebuilt and replaced engines.

(h) The Permittee may resume operation without the catalytic control system during an engine break-in period, not to exceed 200 operating hours, for rebuilt and replaced engines.

4. Performance Testing Requirements

(a) Performance tests shall be conducted on each engine for measuring NO_X, CO, and CH_2O emissions to demonstrate compliance with each emission limitation in this permit. The performance tests shall be conducted in accordance with appropriate reference methods specified in 40 CFR Part 63, Appendix A and 40 CFR Part 60, Appendix A, or an EPA approved American Society for Testing and Materials (ASTM) method. The Permittee may submit to the EPA a written request for approval of an alternate test method, but shall only use that alternate test method after obtaining approval from the EPA.

(i) The initial performance test for each engine shall be conducted within 90 calendar days of startup of a new engine.
(ii) Subsequent performance tests for CH_2O emissions shall be conducted within 12 months of the most recent performance test.
(iii) Performance tests shall be conducted within 90 calendar days of each catalyst replacement.
(iv) Performance tests shall be conducted within 90 calendar days of startup of all rebuilt and replaced engines.

(b) The Permittee shall not perform engine tuning or make any adjustments to engine settings, catalytic control system settings, or processes or operational parameters the day of the engine testing or during the engine testing. Any such tuning or adjustments may result in a determination by the EPA that the test is invalid. Artificially increasing an engine load to meet testing requirements is not considered engine tuning or adjustments.

(c) The Permittee shall not abort any engine tests that demonstrate non-compliance with the emission limits in this permit.

(d) All performance tests conducted on each engine shall meet the following requirements:

(i) The pressure drop across each catalyst bed and the inlet temperature to each catalyst bed shall be measured and recorded at least once during each performance tests.

(ii) All tests for NO_X and CO emissions shall be performed simultaneously.

(iii) All tests shall be performed at a maximum operating rate (90% to 110% of the maximum achievable engine load available on the day of the test). The Permittee may submit to the EPA a written request for approval of an alternate load level for testing, but shall only test at that alternate load level after obtaining written approval from the EPA.

(iv) During each test run, data shall be collected on all parameters necessary to document how emissions were measured and calculated (such as test run length,

minimum sample volume, volumetric flow rate, moisture and oxygen corrections, etc.).

(v) Each test shall consist of at least three 1-hour or longer valid test runs. Emission results shall be reported as the arithmetic average of all valid test runs and shall be in terms of the emission limits in this permit.

(vi) Performance test plans shall be submitted to the EPA for approval 60 calendar days prior to the date the test is planned.

(vii) Performance test plans that have already been approved by the EPA for the emission units approved in this permit may be used in lieu of new test plans unless the EPA requires the submittal and approval of new test plans. The Permittee may submit new plans for EPA approval at any time.

(viii) The test plans shall include and address the following elements:

(A) Purpose of the test;
(B) Engines and catalytic control systems to be tested;
(C) Expected engine operating rate(s) during the test;
(D) Sampling and analysis procedures (sampling locations, test methods, laboratory identification);
(E) Quality assurance plan (calibration procedures and frequency, sample recovery and field documentation, chain of custody procedures); and
(F) Data processing and reporting (description of data handling and quality control procedures, report content).

(e) The Permittee shall notify the EPA at least 30 calendar days prior to scheduled performance testing. The Permittee shall notify the EPA at least 1 week prior to scheduled performance testing if the testing cannot be performed.

(f) If a permitted engine is not operating, the Permittee does not need to start up the engine solely to conduct a performance test. The Permittee may conduct the performance test when the engine is started up again.

5. Monitoring Requirements

(a) The Permittee shall continuously monitor the engine exhaust temperature of each engine at the inlet to the catalyst bed.

(b) Except during startups, not to exceed 30 minutes, if the engine's exhaust temperature at the inlet to the catalyst bed deviates from the acceptable ranges specified in this permit then the following actions shall be taken. The Permittee's completion of any or all of these actions shall not constitute, nor qualify as, an exemption from any other emission limits in this permit.

(i) Within 24 hours of determining a deviation of the engine exhaust temperature at the inlet to the catalyst bed, the Permittee shall investigate. The investigation shall include testing the temperature sensing device, inspecting the engine for performance problems and assessing the catalytic control system for possible

damage that could affect catalytic system effectiveness (including, but not limited to, catalyst housing damage, and fouled, destroyed or poisoned catalyst).

(ii) If the engine exhaust temperature at the inlet to the catalyst bed can be corrected by following the engine manufacturer recommended procedures or equivalent procedures developed by the Permittee or vendor, and the catalytic control system has not been damaged, then the Permittee shall correct the engine exhaust temperature at the inlet to the catalyst bed within 24 hours of inspecting the engine and catalytic control system.

(iii) If the engine exhaust temperature at the inlet to the catalyst bed cannot be corrected using the engine manufacturer recommended procedures or equivalent procedures developed by the Permittee or vendor, or the catalytic control system has been damaged, then the affected engine shall cease operating immediately and shall not be returned to routine service until the following has been met:

(A) The engine exhaust temperature at the inlet to the catalyst bed is measured and found to be within the acceptable temperature range for that engine; and

(B) The catalytic control system has been repaired or replaced, if necessary.

(c) The Permittee shall monitor the pressure drop across the catalyst bed on each engine every 30 days using pressure sensing devices before and after the catalyst bed to obtain a direct reading of the pressure drop (also referred to as the differential pressure). *[Note to Permittee: Differential pressure measurements, in general, are used to show the pressure across the filter elements. This information will determine when the elements of the catalyst bed are fouling, blocked or blown out and thus require cleaning or replacement.]*

(d) The Permittee shall perform the first measurement of the pressure drop across the catalyst bed on each engine no more than 30 days from the date of the initial performance test. Thereafter, the Permittee shall measure the pressure drop across the catalyst bed, at a minimum, every 30 days. Subsequent performance tests, as required in this permit, can be used to meet the periodic pressure drop monitoring requirements provided it occurs within the 30-day window. The pressure drop reading can be a one-time measurement on that day, the average of performance test runs conducted on that day, or an average of all the measurements taken on that day if continuous readings are taken.

(e) If the pressure drop reading exceeds ± 2 inches of water from the baseline pressure drop established during the most recent performance test, then the following actions shall be taken. The Permittee's completion of any or all of these actions shall not constitute, nor qualify as, an exemption from any other emission limits in this permit:

(i) Within 24 hours of determining a deviation of the pressure drop across the catalyst bed, the Permittee shall investigate. The investigation shall include testing the pressure transducers and assessing the catalytic control system for possible damage that could affect catalytic system effectiveness (including, but not limited to, catalyst housing damage, and plugged, fouled, destroyed or poisoned catalyst).

(ii) If the pressure drop across the catalyst bed can be corrected by following the catalytic control system manufacturer and/or vendor recommended procedures or equivalent procedures developed by the Permittee or vendor, and the catalytic

control system has not been damaged, then the Permittee shall correct the problem within 24 hours of inspecting the catalytic control system.

(iii) If the pressure drop across the catalyst bed cannot be corrected using the catalytic control system manufacturer recommended procedures or equivalent procedures developed by the Permittee or vendor, or the catalytic control system is damaged, then the Permittee shall do one of the following:

(A) Conduct a performance test within 90 calendar days, as specified in this permit, to ensure that the NO_X, CO, and CH_2O emission limits are being met and to re-establish the pressure drop across the catalyst bed. The Permittee shall measure CO and NO_X emissions using a portable analyzer and a monitoring protocol approved by the EPA to establish a new temporary pressure drop baseline until a performance test can be scheduled and completed; or

(B) Cease operating the affected engine immediately. The engine shall not be returned to routine service until the pressure drop is measured and found to be within the acceptable pressure range for that engine as determined from the most recent performance test. Corrective action may include removal and cleaning of the catalyst or replacement of the catalyst.

(f) The Permittee shall measure NO_X and CO emissions from each engine at least quarterly to demonstrate compliance with each engine's emission limits in this permit. To meet this requirement, the Permittee shall:

(i) Measure NO_X and CO emissions at the normal operating load using a portable analyzer and a monitoring protocol approved by the EPA or conduct a performance test as specified in this permit;
(ii) Measure the NO_X and CO emissions simultaneously; and
(iii) Commence monitoring for NO_X and CO emissions within 6 months of the Permittee's submittal of the initial performance test results for NO_X and CO emissions to the EPA.

(g) The Permittee shall not perform engine tuning or make any adjustments to engine settings, catalytic control system settings, or processes or operational parameters on the day of or during measurements. Any such tuning or adjustments may result in a determination by the EPA that the result is invalid. Artificially increasing an engine load to meet the testing requirements is not considered engine tuning or adjustments.

(h) For any one (1) engine: If the results of 2 consecutive quarterly portable analyzer measurements demonstrate compliance with the NO_X and CO emission limits, the required monitoring frequency may change from quarterly to semi-annually.

(i) For any one (1) engine: If the results of any subsequent portable analyzer measurements demonstrate non-compliance with the NO_X or CO emission limits, required monitoring frequency shall change from semi-annually to quarterly.

(j) The Permittee shall submit portable analyzer specifications and monitoring protocols for NO_X and CO to the EPA at the following address for approval at least 45 calendar days prior to the date of initial portable analyzer monitoring:

U.S. Environmental Protection Agency, Region 8
Office of Enforcement, Compliance & Environmental Justice
Air Toxics and Technical Enforcement Program, 8ENF-AT
1595 Wynkoop Street
Denver, Colorado 80202

(k) Portable analyzer specifications and monitoring protocols that have already been approved by the EPA for the emission units approved in this permit may be used in lieu of new protocols unless the EPA requires the submittal and approval of a new protocol. The Permittee may submit a new protocol for EPA approval at any time.

(l) The Permittee is not required to conduct emissions monitoring and parametric monitoring of exhaust temperature and catalyst differential pressure on engines that have not operated during the monitoring period. The Permittee shall certify that the engine(s) did not operate during the monitoring period in the annual report specified in this permit.

6. Recordkeeping Requirements

(a) Records shall be kept of manufacturer and/or vendor specifications and maintenance requirements developed by the manufacturer, vendor, or Permittee for each engine, catalytic control system, temperature-sensing device, and pressure-measuring device.

(b) Records shall be kept of all calibration and maintenance conducted for each engine, catalytic control system, temperature-sensing device, and pressure-measuring device.

(c) Records shall be kept that are sufficient to demonstrate that the fuel used for each engine is pipeline quality natural gas in all respects, with the exception of CO_2 concentrations.

(d) Records shall be kept of all temperature measurements required in this permit, as well as a description of any corrective actions taken pursuant to this permit.

(e) Records shall be kept of all pressure drop measurements required in this permit, as well as a description of any corrective actions taken pursuant to this permit.

(f) Records shall be kept of all required testing and monitoring in this permit. The records shall include the following:

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

(g) Records shall be kept of all catalyst replacements or repairs, engine rebuilds and engine replacements.

(h) Records shall be kept of each rebuilt or replaced engine break-in period, pursuant to the requirements of this permit, where an existing engine that has been rebuilt or replaced

resumes operation without the catalyst control system, for a period not to exceed 200 operating hours.

(i) Records shall be kept of each time any engine is shut down due to a deviation of the inlet temperature to the catalyst bed or pressure drop across the catalyst bed. The Permittee shall include in the record the cause of the problem, the corrective action taken, and the timeframe for bringing the pressure drop and inlet temperature range into compliance.

D. Requirements for Tri-Ethylene Glycol Dehydration Process

1. Construction and Operational Limits

(a) The following tri-ethylene glycol dehydration system is approved for installation and operation at the facility:

(i) Four (4) units; each limited to a maximum natural gas processing capacity of 10 MMscfd[1] and a 0.375 MMBtu/hr[2] natural gas fired tri-ethylene glycol reboiler; and

(ii) One (1) unit limited to a maximum natural gas processing capacity of 35 MMscfd, and a 1.5 MMBtu/hr natural gas fired tri-ethylene glycol reboiler, equipped with a flash tank whose emissions are used as fuel for the reboiler.

(b) The Permittee shall process no more than 45 MMscfd of natural gas.

(c) Only dehydration units that are operated and controlled as specified in this permit may be installed and operated.

2. Monitoring and Record Keeping Requirements

The Permittee shall monitor and record the total natural gas processed through the dehydration system, in MMscfd, on a monthly basis.

E. Requirements for Pneumatic Controllers

1. The Permittee shall install, maintain, and operate pneumatic controllers that meet one or more of the following emission control technologies:

(a) Air actuated controllers;

(b) Electronically actuated controllers;

(c) Low-bleed natural gas actuated controllers (no more than 6 standard cubic feet per hour of natural gas); or

(d) No-bleed natural gas actuated controllers.

2. Each controller shall be operated and maintained according to manufacturer specifications or equivalent procedures developed by the Permittee or vendor.

[1] MMscfd means million standard cubic feet per day.
[2] MMBtu/hr means million British thermal units per hour.

3. Beginning with the effective date of this permit, records shall be kept of the date of installation of the controllers, the manufacturer specifications of the controllers or equivalent specifications developed by the Permittee or vendor, and all scheduled maintenance and repairs on the controllers.

F. Requirements for Leak Detection and Repair (LDAR)

1. The Permittee shall implement a LDAR monitoring program for detecting emissions of volatile organic compound (VOC) emissions due to leaking equipment.

2. The Permittee shall develop a written LDAR protocol that, at a minimum, specifies the following:

   (a) The use of an infrared camera for the detection of VOC leaks;

   (b) The technical procedures for monitoring with the infrared camera;

   (c) A schedule for conducting semiannual monitoring;

   (d) Monitoring of "equipment" per the approved LDAR protocol;

   (e) A definition of when a "leak" is detected;

   (f) A repair schedule for leaking equipment (including delay of repair); and

   (g) A recordkeeping format.

3. The Permittee shall submit the LDAR protocol to the EPA at the following address for approval at least 45 calendar days prior to the date of initial monitoring:

   U.S. Environmental Protection Agency, Region 8
   Office of Enforcement, Compliance & Environmental Justice
   Air Toxics and Technical Enforcement Program, 8ENF-AT
   1595 Wynkoop Street
   Denver, Colorado 80202

4. LDAR protocols that have already been approved by the EPA may be used in lieu of new protocols unless the EPA determines it is necessary to require the submittal and approval of a new LDAR protocol.

5. The Permittee may submit a revised LDAR protocol at any time for EPA approval. The existing LDAR protocol will remain in effect until a revised LDAR protocol is approved by the EPA.

6. In the event that the EPA determines that the LDAR monitoring program is not meeting its intended goals, the Permittee shall submit a revised LDAR protocol upon request by the EPA.

7. Leak detection monitoring shall commence upon approval of the LDAR protocol by the EPA.

8. LDAR monitoring shall be conducted at least semi-annually in accordance with an approved LDAR protocol and shall be conducted a minimum of 5 calendar months apart.

9. The Permittee shall notify the EPA in writing at least 30 calendar days prior to any LDAR monitoring conducted. If monitoring cannot be performed on the scheduled date, the Permittee shall notify EPA at least 1 week prior to the scheduled date and reschedule the monitoring to satisfy the monitoring frequency requirements.

10. The Permittee shall maintain a record of all EPA approved LDAR protocols.

11. The Permittee shall maintain a record of the results of all LDAR monitoring and any necessary equipment repairs due to VOC leaks.

G. Requirements for Records Retention

1. The Permittee shall retain all records required by this permit for a period of at least 5 years from the date the record was created.

2. Records shall be kept in the vicinity of the facility, such as at the facility, the location that has day-to-day operational control over the facility, or the location that has day-to-day responsibility for compliance of the facility.

H. Requirements for Reporting

1. Annual Emission Reports

(a) The Permittee shall submit a written annual report of the actual annual emissions from all emission units at the facility covered under this permit; including emissions from start-ups, shutdowns, and malfunctions, each year no later than April 1st. The annual report shall cover the period for the previous calendar year. All reports shall be certified to truth and accuracy by the person primarily responsible for Clean Air Act compliance for the Permittee.

(b) The report shall be submitted to:

U.S. Environmental Protection Agency, Region 8
Office of Partnerships and Regulatory Assistance
Tribal Air Permitting Program, 8P-AR
1595 Wynkoop Street
Denver, Colorado 80202

The report may be submitted via electronic mail to r8AirPermitting@epa.gov.

2. All other documents required to be submitted under this permit, with the exception of the Annual Emission Reports, shall be submitted to:

U.S. Environmental Protection Agency, Region 8
Office of Enforcement, Compliance & Environmental Justice
Air Toxics and Technical Enforcement Program, 8ENF-AT
1595 Wynkoop Street
Denver, Colorado 80202

All Documents may be submitted electronically to r8airreportenforcement@epa.gov.

3. The Permittee shall submit a written LDAR monitoring report each year no later than April 1st. The annual report shall include the semi-annual LDAR monitoring results for the previous calendar year, including any necessary equipment repairs due to VOC leaks.

4. The Permittee shall promptly submit to the EPA a written report of any deviations of permit requirements and a description of the probable cause of such deviations and any corrective actions or preventative measures taken. A "prompt" deviation report is one that is post marked or submitted via electronic mail to r8airreportenforcement@epa.gov as follows:

   (a) Within 30 days from the discovery of any deviation of the emission or operational limits that is left un-corrected for more than 5 days after discovering the deviation;

   (b) By April 1st for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the Permittee's ability to meet the emission limits.

5. The Permittee shall submit a written report for any required performance tests to the EPA Regional Office within 60 days after completing the tests.

6. The Permittee shall submit any record or report required by this permit upon EPA request.

II. General Provisions

A. Conditional Approval

Pursuant to the authority of 40 CFR 49.151, the EPA hereby conditionally grants this permit to construct. This authorization is expressly conditioned as follows:

1. *Document Retention and Availability:* This permit and any required attachments shall be retained and made available for inspection upon request at the location set forth herein.

2. *Permit Application:* The Permittee shall abide by all representations, statements of intent and agreements contained in the application submitted by the Permittee. The EPA shall be notified 10 days in advance of any significant deviation from the permit application as well as any plans, specifications or supporting data furnished.

3. *Permit Deviations:* The issuance of this permit may be suspended or revoked if the EPA determines that a significant deviation from the permit application, specifications, and supporting data furnished has been or is to be made. If the proposed source is constructed, operated, or modified not in accordance with the terms of this permit, the Permittee will be subject to appropriate enforcement action.

4. *Compliance with Permit:* The Permittee shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the permitted facility/source. Noncompliance with any permit term or condition is a violation of this permit and may constitute a violation of the Clean Air Act and is grounds for enforcement action and for a permit termination or revocation.

5. *Fugitive Emissions:* The Permittee shall take all reasonable precautions to prevent and/or minimize fugitive emissions during the construction period.

6. *National Ambient Air Quality Standard and PSD Increment:* The permitted source shall not cause or contribute to a National Ambient Air Quality Standard violation or a PSD increment violation.

7. *Compliance with Federal and Tribal Rules, Regulations, and Orders:* Issuance of this permit does not relieve the Permittee of the responsibility to comply fully with all other applicable federal and tribal rules, regulations, and orders now or hereafter in effect.

8. *Enforcement:* It is not a defense, for the Permittee, in an enforcement action, to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9. *Facility/Source Modifications:* For proposed modifications, as defined at §49.152(d), that would increase an emissions unit allowable emissions of pollutants above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit modification pursuant to the MNSR regulations approving the increase. For a proposed modification that is not otherwise subject to review under the PSD or MNSR regulations, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at §49.159(f).

10. *Relaxation of Legally and Practically Enforceable Limits:* At such time that a new or modified source within the permitted facility/source or modification of this permitted facility/source becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of this permitted facility/source to otherwise emit a pollutant, such as a restriction on hours of operation, then the requirements of the PSD regulations shall apply to the source or modification as though construction had not yet commenced on the source or modification.

11. *Revise, Reopen, Revoke and Reissue, or Terminate for Cause:* This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee, for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. The EPA may reopen a permit for a cause on its own initiative, e.g., if this permit contains a material mistake or the Permittee fails to assure compliance with the applicable requirements.

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

13. *Property Rights:* This permit does not convey any property rights of any sort or any exclusive privilege.

14. *Information Requests:* The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating this permit or to determine compliance with this permit. For any such information claimed to be confidential, you shall also submit a claim of confidentiality in accordance with 40 CFR Part 2, Subpart B.

15. *Inspection and Entry:* The EPA or its authorized representatives may inspect this permitted facility/source during normal business hours for the purpose of ascertaining compliance with all conditions of this permit. Upon presentation of proper credentials, the Permittee shall allow the EPA or its authorized representative to:

(a) Enter upon the premises where a permitted facility/source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;

(c) Inspect, during normal business hours or while the permitted facility/source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements; and

(e) Record any inspection by use of written, electronic, magnetic and photographic media.

16. *Permit Effective Date:* This permit is effective immediately upon issuance unless comments resulted in a change in the proposed permit, in which case this permit is effective 30 days after issuance. The Permittee may notify the EPA, in writing, that this permit or a term or condition of it is rejected. Such notice should be made within 30 days of receipt of this permit and should include the reason or reasons for rejection.

17. *Permit Transfers:* Permit transfers shall be made in accordance with 40 CFR 49.159(f). The Air Program Director shall be notified in writing at the address shown below if the company is sold or changes its name.

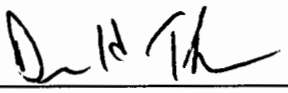
U.S. Environmental Protection Agency, Region 8
Office of Partnerships and Regulatory Assistance
Tribal Air Permitting Program, 8P-AR
1595 Wynkoop Street
Denver, Colorado 80202

18. *Invalidation of Permit:* This permit becomes invalid if construction is not commenced within 18 months after the effective date of the permit, construction is discontinued for 18 months or more, or construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between the construction of the approved phases of a phased construction project. The Permittee shall commence construction of each such phase within 18 months of the projected and approved commencement date.

19. *Notification of Start-Up*: The Permittee shall submit a notification of the anticipated date of initial start-up of the permitted source to the EPA within 60 days of such date, unless the source permitted under this action is an existing source.

B. Authorization

Authorized by the United States Environmental Protection Agency, Region 8



4-8-2014

Debra H. Thomas
Acting Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

Date