

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

1595 Wynkoop Street Denver, CO 80202-1129 Phone 800-227-8917 www.epa.gov/region08

MAR 2 1 2017

Ref: 8P-AR

Mr. Michael K. Lane ConocoPhillips Company P.O. Box 737 MS#84 Ignacio, Colorado 81137

Re: ConocoPhillips Company – Ute Compressor Station Administrative Revision of Permit #SMNSR-SU-000054-2012.001

Dear Mr. Lane:

The U.S. Environmental Protection Agency, Region 8 received a request from ConocoPhillips Company (ConocoPhillips), dated October 5, 2016, to administratively revise the synthetic minor permit that the EPA issued pursuant to the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49, for the Ute Compressor Station (SMNSR-SU-000054-2012.001). ConocoPhillips requested to revise the synthetic MNSR permit to incorporate enforceable requirements for monthly auditory, visual and olfactory monitoring of the condensate storage tanks. Incorporation of the requested revisions will enable ConocoPhillips to fulfill requirements from a Settlement Agreement and Stipulated Final Compliance Order (Enforcement Case ID: 2016-05) with the Southern Ute Indian Tribe Environmental Programs Division, Air Quality Program.

The EPA has verified that the requested revisions qualify as administrative revisions under 40 CFR 49.159(f) and has revised the permit to incorporate the changes that ConocoPhillips has requested. We hereby issue the enclosed revised MNSR permit for the Ute Compressor Station (permit # SMNSR-SU-000054-2016.002). Also enclosed is a Technical Support Document describing the permit changes. Administrative permit revisions are not subject to the permit application, public participation, issuance or administrative and judicial review requirements of the MNSR Permit Program.

If you have any questions concerning the enclosed final permit, please contact Colin Schwartz, of my staff, at (303) 312-6043.

Sincerely.

Monica Morales, Acting Director Air Program

Enclosures (2)

cc: Lisa Yates, Senior Environmental Coordinator, ConocoPhillips Company Mark A. Hutson, Air Quality Technical Manager, Southern Ute Indian Tribe 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-000054-2016.002

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

Permittee:

ConocoPhillips Company

Permitted Facility:

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

Summary

On October 15, 2014, the EPA issued a synthetic minor permit for the Ute Compressor Station in accordance with the requirements of the Tribal Minor New Source Review Permit Program at 40 CFR part 49 (MNSR). On October 5, 2016, the EPA received a request to administratively revise the permit to incorporate requirements from a Settlement Agreement and Stipulated Final Compliance Order with the Southern Ute Indian Tribe Environmental Programs Division, Air Quality Program.

The Ute Compressor Station is located on Indian country lands within the Southern Ute Indian Reservation in Colorado and dehydrates and compresses natural gas. The natural gas comes from wells located in the vicinity of the Florida River producing natural gas from the Fruitland Coal Formation. Field gas is gathered and transported to the facility via pipelines for liquid separation and natural gas compression. The inlet fluid flows through a two-phase inle: separator where natural gas and liquids are separated. The liquids flow to two 300-bbl above ground condensate storage tanks where oil and free water separate out. The water is transferred to a 120-bbl pit tank, where it is stored until it is hauled away via tank truck to a commercial facility for proper disposal. The oil is sold as product and shipped off-site via tank truck. The gas is compressed then transported off-site via pipeline. Liquids that drop out during compression are routed to the two condensate storage tanks.

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. An August 29, 2012 application from ConocoPhillips requested a synthetic minor permit for the Ute Compressor Station to transfer the requirements of a September 30, 2011, Consent Agreement, Docket No. CAA-08-2011-0032 (Consent Agreement) to a federally enforceable non-Title V permit (where they would become applicable requirements that live on past termination of the Consent Agreement).

The Consent Agreement required that ConocoPhillips control the carbon monoxide (CO) and formaldehyde (CH₂O) emissions from one (1) lean-burn engine rated at 1,478 horsepower (hp). In addition, the Consent Agreement requires that ConocoPhillips implement a leak detection and repair (LDAR) program for storage tanks at the facility, and retrofit or replace all existing high-bleed pneumatics with low-bleed or no-bleed pneumatics. This permit reflects the incorporation of the required emissions limits and provisions of a Consent Agreement between the EPA and ConocoPhillips. The attainment of this MNSR permit was a required element of the Consent Agreement.

B. An October 5, 2016, application from ConocoPhillips requested an administrative revision to the MNSR Permit # SMNSR-SU-000054-2012.001 to incorporate requirements from a September 12, 2016, Settlement Agreement and Stipulated Final Compliance Order, Enforcement, Case ID: 2016-05, with the Southern Ute Indian Tribe Environmental Programs Division, Air Quality Program (Settlement Agreement). The Settlement Agreement was established to bring ConocoPhillips into compliance with the Reservation Air Code (RAC) after it was discovered that there were RAC violations during an on-site inspection and records review on May 10, 2016. The Settlement Agreement specifically required monthly auditory, visual and olfactory (AVO) monitoring of the condensate storage tanks operating at the facility. The Settlement Agreement required ConocoPhillips to apply to the EPA for a revision of MNSR Permit # SMNSR-SU-000054-2012.001 to incorporate the stipulated requirements.

Upon compliance with this MNSR permit, the legally and practically enforceable reductions in emissions can be used when determining the applicability of other Clean Air Act (CAA) requirements, such as the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52, the Title V Operating Permit Program at 40 CFR part 70 (Part 70 - as administered by the Southern Ute Indian Tribe via an EPA-approved Part 70 program) and the NESHAP at 40 CFR part 63.

The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have potentially adverse effects on ambient air quality.

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I. Conditional Permit to Construct

A. General Information

Facility: Permit Number: SIC Code and SIC Description:

Site Location: Ute Compressor Station SW ¼, SE ¼ Sec 14 and 15 T32N R11W Southern Ute Indian Reservation La Plata County, CO ConocoPhillips Ute Compressor Station SMNSR-SU-000054-2016.002 1311- Crude Petroleum and Natural Gas Production

Corporate Office Location ConocoPhillips Company San Juan Business Unit P.O. Box 4289 Farmington, NM 87499

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

Latitude 37.0173N, Longitude -108.0201W

B. Applicability

- 1. This permit is being issued under the authority of the MNSR permitting program.
- 2. The requirements in this permit have been created, at the Permittee's request and pursuant to Consent Agreement # CAA-08-2011-0032 and Settlement Agreement Case ID 2016-05, to establish legally and practically enforceable requirements for limiting nitrogen oxides (NO_X), CO, and CH₂O engine emissions, monitoring condensate tank operations, upgrading pneumatic controls, and implementing an LDAR program.
- 3. Any conditions established for this facility or any specific units at this facility pursuant to any permit issued under the authority of the PSD Permit Program or MNSR Permit Program shall continue to apply.
- 4. By issuing this permit, 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 1,478 Horsepower Engine

1. Construction and Operational Limits

The Permittee shall install and operate emission controls as specified in this permit on one (1) reciprocating internal combustion engine 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 1,478 hp.

2. <u>Emission Limits</u>

- (a) Emissions from the engine shall not exceed the following:
 - (i) NO_x : 5.5 pounds per hour (lb/hr);
 - (ii) CO: 2.7 lb/hr; and
 - (iii) CH₂O: 0.22 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 engine is equipped with a catalytic control system capable of reducing the uncontrolled emissions of CO and CH₂O to meet the emission limits specified in this permit.
 - (b) The Permittee shall install, operate, and maintain a temperature sensing device (i.e., thermocouple or resistance temperature detectors) before the catalytic control system on the engine in order to continuously monitor the exhaust temperature at the inlet of the catalyst bed. The temperature sensing device shall be calibrated and operated by the Permittee according to manufacturer and/or vendor specifications or specifications developed by the Permittee or vendor.
 - (c) Except during startups, which shall not to exceed 30 minutes, the engine exhaust temperature of the engine, at the inlet to the catalyst bed, shall be maintained at all times the engine operates 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 the 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% \pm 10% of the engine load measured during the most recent performance test.
 - (e) The Permittee shall only fire the engine with natural gas. The natural gas shall be pipeline-quality in all respects except that the carbon dioxide (CO₂) concentration in the gas is not required to be within pipeline-quality.
 - (f) The Permittee shall follow, for the engine and its respective catalytic control system, the manufacturer and/or recommended maintenance schedule and procedures or equivalent maintenance schedule and procedures developed by the Permittee or vendor to ensure optimum performance of the engine and its respective catalytic control system.
 - (g) The Permittee may rebuild the existing permitted engine or replace the 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 engine that is rebuilt or replaced shall also apply to the rebuilt and replaced engine.

(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. <u>Performance Testing Requirements</u>

- (a) Performance tests shall be conducted on the engine for measuring NO_X, CO, and CH₂O 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 the engine shall be conducted within 90 calendar days of startup of a new engine.
 - (ii) Subsequent performance tests for CH₂O 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 the engine load to meet testing requirements is not considered engine tuning or adjustments.
- (c) The Permittee shall not abort any engine test that demonstrates non-compliance with the emission limits in this permit.
- (d) All performance tests conducted on the engine shall meet the following requirements:
 - (i) The pressure drop across the catalyst bed and the inlet temperature to the catalyst bed shall be measured and recorded at least once during each performance test.
 - (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 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 unit 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 the 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 at the inlet to the catalyst bed.
 - (b) Except during startups, which shall not 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 and/or 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 and/or 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 the 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 the 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 and/or vendor 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 CH₂O 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 the engine at least quarterly to demonstrate compliance with the engine's emission limits in this permit. To meet this requirement, the Permittee shall:
 - 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 3 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) 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) If the results of any subsequent portable analyzer measurements demonstrate noncompliance 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.
- (I) The Permittee is not required to conduct emissions monitoring of NO_X, CO, and CH₂O emissions 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 did not operate during the monitoring period in the annual report specified in this permit.

6. <u>Recordkeeping Requirements</u>

- (a) Records shall be kept of manufacturer and/or vendor specifications or equivalent specifications developed by the Permittee or vendor, and maintenance requirements for the engine, catalytic control system, temperature-sensing device, and pressure-measuring device.
- (b) Records shall be kept of all calibration and maintenance conducted for the 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 the engine is pipeline-quality natural gas in all respects, with the exception of CO₂ 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 the 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 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 or vendor specifications or equivalent procedures developed by the Permittee or vendor.
- 3. Beginning with the effective date of this permit, records shall be kept of the date of installation of the controllers, the manufacturer or vendor specifications of the controllers or equivalent specifications developed by the Permittee or vendor, and all scheduled maintenance and repairs on the controllers.

E. Requirements for Condensate Storage Tanks

1. <u>Applicability</u>

The requirements in this section apply to two (2) 300-barrel capacity storage tanks used to store natural gas condensate.

2. Monitoring Requirements

- (a) The Permittee shall physically inspect the condensate tanks each month using AVO methods to detect leaks that could result in air emissions.
- (b) The inspection shall include thief hatches, storage tanks, and associated process piping, but shall not include normal storage tank venting.
- (c) The monthly inspections shall be separated by at least 14 calendar days.
- (d) In the event that a leak or defect is detected, the Permittee shall repair the leak or defect according to the following schedule:
 - (i) A first attempt at repair shall be made no later than 15 calendar days after the leak is detected;
 - (ii) If the repair involves installation of parts that cannot be obtained within the first 15 calendar-day window, the repair may be delayed until the next 15 calendar-day period;
 - (iii) Repair shall be completed no later than 30 calendar days after the leak or defect is detected;
 - (iv) If the repair cannot be completed within the 30-day window because it requires a shutdown of the entire facility and/or replacement parts are unavailable, the repair may be delayed until the next process unit shutdown. Leaking equipment shall be repaired by the end of the next process shutdown.
 - (v) Grease or another applicable substance shall be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.

3. <u>Recordkeeping Requirements:</u>

The Permittee shall maintain records of each AVO inspection to include the date of inspection, a description of each leak or defect identified, the corrective actions taken to repair the leak or defect, and the date of repair.

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 requires 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 startups, 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 <u>r8AirPermitting@epa.gov</u>.

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 <u>r8airreportenforcement@epa.gov</u>.

 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.

- 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 <u>r8airreportenforcement@epa.gov</u> 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) Within 30 days from the discovery of an equipment leak as a result of the semi-annual LDAR monitoring that is left un-corrected for more than 5 days after discovering the leak; and
 - (c) 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. 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.
- 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

1211 17 fronca 3 An oralla

Monica Morales, Acting Air Director

Date

United States Environmental Protection Agency Region 8 Air Program Air Pollution Control Synthetic Minor Source Permit to Construct Technical Support Document for Administratively Revised Permit #SMNSR-SU-000054-2016.002



ConocoPhillips Company Ute Compressor Station Southern Ute Indian Reservation La Plata County, Colorado

In accordance with the requirements of the Tribal Minor New Source Review Permit Program at 40 CFR part 49 (MNSR), this Federal permit to construct is being issued under authority of the Clean Air Act (CAA). The EPA has prepared this technical support document describing the conditions of this permit and presents information that is germane to this permit action.

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I. Introduction

On October 15, 2014, we issued a synthetic minor permit for the ConocoPhillips Company (ConocoPhillips) Ute Compressor Station in accordance with the Tribal Minor New Source Review Permit Program at 40 CFR part 49 (MNSR). On October 5, 2016, the EPA received a request to administratively revise the permit to establish legally and practically enforceable requirements for monthly auditory, visual and olfactory (AVO) monitoring of the condensate storage tanks. ConocoPhillips requested incorporation of the monitoring to fulfill requirements from a Settlement Agreement and Stipulated Final Compliance Order (Enforcement Case ID: 2016-05) with the Southern Ute Indian Tribe Environmental Programs Division, Air Quality Program (Settlement Agreement).

This permit revision applies to an existing permitted facility operating on the Southern Ute Indian Reservation in Colorado.

This permit revision does not authorize the construction of any new emission sources or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations that would result in an emissions increase. This revised permit is intended only to incorporate required requested provisions from the Settlement Agreement, which was established to bring ConocoPhillips into compliance with the Reservation Air Code (RAC) after it was discovered that there were RAC violations during an on-site inspection and records review on May 10, 2016.

According to 40 CFR 49.159(f)(1), "an administrative revision is a permit revision that makes any of the following changes:

- 1. Corrects typographical errors.
- 2. Identifies a changes in the name, address or phone number of any person identified in the permit or provides a similar minor administrative change at the source.
- 3. Requires more frequent monitoring or reporting by the Permittee.
- 4. Allows for a change in ownership or operational control of a source where the reviewing authority determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the reviewing authority.
- 5. Establishes an increase in an emissions unit's annual allowable emissions limit for a regulated NSR pollutant, when the action that necessitates such increase is not otherwise subject to review under major NSR or under this program.
- 6. Incorporates any other type of change that the reviewing authority has determined to be similar to those in paragraphs (f)(1)(i) through (v) of this section."

ConocoPhillips is requesting additional monitoring requirements for the condensate storage tanks. Therefore, the EPA has determined that the requested changes qualify as an administrative revision per 40 CFR 49.159(f)(1)(iii). According to 40 CFR 49.159(f)(2), administrative permit revisions are not subject to the permit application, public participation, issuance or administrative and judicial review requirements of the MNSR Permit Program.

Upon compliance with this permit, the legally and practically enforceable reductions in emissions can be used when determining the applicability of other CAA requirements, such as the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52, the Title V Operating Permit

Program at 40 CFR part 70 (as administered by the Southern Ute Indian Tribe under an EPA-approved Part 70 program), and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR part 63.

II. Facility Description

The Ute Compressor Station, owned and operated by ConocoPhillips compresses natural gas prior to custody transfer. Field gas is gathered and transported to the facility via pipelines for liquid separation and natural gas compression. The inlet fluid flows through a two-phase inlet separator where natural gas and liquids are separated. The liquids flow to two 300-bbl above ground condensate storage tanks where oil and free water separate out. The water is transferred to a 120-bbl pit tank, where it is stored until it is hauled away via tank truck to a commercial facility for proper disposal. The oil is sold as product and shipped off-site via tank truck. The gas is compressed then transported off-site via pipeline. Liquids that drop out during compression are routed to the two condensate storage tanks. A dehydration system resides onsite but is disconnected and decommissioned fulfilling requirements from the Settlement Agreement (2016-05).

The emission units identified in Table 1 are currently installed and/or operating at the facility. The information provided in this table is for informational purposes only and is not intended to be viewed as enforceable restrictions or open for public comment. Table 2 summarizes the legally and practically enforceable controlled emissions at the facility based on the information provided by ConocoPhillips.

Unit Description	Controls	Original Preconstruction Approval and/or Establishment of Enforceable Control Requirements
Natural gas-fired, 4-stroke lean-burn reciprocating internal combustion engine with a maximum site rating of 1,478 hp	Oxidation Catalyst	No pre-construction approval required for the installation of the engine. Installed prior to the promulgation of the MNSR permit program. CO and CH ₂ O control requirements established in the September 30, 2011 Consent Agreement # CAA-08-2011- 0032 and transferred to MNSR permit #SMNSR-SU- 000054-2012.001.
Natural gas-fired, 4-stroke lean-burn reciprocating internal combustion engine with a maximum site rating of 1,215 hp	None	No pre-construction approval required for the installation of the engine. Installed prior to the promulgation of the MNSR permit program.
2 – 300 bbl* Condensate Tanks	None	No pre-construction approval required for the installation of the organic liquid storage tanks. Installed prior to the promulgation of the MNSR permit program. The Settlement Agreement stipulated AVO monitoring for the tanks, which are being transferred to this MNSR permit #SMNSR-SU- 000054-2016.002.
Truck Loadout	None	No pre-construction approval required for loadout operations. Installed prior to the promulgation of the MNSR permit program.
1 – 30 kW Combustion Turbine	None	No pre-construction approval required for the installation of the turbines. Installed prior to the promulgation of the MNSR permit program.
1 – 65 kW* Combustion Turbine	None	No pre-construction approval required for the installation of the turbines. Installed prior to the promulgation of the MNSR permit program.

Table 1. Existing Emission Units

Unit Description	Controls	Original Preconstruction Approval and/or Establishment of Enforceable Control Requirements
Miscellaneous Storage Tanks	None	No pre-construction approval required for the installation of the tanks. Installed prior to the promulgation of the MNSR permit program.

*Mscfd = million standard cubic feet per day; MMBtu/hr = million British thermal units per hour; bbl = barrel; kW = kilowatt.

Table 2. Facility-wide Emissions

Criteria Pollutants	Controlled Potential Emissions (tons per year)	
PM	0.83	
PM ₁₀	0.83	
PM _{2.5}	0.83	
SO _x	1.98	PM – Particulate Matter
NO _x	56.89	PM_{10} – Particulate Matter less than 10
CO	57.20	microns in size
VOC	40.10	PM _{2.5} – Particulate Matter less than 2.5
Hazardous Air Pollutants (HAPs)		microns in size SO _x – Sulfur Oxides
Acetaldehyde	0.37	NO _x – Nitrogen Oxides
Acrolein	0.22	CO – Carbon Monoxide
Benzene	0.59	VOC – Volatile Organic Compounds
Ethyl-Benzene	0.14	
Formaldehyde	0.96	
2,2,4 Trimethylpentane	0.04	
Toluene	1.74	
n-Hexane	0.27	
Xylene	0.98	
Total HAPs	5.31	

III. Revised Permit Requirements

ConocoPhillips requested the MNSR permit originally issued on October 15, 2014 be revised to incorporate enforceable provisions, including monitoring requirements for the condensate storage tanks to reflect requirements from the Settlement Agreement with the Southern Ute Indian Tribe.

The permit includes conditions requiring inspection of the condensate tanks (TK-5080 and TK-5081) each month using AVO methods to detect leaks that could result in air emissions. This includes inspection of the thief hatches, storage tanks and associated process piping but excludes normal storage tank venting. Monthly inspections must be separated by at least 14 calendar days.

In the event that a leak or defect is detected, the Permittee shall repair the leak or defect according to the following schedule:

- 1. A first attempt at repair must be made no later than 15 calendar days after the leak is detected.
- 2. If the repair involves installation of parts that cannot be obtained within the first 15 calendarday window, the repair may be delayed until the next 15 calendar-day period.
- 3. Repair must be completed no later than 30 calendar days after the leak or defect is detected.
- 4. If the repair cannot be completed within the 30-day window due to a need to shutdown of the entire facility and/or unavailability of replacement parts, the repair may be delayed until the

next process unit shutdown. Leaking equipment shall be repaired by the end of the next process shutdown.

5. Grease or another applicable substance must be applied to deteriorating or cracked gaskets to improve the seal while waiting repair.