



**NAVAJO NATION ENVIRONMENTAL PROTECTION
AGENCY**

**Navajo Nation Operating Permit Program
Rt. 112 North, Building F004-051
P.O. Box 529, Fort Defiance, AZ 86504**



Detailed Information

Permitting Authority: NNEPA

County: McKinley

State: New Mexico

AFS Plant ID: 35-031-84232

Facility: CONOCOPHILLIPS COMPANY – Wingate Fractionating Plant Candlestick Flare

Document Type: RESPONSES TO COMMENTS

RESPONSE TO COMMENTS

**on the Part 71 Permit to Operate
ConocoPhillips Company - Wingate Fractionating Plant - Candlestick Flare**

Permit No. NN-OP-05-011

Between April 9, 2009 and May 9, 2009, the Navajo Nation Environmental Protection Agency (NNEPA) had notices published in the Navajo Times of Window Rock, Arizona and the Daily Times of Farmington, New Mexico, and between April 5, 2009 and April 29, 2009 announced on radio stations KGAK-AM, KTNN-AM 660, and KWRK-FM 96.1, stating that ConocoPhillips Company – Wingate Fractionating Plant – Candlestick Flare, located at #68 El Paso Circle, Gallup, New Mexico, had applied for a Part 71 Operating Permit renewal to operate a candlestick flare. The notice also stated that NNEPA proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that they would have thirty (30) days to provide comments on whether or not the permit should be issued as proposed.

On May 18, 2009, U.S. EPA submitted comments on the proposed Part 71 Operating Permit. Their comments are listed as Comments 1 through 3. On April 9, 2009, ConocoPhillips Company (referred to as "the Permittee") submitted comments on the proposed Part 71 Operating Permit. Their comments are listed as Comments 4 through 18. This Response to Comment document provides responses to all of these comments. When permit language is included in the response, bolded language indicates additions to the permit and language with a line through it has been deleted from the permit.

Comments from the U.S. EPA, Region 9 (Comments 1 through 3)

Comment 1:

EPA has not delegated any NSPS subparts to NNEPA. Therefore, NNEPA is not the “Administrator” for NSPS purposes. NNEPA should revise condition II.A.1. to require that NSPS reports be sent to the EPA Administrator, with a duplicate to NNEPA.

Response to Comment 1:

Condition II.A.1 has been revised as follows:

II.A. NSPS General Provisions

The following requirements apply to the operation, maintenance, and testing of the candlestick flare, Unit ID No. 17, in accordance with 40 CFR Part 60, Subparts A (General Provisions), RRR (Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes), NNN (Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations), and KKK (Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants):

1. All requests, reports, applications, submittals, and other communications to the **EPA Administrator** pursuant to 40 CFR Part 60 shall be submitted **to the EPA Region 9 office and a in duplicate submitted to the NNEPA and the EPA Region 9 office** at the following addresses [40 CFR § 60.4(a)]:

Navajo Nation Environmental Protection Agency
Air Quality Control Program
P.O. Box 529
Fort Defiance, AZ 86504

and

EPA Region 9
Director, Air Division (Attn: AIR-1)
EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105

Comment 2:

The semi-annual monitoring reporting condition (III.C.1.) and the annual compliance report condition (IV.C.1.) have references to due dates that have passed. NNEPA should

delete these dates, and revise the conditions to ensure that there are no gaps in the periods of time for which the permittee must certify compliance and report monitoring results.

Response to Comment 2:

Conditions III.C.1 and IV.C.1. have been revised per EPA comment. In addition, Condition IV.C.2. was revised based on similar language in the condition. The following revisions to the permit have been made:

III.C. Reporting Requirements [40 CFR § 71.6 (a)(3)(iii)] [NNOPR § 302 (G)]

1. The permittee shall submit to NNEPA and U.S. EPA Region 9 reports of any monitoring required under 40 CFR § 71.6(a)(3)(i)(A), (B), or (C) each six month reporting period from January 1 to June 30 and from July 1 to December 31, except that the first reporting period shall cover the period from the effective date of this Part 71 permit ~~through June 30, 2008~~ **December 31, 2009**. All reports shall be submitted to NNEPA and U.S. EPA and shall be postmarked by the 30th day following the end of the reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with Condition IV.E of this permit.

IV.C. Compliance Certifications [40 CFR § 71.6(c)(5)] [NNOPR § 302(I)]

1. The permittee shall submit to NNEPA and U.S. EPA Region 9 a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, postmarked by January 30 and covering the previous calendar year, except that the first certification period shall cover the period from ~~May 12, 2007 through May 11, 2008~~ **January 1, 2009 through December 31, 2009** and the certification shall be postmarked by ~~June 10, 2008~~, and the second certification period shall cover the period from ~~May 12, 2008 through December 31, 2008~~ and the certification shall be postmarked by ~~January 30, 2009~~ **2010**. The compliance certification shall be certified as to truth, accuracy, and completeness by the permit-designated responsible official consistent with Section IV.E. of this permit and 40 CFR § 71.5(d) [40 CFR § 71.6(c)(5)].
2. The permittee shall submit to NNEPA a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, postmarked by July 30 and covering the previous six (6) months, except that the first certification period shall cover the period from ~~the effective date of this Part 71 permit~~ **January 1, 2009** through ~~June 30, 2008~~ **2009**. The compliance certification shall be certified as to truth, accuracy, and completeness by the permit-designated responsible official consistent with Section IV.E. of this permit. This condition is enforceable by NNEPA only [NNOPR § 302(I)].

Comment 3:

The Statement of Basis provides actual flare emissions data in Section 3. However, according to the SOB, this data is based on 2004 emission inventory. Since the source reports its estimated actual emissions annually as part of its fee submittal, NNEPA should present the most recent actual emissions estimates that are available.

Response to Comment 3:

The Statement of Basis has been revised to reflect the actual emissions estimates from the source from the 2007 emission inventory data.

Actual Emissions from Unit 17 (candlestick flare)

The following table shows the actual emissions from the source (candlestick flare only). This information reflects the ~~2004~~ 2007 emission inventory data submitted by the Permittee.

Pollutant	Actual Emissions (tons/year)
PM	0 not reported
PM10	0 0.01
SO2	0 0.05
VOC	19.1 12.50
NOX	3.1 2.56
CO	6.1 not reported
n-Hexane	0.41 0.27
Benzene	0.1 0.05
Toluene	0.1 0.06
Xylenes	0.01
2,2,4 - TMP	0.03

Comments from the Permittee (Comments 4 through 18)

Comment 4:

The Permittee requested changes to contact information and source identification on the cover page and Condition I as follows:

Cover page:

G. Lane Ayers, Plant Manager
ConocoPhillips Company
~~P.O. Box 6003, Three Westlake Park~~
~~550 Westlake Park Blvd~~
~~Houston, TX 77079~~
P.O. Box 217
Bloomfield, NM 87413

I. Source Identification

Parent Company name: ConocoPhillips Company
Parent Company Mailing: ~~P.O. Box 6003 Three Westlake Park,~~
~~550 Westlake Park Blvd~~
~~Houston, TX 77079~~
(Manager of SJ Plants)
P.O. Box 217
Bloomfield, NM 87413

Telephone: ~~(832) 486-2100~~ **(505) 632-4954**
Facsimile: ~~(832) 486-2764~~ **(505) 632-4930**

Plant Name: Wingate Fractionating Plant – **Candlestick Flare**
Plant Location: #68 El Paso Circle
Gallup, NM 87301
McKinley County

Plant Mailing: P. O. Box 119
Rehoboth, NM 87322

Company Contact: Beverly Cox
Telephone: (505) 863-1023 **324-6194**
Facsimile: (505) 863-1047 **599-4005**

Plant Contact: ~~same~~ **Kim Kamps**
Telephone: ~~same~~ **(505)-863-1023**
Facsimile: ~~same~~ **(505)-863-1047**

Responsible Official: G. Lane Ayers
Telephone: (505) 632-4906
Facsimile: (505) 863-1047 **632-4930**

Response to Comment 4:

The cover page and Condition I have been revised as requested.

Comment 5:

The Permittee requested to revise the description of the process in Section I as follows:

Description of Process: ~~This facility performs fractionation of natural gas liquids into different types of fuels. The only piece of equipment at this facility that is located on the reservation of the Navajo Nation is a candlestick flare, and therefore this permit applies only to that flare. The Title V operating permit for the remainder of the facility has been issued by the New Mexico Environment Department.~~

Wingate Fractionating Plant performs fractionation of natural gas liquids into different product streams. Wingate Fractionating Plant operates as authorized by NSR and Title V permits issued by New Mexico Environment Department (NMED). The only emissions source associated with Wingate Fractionating Plant that is located on the reservation of the Navajo Nation is a candlestick flare; therefore this permit only applies to that flare.

Response to Comment 5:

NNEPA agrees that the revised description is acceptable and has made this requested change.

Comment 6:

The Permittee requested the following clarification in Section II.A.2., NSPS General Provisions:

2. Any owner or operator **of the candlestick flare**, subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative [40 CFR § 60.7(b)].

Response to Comment 6:

Condition II.A.2 has been incorporated as it is written in 40 CFR § 60.7(b). It has been made clear under the facility description and the Statement of Basis that this permit pertains only to the candlestick flare. There has been no change to the permit as a result of this comment.

Comment 7:

The Permittee requested under Section II.B., NSPS General Control Device Requirements, 40 CFR § 60.18, if the regulation can be cited rather than repeated as follows:

The Permittee shall comply with the ~~following~~ requirements for the candlestick flare (EU 17) in accordance with 40 CFR § 60.18 and Condition II.C of this permit

- (a)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (d), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (d).
- ~~(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (a)(3)(ii) of this section and the maximum tip velocity~~

~~specifications in paragraph (a)(4) of this section, or adhering to the requirements in paragraph (a)(3)(i) of this section.~~

~~(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max} , as determined by the following equation:~~

$$V_{max} = (X_{H2} - K_1) * K_2$$

~~Where:~~

~~V_{max} = Maximum permitted velocity, m/sec.~~

~~K_1 = Constant, 6.0 volume percent hydrogen.~~

~~K_2 = Constant, 3.9(m/sec)/volume percent hydrogen.~~

~~X_{H2} = The volume percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).~~

~~(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (d)(4) of this section.~~

~~(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (d)(3) of this section.~~

~~(4)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (d)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (a)(4) (ii) and (iii) of this section.~~

~~(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (d)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).~~

~~(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (d)(4), less than the velocity, V_{max} , as determined by the method specified in paragraph (d)(5), and less than 122 m/sec (400 ft/sec) are allowed.~~

~~(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in paragraph (d)(6).~~

~~(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.~~

- (b) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
- (c) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- (d)(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
- (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \frac{\text{Constant, } 1.740 \times 10^{-7} \left(\frac{1}{\text{ppm}} \right) \left(\frac{\text{g mole}}{\text{scm}} \right) \left(\frac{\text{MJ}}{\text{kcal}} \right)}{\text{where the standard temperature for } \left(\frac{\text{g mole}}{\text{scm}} \right) \text{ is } 20^\circ\text{C;}}$$

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross-sectional area of the flare tip.
- (5) The maximum permitted velocity, V_{max} , for flares complying with paragraph (a)(4)(iii) shall be determined by the following equation:

$$\text{Log}_{10}(V_{\text{max}}) = (H_T + 28.8) / 31.7$$

V_{max} = Maximum permitted velocity, M/sec

28.8 = Constant

~~31.7 = Constant~~

~~H_T = The net heating value as determined in paragraph (d)(3).~~

~~(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.~~

$$\del V_{\max} = 8.706 + 0.7084 (H_T)$$

~~V_{max} = Maximum permitted velocity, m/sec~~

~~8.706 = Constant~~

~~0.7084 = Constant~~

~~H_T = The net heating value as determined in paragraph (d)(3).~~

Response to Comment 7:

NNEPA believes that while all efforts are made to streamline permit conditions, the NSPS General Control Device Requirements, 40 CFR § 60.18, present different options for compliance, and are referred to in other conditions of the permit. There has been no change to Section II.B as a result of this comment.

Comment 8:

The Permittee has requested the following changes to Section II.C., NSPS Requirements.

II.C. NSPS Requirements (Unit ID No. 17 only)

A. 40 CFR Part 60, Subpart NNN

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart NNN, included as Appendix A of this permit, and 40 CFR §60.18 as specified at Condition II.B of the permit, when using the candlestick flare (EU 17) to comply with Subpart NNN for the **vapor recovery unit (Unit 11) Mega-train ("B") Depropanizer Distillation Unit and the Butamer De-isobutanizer reactors** regulated under New Mexico Environment Department Operating Permit P117-R1 *et seq.*:

~~(1) 40 CFR §60.660 (Applicability and designation of affected facilities)~~

~~(2) 40 CFR §60.661 (Definitions)~~

~~(3) 40 CFR §60.662(b) (Standards)~~

~~(4) 40 CFR §60.663(b) (Monitoring of emissions and operations)~~

~~(5) 40 CFR §60.664(a),(d) and (e) (Test methods and procedures)~~

~~(6) 40 CFR §60.665(b)(3) (Reporting and recordkeeping requirements)~~

~~(7) 40 CFR §60.665(f) (Reporting and recordkeeping requirements)~~

~~(8) 40 CFR §60.665(l)(4) (Reporting and recordkeeping requirements)~~

~~(9) 40 CFR §60.666 (Reconstruction)~~

~~(10) 40 CFR §60.667 (Chemicals affected by Subpart NNN)~~

B. 40 CFR Part 60, Subpart RRR

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart RRR, included as Appendix B of this permit, and 40 CFR §60.18 as specified at Condition II.B of the permit, when using the candlestick flare (EU 17) to comply with Subpart RRR for the **vapor recovery unit (Unit 11)** ~~isobutanizer reactors~~ regulated under New Mexico Environment Department Operating Permit P117-R1 *et seq.*:

- (1) ~~40 CFR §60.700 (Applicability and designation of affected facility)~~
- (2) ~~40 CFR §60.701 (Definitions)~~
- (3) ~~40 CFR §60.702(b) (Standards)~~
- (4) ~~40 CFR §60.703(b) (Monitoring of emissions and operations)~~
- (5) ~~40 CFR §60.704(a),(c) and (d) (Test methods and procedures)~~
- (6) ~~40 CFR §60.705(b)(3) (Reporting and recordkeeping requirements)~~
- (7) ~~40 CFR §60.705(d) and (e) (Reporting and recordkeeping requirements)~~
- (8) ~~40 CFR §60.705(l)(3),(7) (Reporting and recordkeeping requirements)~~
- (9) ~~40 CFR §60.705(s) (Reporting and recordkeeping requirements)~~
- (10) ~~40 CFR §60.706 (Reconstruction)~~
- (11) ~~40 CFR §60.707 (Chemicals affected by subpart RRR)~~

C. 40 CFR Part 60, Subpart KKK

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart KKK, included as Appendix C of this permit, and 40 CFR §60.18 as specified at Condition II.B of the permit, when using the candlestick flare (EU 17) to comply with Subpart KKK for the vapor recovery unit (Unit 11), ~~the truck rack loading system (Unit 16), and the butamer unit (Unit 18)~~ regulated under New Mexico Environment Department Operating Permit P117-R1 *et seq.*:

- (1) ~~40 CFR §60.633(g) (Exceptions)~~

Response to Comment 8:

This comment was discussed with a representative for ConocoPhillips on July 13, 2009. It was agreed that the Conditions would remain as is in the permit with the following exceptions:

A. 40 CFR Part 60, Subpart NNN

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart NNN, included as Appendix A of this permit, and 40 CFR §60.18 as specified at Condition II.B of the permit, when using the candlestick flare (EU 17) to comply with Subpart NNN for the **vapor recovery unit (Unit 11)**, Mega train (“B”) Depropanizer Distillation Unit and the Butamer De isobutanizer reactors regulated under New Mexico Environment Department Operating Permit P117-R1 *et seq.*:

- B. 40 CFR Part 60, Subpart RRR
The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart RRR, included as Appendix B of this permit, and 40 CFR §60.18 as specified at Condition II.B of the permit, when using the candlestick flare (EU 17) to comply with Subpart RRR for the **vapor recovery unit (Unit 11)**, isobutanizer reactors regulated under New Mexico Environment Department Operating Permit P117-R1 *et seq.*:
- C. 40 CFR Part 60, Subpart KKK
The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart KKK, included as Appendix C of this permit, and 40 CFR §60.18 as specified at Condition II.B of the permit, when using the candlestick flare (EU 17) to comply with Subpart KKK for the vapor recovery unit (Unit 11), the truck rack loading system (Unit 16), and the butamer unit (Unit 18) regulated under New Mexico Environment Department Operating Permit P117-R1 *et seq.*:

Comment 9:

The Permittee requested the following changes to Condition II.D.A:

II.D. Monitoring and Testing Requirements [40 CFR § 71.6(a)(3)(i)(B) and (C); 71.6(a)(3)(ii); 71.6 (c)(1)]

- A. At least once per calendar year, the Permittee shall conduct a performance test utilizing Method 22 (Smoke Emissions From Flares) in order to determine compliance with Condition II.B.(a)(1) when the equipment associated with Conditions II.C.A, II.C.B ~~and or~~ II.C.C are venting ~~process~~ gas to the flare. The observer must be knowledgeable with respect to the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. Smoke emissions are defined as a pollutant generated by combustion in a flare and occurring immediately downstream of the flame. Smoke occurring within the flame, but not downstream of the flame, is not considered a smoke emission. The observation period shall be 2 hours, **or the duration of the flaring event, whichever is shorter.**

Response to Comment 9:

Condition II.D.A. has been revised as requested with the exception of adding “or the duration of the flaring event, whichever is shorter”. Method 22 requires the observation period to be 2 hours; NNEPA does not have the authority to shorten the observation period.

Comment 10:

The Permittee suggested adding monitoring for the continuous presence of flame under Condition II.D.

Response to Comment 10:

The NNEPA agrees that a condition should be added under Condition II.D. for monitoring the continuous presence of a flame. Condition II.D.D. has been added as follows:

.....

- D. In order to demonstrate compliance with Condition II.B.(a)(2), the Permittee shall monitor the continuous presence of a flame using the method outlined in Condition II.B(d)(2).**

Comment 11:

Condition III.A. Testing Requirements: Only periodic test requirement is for 60.18; since this is a flare device, it is not possible to provide prior notification of emergency events. ConocoPhillips understands this condition to be general permit language, not applicable here.

Response to Comment 11:

NNEPA agrees that the general permit language for testing is not applicable for the candlestick flare and has deleted Condition III.A. The Permittee is still responsible for complying with all NSPS and 40 CFR § 60.18 requirements. Subsequent conditions were renumbered accordingly and the Table of Contents was revised.

~~**III.A. Testing Requirements [40 CFR § 71.6(a)(3)]**~~

~~In addition to the unit specific testing requirements derived from the applicable requirements for each individual unit contained in Section II of this permit, the Permittee shall comply with the following generally applicable testing requirements as necessary to ensure that the required tests are sufficient for compliance purposes:.~~

- ~~1. Submit to NNEPA a source test plan 30 days prior to any required testing. The source test plan shall include and address the following elements:~~

- ~~1.0 Purpose of the test~~
- ~~2.0 Source Description and Mode of Operation During Test~~
- ~~3.0 Scope of Work Planned for Test~~
- ~~4.0 Schedule/Dates~~
- ~~5.0 Process Data to be Collected During Test~~
- ~~6.0 Sampling and Analysis Procedures~~

- 6.1 Sampling Locations
- 6.2 Test Methods
- 6.3 Analysis Procedures and Laboratory Identification
- 7.0 Quality Assurance Plan
 - 7.1 Calibration Procedures and Frequency
 - 7.2 Sample Recovery and Field Documentation
 - 7.3 Chain of Custody Procedures
 - 7.4 QA/QC Project Flow Chart
- 8.0 Data Processing and Reporting
 - 8.1 Description of Data Handling and QC Procedures
 - 8.2 Report Content

2. ~~Unless otherwise specified by an applicable requirement or permit condition in Section II, all source tests shall be performed at maximum available operating rates (90% to 110% of device design capacity).~~
3. ~~Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test. No adjustments are to be made within two (2) hours of the start of the tests. Any operating adjustments made during a source test, that are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.~~
4. ~~During each test run and for two (2) hours prior to the test and two (2) hours after the completion of the test, the permittee shall record the following information:~~
 - a. ~~Fuel characteristics and/or amount of product processed (if applicable).~~
 - b. ~~Visible emissions.~~
 - c. ~~All parametric data which is required to be monitored in Section II for the emission unit being tested.~~
 - d. ~~Other source specific data identified in Section II such as minimum test length (e.g., one hour, 8 hours, 24 hours, etc.), minimum sample volume, other operating conditions to be monitored, correction of O₂, etc.~~
5. ~~Each source test shall consist of at least three (3) valid test runs and the emission results shall be reported as the arithmetic average of all valid test runs and in the terms of the emission limit. There must be at least 3 valid test runs, unless otherwise specified.~~
6. ~~Source test reports shall be submitted to NNEPA within 60 days of completing any required source test.~~

Comment 12:

The Permittee requested clarification in Condition III.B as follows:

III.B. Recordkeeping Requirements [40 CFR § 71.6 (a)(3)(ii)]

In addition to the unit specific recordkeeping requirements derived from the applicable requirements for each individual unit and contained in Section II, the permittee shall comply with the following generally applicable recordkeeping requirements: **This condition applies only to recordkeeping applicable to the candlestick flare.**

1. The permittee shall keep records of required monitoring information that include the following:
 - a. The date, place, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original ~~strip~~-chart recordings for continuous monitoring instrumentation, **all electronic records**, and copies of all reports required by this permit.

Response to Comment 12:

The language in Condition III.B has been taken directly from 40 CFR § 71. NNEPA recognizes that ConocoPhillips maintains electronic records. However, NNEPA does not have the authority at this time to add the requested change. In addition, it is not necessary to add “this condition applies only to recordkeeping applicable to the candlestick flare.” It has been made clear under Facility Information and in the Statement of Basis that this permit only applies to the candlestick flare. No change has been made to the permit as a result of this comment.

Comment 13:

III.C. Reporting Requirements - Only required monitoring is annual visible emissions. Shouldn't record of deviations from requirement for continuous monitoring for presence of flame be required? (60.18(a)(2))

Response to Comment 13:

Condition III.C. is Standard language. The permittee is required to monitor for continuous presence of flame under 40 CFR § 60.18 (General Control Device Requirements). No change has been made to the permit as a result of this comment.

Comment 14:

The Permittee requested the following changes to Condition III.F.

III.F. Chemical Accident Prevention [Clean Air Act Sections 112(r)(1), 112(r)(3), 112(r)(7) & 40 CFR Part 68]

1. The following activities are considered essential and necessary to satisfy the general duty requirements of section 112(r)(1) of the Act:
 - a. Identify hazards which may result from accidental releases using appropriate hazard assessment techniques.
 - b. Design, maintain, and operate a safe facility.
 - c. Minimize the consequences of accidental releases if they occur.
2. **The Wingate Fractionating Plant** ~~This facility~~ is subject to 40 CFR Part 68 and shall certify annual compliance with all requirements of 40 CFR Part 68, including compliance with the risk management plan (RMP) submitted to USEPA Region VI ~~IV~~. [40 CFR § 68.215]. **The candlestick flare authorized by this permit is not by itself subject to 40 CFR 68 and non-compliance with this condition of this permit shall not constitute a deviation of this permit. This condition is for information only.**

Response to Comment 14:

The candlestick flare is a process flare and a part of the Wingate Fractionating Plant. Although the candlestick flare is in a separate jurisdiction, it is located on contiguous property and is part of a single stationary source with processes subject to 40 CFR Part 68. The candlestick flare has always been subject to 40 CFR Part 68, and will continue to be subject. NNEPA recognizes that ConocoPhillips includes the candlestick flare in its Risk Management Plan for the Wingate Fractionating Plant and finds that approach acceptable. No change has been made to the permit as a result of this comment.

Comment 15:

The Permittee requested the following clarification to Condition IV.S.:

IV.S. Malfunction

NNEPA and US EPA Region 9 shall be notified by telephone within 48 hours following any failure of the candlestick flare ~~secondary control equipment~~ to operate in a normal manner which results in an increase in emissions. In addition, NNEPA and the US EPA Region 9 shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunction or abnormal operation, the date of the initial failure, the period of time of the failure, the cause of the failure, the estimated resultant emissions and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

Response to Comment 15:

Condition IV.S. was revised as follows:

NNEPA and US EPA Region 9 shall be notified by telephone within 48 hours following any failure of the candlestick flare ~~secondary control equipment~~ to operate in a normal manner which results in an increase in emissions. In addition, NNEPA and the US EPA Region 9 shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunction or abnormal operation, the date of the initial failure, the period of time of the failure, the cause of the failure, the estimated resultant emissions and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

Comment 16:

The Permittee requested changes to contact information and source identification in the Statement of Basis as follows:

Permitting Authority: Navajo Nation Environmental Protection Agency

County: Mc Kinley

State: NM

AFS Plant ID: 35-031-84232

Facility: ConocoPhillips Company (Wingate Fractionating Plant **Candlestick Flare**)

Document Type: Draft Statement of Basis

1. Facility Information

a. Permittee

ConocoPhillips Company

Mailing Address:

~~P.O. Box 6003 Three Westlake Park,
550 Westlake Park Blvd~~

Houston, TX 77079
P.O. Box 119
Rehoboth, NM 87322

b. **Facility location**

The Wingate Fractionating Plant is located at #68 El Paso Circle, Gallup, NM 87301. The facility is 6 miles east of Gallup, New Mexico. **The plant is located on private land and is under the jurisdiction of the New Mexico Environment Department (NMED). The candlestick flare, emissions unit 17, is on the reservation of the Navajo Nation, in Section 16 of Township 15-N, Range 17-W. This permit applies only to the candlestick flare.**

e. **Contact information**

~~Facility Contact: Beverly Cox Telephone (505) 863-1023~~
~~Responsible Official: G. Lane Ayers Telephone (505) 632-4906~~
~~Facsimile: (505) 863-1047~~

Technical Contact: Beverly Cox Telephone (505) 324-6194
Facility Contact: Kim Kamps Telephone (505) 863-1023
Responsible Official: G. Lane Ayers Telephone (505) 632-4906
Facsimile: (505) 632-4930

d. **Description of operation**

ConocoPhillips Company, Wingate plant, is a natural gas fractionating plant. The majority of the plant is on private land under the jurisdiction of the State of New Mexico. However a small portion of this facility, **the candlestick flare**, is located on land under the jurisdiction of the Navajo Nation. This application addresses the portion of the plant that is located on tribal land, however the potential emissions from the New Mexico Environment Department Operating Permit No.: P117-R1, issued on April 7, 2008, are referenced. The only piece of equipment located on the Navajo Nation is a candlestick flare; therefore, this permit only applies to that unit. The remainder of the facility is permitted by the New Mexico Environment Department.

~~The facility processes natural gas liquids into different types of fuels. The Wingate Fractionating Plant as a whole is a major source of VOC emissions, pursuant to 40 C.F.R. Part 71, because the VOC potential to emit ("PTE") is greater than the 100 tpy major source threshold. During operation the candlestick flare receives small volumes of hydrocarbons from routine process releases and it is also a secondary control device receiving hydrocarbons from routine and non-routine activities, including failure of the vapor recovery unit (VRU), which is the primary control device for the fractionating plant.~~

The facility processes natural gas liquids into different product streams. The Wingate Fractionating Plant as a whole is a major source of VOC emissions, pursuant to 40 C.F.R. Part 71, because the VOC potential to emit ("PTE") is greater than the 100 tpy major source threshold, considering emissions from both the plant and the potential emissions from the flare. During operation the candlestick flare is a secondary control device receiving hydrocarbons from routine and non-routine activities, including failure or overload of the vapor

recovery unit (VRU), which recovers hydrocarbons and directs unrecovered hydrocarbons to the boiler, unit 19, which is a control device for portions of the fractionating plant.

e. **Permitting History**

The ConocoPhillips Company Fractionator was initially constructed in 1952. The New Mexico Environment Department issued a construction permit **and a number of subsequent revisions** for all of the facility ~~except for~~ **including** the candlestick flare, which was ~~located~~ **constructed in 1972** on the reservation of the Navajo Nation. In 2000 the facility submitted an application identifying the flare (Unit 17) as a major source for VOC based upon previous calculations and data. On December 22, 2001 USEPA Region IX issued a Part 71 permit (NN-OP-00-08) to the facility that covered the candlestick flare unit. **NMED also issued revised NSR and Title V permits not including the candlestick flare.**

Response to Comment 16:

The contact information and source identification in the Statement of Basis have been revised as requested.

Comment 17:

The permittee requested clarification of condition 6 in the Statement of Basis as follows:

6. **Federal Rule Applicability**

....

- (a) New Source Performance Standard (NSPS) for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants (40 CFR 60.630 – 60.636, Subpart KKK): Emission units, identified as Unit 11 (vapor recovery unit), Unit 16 (truck rack system) and Unit 18 (butamer unit), located in NMED jurisdiction and regulated under Operating Permit P117-R1, are subject to 40 CFR 60, Subpart KKK. Emissions from the ~~vapor recovery unit~~, truck rack system and butamer unit are directed to the **vapor recovery unit, where hydrocarbons are recovered for re-introduction in to the processing system. Unrecoverable hydrocarbons are directed to the large boiler (unit 19), in normal operation. When candlestick flare** ~~when there is a failure to these processes, or overload to the processes or~~ **flare. Under 40 CFR 60.633(g), flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.** Therefore, the requirements of 40 CFR 60.18 have been incorporated into the permit.

Response to Comment 17:

Condition 6 of the Statement of Basis has been revised descriptively as requested.

Comment 18:

Why should this permit remain a Title V Permit?

Response to Comment 18:

Title V of the Clean Air Act requires all major sources to obtain a Title V operating permit. CAA § 502(a), 42 U.S.C. § 7661a(a). A major source is defined as “any stationary source (*or any group of stationary sources located within a contiguous area and under common control*)” that, for purposes of the major source currently being permitted, emits or has the potential to emit 100 tons per year or more of a criteria pollutant. CAA § 501(2), 42 U.S.C. § 7661(2) (incorporating 42 U.S.C. § 7602(j)) (emphasis added).

The candlestick flare by itself would not trigger the Title V permit requirement, as its potential to emit, based on a seven-year history, is below 100 tons per year for any criteria pollutant. The candlestick flare may not be considered by itself for Title V purposes, however, because it is a “stationary source located within a contiguous area and under common control” with the remainder of the Wingate Fractionating Plant. Both the flare and the remainder of the plant are owned by ConocoPhillips. The flare receives small volumes of hydrocarbons from routine process releases from the fractionating plant and also serves as a secondary control device for the plant, in the event of failure of the vapor recovery unit. It thus is an integral part of the plant. The Wingate Fractionating Plant has the potential to emit more than 100 tons per year of NO_x, VOCs, and CO and therefore requires a Title V permit.

The unique situation here is that the main portion of the Wingate Fractionating Plant is subject to New Mexico state jurisdiction, but the candlestick flare is on Navajo tribal trust land subject to Navajo jurisdiction. The state does not have jurisdiction over Navajo tribal trust land, and so can not issue a Title V permit that covers the candlestick flare. In fact, U.S. EPA’s approval of New Mexico’s Title V operating permit program specifies that New Mexico’s program complies “with Federal requirements for approvable State and local programs to issue operating permits to all major stationary sources, and to certain other sources *with the exception of Indian Lands.*” 60 Fed. Reg. 60,032 (Nov. 26, 1996) (emphasis added); *see also* 59 Fed. Reg. 59,656 (Nov. 18, 1994) (same language with regard to interim approval). For this reason, two Title V permits are required for the Wingate Fractionating Plant: one issued by New Mexico for all but the candlestick flare, and one issued by NNEPA for the candlestick flare.