



NAVAJO NATION ENVIRONMENTAL PROTECTION AGENCY

Navajo Nation Air Quality Control Program

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Detail Information

Permitting Authority: Navajo Nation Environmental Protection Agency

County: Mc Kinley

State: NM

AFS Plant ID: 35-031-84232

Facility: ConocoPhillips Company (Wingate Fractionating Plant)

Document Type: Draft Statement of Basis

**PART 71 FEDERAL OPERATING PERMIT
DRAFT STATEMENT OF BASIS
ConocoPhillips Company Wingate Fractionating Plant**

Permit No. NN OP 05-011

1. Facility Information

a. Permittee

ConocoPhillips Company

Mailing Address:

P.O. Box 6003 Three Westlake Park,
550 Westlake Park Blvd
Houston, TX 77079

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, and is partially located on the reservation of the Navajo Nation, in Section 16 of Township 15-N, Range 17-W.

c. Contact information

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

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 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.

e. Permitting History

The ConocoPhillips Company Fractionator was initially constructed in 1952. The New Mexico Environment Department issued a construction permit for all of the facility except for the candlestick flare which was located 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.

NNEPA received a Part 71 renewal application on May 23, 2005. On February 9, 2009, NNEPA received a revised Part 71 renewal application. As part of the revised Part 71 renewal application, ConocoPhillips revised the PTE of VOC from the flare to reflect maximum historic flare operations, inclusive of a safety factor, instead of an unrealistic assumption of continuous full capacity flaring and resultant product loss. While the resultant PTE of VOC at 34.1 tons per year is greater than that determined in original Part 71 Permit NN-OP-00-08 (i.e., 19.1 tons per year), this increase does not reflect a modification to the flare but is only a correction to the method of computing regulated pollutant emission rates from the flare. Emission calculations submitted by ConocoPhillips in the revised Part 71 renewal application support the revision to the method of calculating PTE of VOC from the flare (see Attachment A to this SOB for emission calculations). This request to modify the permit has been combined with the renewal application.

There are no other emission sources at this portion of the facility, with the exception of fugitive VOC emissions from equipment leaks.

f. Permitted Emission Units and Control Equipment

Emission Unit I.D. No.	Unit Description	Maximum Capacity	Associated Control Device	Construction Date
17	Candlestick process flare	63.6 Mscf/hr 25 MMscf/yr (including safety factor)	N/A	10/23/72

g. Unpermitted Emission Units and Control Equipment

No unpermitted emission units were found to be operating at this source during this review process.

h. New Emission Units and Control Equipment

There are no new emission units or pollution control equipment included in this Part 71 operating permit renewal.

i. Insignificant Activities

This stationary source also includes the following insignificant activities as defined in 40 CFR 71.5(c)(11)(ii):

A. Fugitive VOC emissions from connections, flanges, open-ended lines, valves, and other components associated with the flare.

j. Enforcement Issues

There are no enforcement issues pending.

k. Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Attachment A of this document.

2. Potential to Emit after Issuance

Potential to emit (PTE) means the maximum capacity of a facility to emit any air pollutant (Clean Air Act criteria pollutants or hazardous air pollutants) under its physical and operational design. Any physical or operational limitation on the maximum capacity of this plant to emit an air pollutant, including air pollution control equipment and restriction on hours of operation or on the type or amount of material combusted or processed, may be treated as part of its design if the limitation is enforceable by US EPA or NNEPA. Actual emissions may be lower than PTE.

Process/Facility	Potential to Emit (tons/year)						
	PM	PM10	SO ₂	NO _x	VOC	CO	HAPs
Unit 17 Candlestick flare	0.01	0.01	0.01	5.22	34.13	10.42	< 10 single < 25 total
NMED Op. Permit No.: P117- R1*	4.93	4.93	0.66	394.6	189.9	308.8	< 10 single < 25 total
PTE of Entire Source (NMED + NNEPA)	4.94	4.94	0.67	399.82	224.03	319.22	< 10 single < 25 total
Title V (Part 71) Major Source Thresholds	NA	100	100	100	100	100	10 for single HAP/25 for total HAPs

*Note: Potential to emit based on NMED Operating permit No.: P117-R1, issued April 7, 2008. PM is assumed to equal PM10.

- (a) The potential to emit of NO_x, VOC and CO are equal to or greater than 100 tons per year. Therefore, this source is considered a major source under 40 CFR Part 71 (Federal Operating Permit Program).
- (b) The Wingate Fractionating Plant was constructed in 1952 and the candlestick flare (Unit 17) was constructed in 1972. The Plant is located in an attainment area and it is not in one of the 28 source categories defined in 40 CFR 52.21(b)(1)(iii). The source-wide potential to emit of NO_x and CO are each greater than 250 tons per year. Therefore, this source is an existing major stationary source under the Prevention of Significant Deterioration (PSD) program.

3. **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 emission inventory data submitted by the Permittee.

Pollutant	Actual Emissions (tons/year)
PM	0
PM10	0
SO2	0
VOC	19.1
NOX	3.1
CO	6.1
n-Hexane	0.41
Benzene	0.1
Toluene	0.1

4. **Tribe Information**

a. **General**

The reservation of the Navajo Nation is the largest Indian reservation in the country, covering more than 26,000 square miles in three states: Arizona, Utah, and New Mexico. The Navajo Nation currently is home to more than 260,000 people. Industries on the reservation include oil and natural gas production and processing, coal and uranium mining, and tourism.

b. **Local air quality and attainment status**

All areas of the Navajo Nation are currently designated as attainment or unclassifiable for all pollutants for which a National Ambient Air Quality Standard (NAAQS) has been established.

5. **Prevention of Significant Deterioration (PSD) Applicability**

ConocoPhillips Wingate Fractionating Plant was originally constructed in 1952, and the candlestick flare, located in Navajo Nation jurisdiction, was constructed in 1972. Modifications to this source are outlined in the Statement of Basis for the Title V renewal permit issued by NMED (Op. Permit No.: P117-R1). This existing source is not one of the 28 listed source categories defined in 40 CFR 52.21(b)(1)(iii) and has the potential to emit NO_x and CO greater than 250 tons per year. Therefore, this source is an existing PSD major source. Since there have been no major source modifications to the flare, however, the PSD requirements do not apply and therefore are not included in this permit.

6. **Federal Rule Applicability**

USEPA and NNEPA recognize that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into Part 71 permits.

(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 candlestick flare when there is a failure to these processes, or overload to the processes. 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.

(b) New Source Performance Standard (NSPS) - Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40 CFR 60, Subpart NNN):

The Mega train (“B”) Depropanizer Distillation Unit, located in NMED jurisdiction and regulated under Operating Permit P117-R1, was constructed or modified after December 30, 1983 and the Butamer De isobutanizer reactors, located in NMED jurisdiction and regulated under Operating Permit P117-R1, were constructed or modified after June 29, 1990. These units are affected facilities under 40 CFR 60, Subpart NNN (see EPA Region 6 applicability determination letter dated 12/14/06).

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart NNN, included as Appendix A of the 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 Mega train (“B”) Depropanizer Distillation Unit and the Butamer De isobutanizer reactors regulated under New Mexico Environment Department Operating Permit P117-R1:

- (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)

(c) New Source Performance Standard (NSPS) - Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (40 CFR 60, Subpart RRR):

The isobutanizer reactors, located in NMED jurisdiction and regulated under Operating Permit P117-R1, were constructed or modified after June 29, 1990 and are affected facilities subject to 40 CFR 60, Subpart RRR (see EPA Region 6 applicability determination letter dated 12/14/06).

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart RRR, included as Appendix B of the 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 isobutanizer reactors regulated under New Mexico Environment Department Operating Permit P117-R1:

- (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)

(d) New Source Performance Standard (NSPS) – General Provisions (40 CFR Part 60, Subpart A):

This source is subject to the General Provisions of 40 CFR Part 60, Subpart A. As such, the requirements of § 60.18, general control device and work practice requirements for the flare, have been incorporated into the permit. The Permittee shall continue to comply with these applicable requirements.

(e) Chemical Accident Prevention Program

This source is subject to the Chemical Accident Prevention program regulated under Section 112(r) of the Clean Air Act and 40 CFR Part 68. A risk management plan (“RMP”) has been submitted to USEPA Region VI and applies to the facility as a whole; a separate RMP for the candlestick flare is not required.

(f) Asbestos (40 CFR 61, Subpart M)

The Permittee is subject to the requirements of Subpart M. The applicable requirements are specified in the permit.

(g) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPS) requirements included in this permit.

(h) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The potential to emit of VOC from the flare, which may not be a PSEU since it is a control device in and of itself, is less than 100 tons per year. Therefore CAM does not apply.

7. Endangered Species Act

Pursuant to Section 7 of the Endangered Species Act (ESA), 16 U.S.C. § 1536, and its implementing regulations at 50 CFR Part 402, USEPA is required to ensure that any action authorized, funded, or carried out by USEPA is not likely to jeopardize the continued existence of any Federally listed endangered species or threatened species or result in the destruction or adverse modification of such species’ designated critical habitat. NNEPA is issuing this federal Part 71 permit to ConocoPhillips for the candlestick flare unit pursuant to a delegation from USEPA. However, this permit does not authorize the construction of new emission units, or emission increases from the existing unit, nor does it otherwise authorize any other physical modifications to

the unit or its operations. Therefore, NNEPA and USEPA have concluded that the issuance of this permit will have no effect on listed species or their critical habitat.

8. Use of Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source, NNEPA, and EPA in such determinations.

9. NNEPA Authority

On October 15, 2004 USEPA delegated authority to administer the federal Title V operating permits program (Part 71) to the Navajo Nation Environmental Protection Agency. For more information concerning this delegation, please visit the following website: <http://www.epa.gov/region09/air/permit/permitdelegation.html>

10. Public Participation

a. Public Notice

As described in 40 C.F.R. § 71.11(a)(5) and Navajo Nation Operating Permit Regulations (“NNOPR”) § 403(A), all draft operating permits shall be publicly noticed and made available for public comment. The public notice of permit actions and public comment period is described in 40 C.F.R. § 71.11(d) and NNOPR Subpart IV.

There is a 30-day public comment period for actions pertaining to a draft permit. Public notice will be given for this draft permit by mailing a copy of the notice to the permit applicant and the affected states (Arizona and New Mexico). A copy of the notice will also be provided to all persons who submit a written request to the address below to be included on the mailing list.

Charlene Nelson
Navajo Nation Operating Permit Program
P.O. Box 529
Fort Defiance, AZ 86504
E-mail: charlenenelson@navajo.org

Public notice will be published in the Gallup Independent, the Navajo Times, and the Farmington Daily Times.

b. Opportunity for Comment

Members of the public may review a copy of the draft permit prepared by NNEPA, this statement of basis for the draft permit, the application, and all supporting materials submitted by the source at:

Navajo Nation Air Quality Control Program
Route 112 North, Bldg No. F004-51
Fort Defiance, AZ 86504

Copies of the draft permit and this statement of basis can also be obtained free of charge from NNEPA's website: www.navajonationepa.org/airqty/permits

or by contacting Charlene Nelson at the NNAQCP address listed above or by telephone at (928) 729-4247. All documents will be available for review at the NNAQCP office indicated above during regular business hours.

If you have comments on the draft permit, you must submit them during the 30-day public comment period. All comments received during the public comment period and all comments made at any public hearing will be considered in arriving at a final decision on the permit. The final permit is a public record that can be obtained by request. A statement of reason for changes made to the draft permit and responses to comments received will be sent to persons who commented on the draft permit.

If you believe that any condition of the draft permit is inappropriate, you must raise all reasonably ascertainable issues and submit all argument supporting your position by the end of the comment period. Any supporting documents must be included in full and may not be incorporated by reference, unless they are already part of the administrative record for this permit or consist of tribal, state or federal statutes or regulations, or other generally available referenced materials.

c. Opportunity to Request a Hearing

A person may submit a written request for a public hearing to Charlene Nelson, at the address listed above, by stating the nature of the issues to be raised at the public hearing. Based on the number of hearing requests received, NNEPA will hold a public hearing whenever it finds there is a significant degree of public interest in a draft operating permit. If a public hearing is held, NNEPA will provide public notice of the hearing and any person may submit oral or written statements and data concerning the draft permit.

d. Mailing List

If you would like to be added to our mailing list to be informed of future actions on this or other Clean Air Act permits issued on Navajo Nation, please send your name and address to Charlene Nelson at the address listed above.

ATTACHMENT A - EMISSION CALCULATIONS