# WASHINGTON STATE DEPARTMENT OF ECOLOGY POST OFFICE BOX 47600 OLYMPIA, WASHINGTON 98504-7600

IN THE MATTER OF:	
	NO. PSD-00-02, Amendment 8
Phillips 66	
Ferndale Refinery	FINAL APPROVAL
P.O. Box 8	OF PSD APPLICATION
Ferndale, Washington 98248-0008	

This approval (Amendment 8) is issued pursuant to the regulations set forth in the Washington Administrative Code 173-400-700. All previous approvals were issued pursuant to the United States Environmental Protection Agency (EPA) regulations for the Prevention of Significant Deterioration (PSD) set forth in Title 40, Code of Federal Regulations, Part 52, and regulations set forth in the Washington Administrative Code 173-400-141 or 173-400-700 beginning in 2005. Based upon the Notice of Construction Application (NOC) for PSD-00-02, Amendment 8 dated April 23, 2015, submitted by Phillips 66 the Washington State Department of Ecology (Ecology), now finds the following:

#### **FINDINGS**

- 1. Amendment 8 is an administrative amendment that requests additional language changes so that the permit better reflects current operations under the refinery's 2005 federal Clean Air Act based Consent Decree. Several Consent Decree requirements were of a temporary nature to allow the refinery to reach certain compliance goals. Now that those conditions have been satisfied, they are no longer applicable or needed. No permit limits are affected.
- 2. Amendment 7 was an administrative amendment that accomplished the following three changes: reflected the facility owner's name change from the ConocoPhillips Company to Phillips 66; expanded Condition 2 for the Fluidized Catalytic Cracking Unit (FCCU) and carbon monoxide (CO) boiler to include a consent decree short-term nitrogen oxides (NO<sub>X</sub>) limit of 123.2 ppmvd at 0 percent O<sub>2</sub> (7-day rolling average); and also expanded Condition 2 to include consent decree long term NO<sub>X</sub> limit of 96.1 ppmvd at 0 percent O<sub>2</sub> (365-day rolling average).
- 3. Amendment 6 was an administrative amendment that corrected a mistake in the wording that defined the flexibility of the time period between the annual tests required by existing Approval Conditions 13 and 14. The existing time period wording was incompatible with annual testing periods. There were no changes to the required testing interval or required test methods. ConocoPhillips (now Phillips 66) requested this change in a letter dated May 18, 2011, as a part of their Title V permit renewal process.

- 4. Amendment 5 was an administrative amendment. Approval Condition 14 was changed from semi-annual to annual testing, and Approval Condition 21b was changed to submit testing reports within 30 days of the end of the month. ConocoPhillips (now Phillips 66) requested this amendment because they identified a discrepancy between this approval and the EPA Consent Decree.
- 5. Amendment 4 was an administrative amendment, extending the compliance date for Approval Condition 7 from December 31, 2006, until June 30, 2007. This compliance date was based upon an EPA Consent Decree. ConocoPhillips (now Phillips 66) requested this amendment because they had difficulty scheduling the on-site construction of this project.
- 6. Amendment 3 was based upon an increase in throughput from the FCCU from a nominal 30,000 barrels per day (bpd) to a nominal 35,000 bpd and an increase of FCCU coke burn rate to 29,000 lb/hr. Although the permit application stated that particulate matter (PM) would not exceed the PSD Significant Emission Rate (SER), the facility had not been able to demonstrate compliance with the PM and particulate matter smaller than 10 microns in diameter (PM<sub>10</sub>) emission limits for the FCCU established in Northwest Clean Air Agency's (NWCAA's) Order of Approval to Construct (OAC #733a). Including PM in the permit modification restricted emissions from the project to below the significance levels for PM and PM<sub>10</sub>, thereby avoiding the requirements of the PSD program for PM and PM<sub>10</sub>. In addition, it was discovered that CO was incorrectly removed from the permit as part of Amendment 1. CO was added back into the permit as a result of this action.
- 7. Amendment 2 was an administrative amendment that changed the company name and simplified the performance testing requirements in Approval Condition 2. On April 21, 2003, Ecology was informed that the performance test method specified in Approval Condition 2 limited the source test to one specific testing procedure. Ecology agreed to change the reference; thus allowing more flexibility in performance testing.
- 8. Amendment 1 was based upon the application received on January 28, 2002, and determined to be complete on March 14, 2002. The amendment proposed the S Zorb process (licensed by ConocoPhillips; now Phillips 66) as a replacement for the recently permitted hydrodesulfurizer. In addition to the S Zorb replacement, two heaters (heavy HCC gasoline stripper reboiler and the heavy FCC gasoline HDS feed heater) were combined into one heater (cat gasoline desulfurizer feed heater). Removing the two heaters resulted in emissions of CO below the PSD significance rates. CO emissions were no longer contained in this PSD permit. No emission increases were associated with this amendment.
- 9. The original permit was based upon an application received on April 26, 2000, and determined to be complete on August 8, 2000. Below is a description of the project.

- 10. Amendment 3 added new Approval Conditions 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, and 16.
- 11. Phillips 66 operates an oil refinery in Ferndale, Washington.
- 12. The original project consisted of two smaller projects. The Ferndale Upgrade Project and the Clean Fuels Project.
- 13. The Ferndale Upgrade Project consisted of installing a new nominally 30,000 bpd FCCU (now estimated at 35,000 bpd), CO boiler, and alkylation unit feed treater. The gas plant was modified to accommodate the new flow from the FCCU.
- 14. The Clean Fuels Project involved revamping the existing No. 2 hydrofiner to treat the light straight-run gasoline. Additionally, a new nominally 17,500 bpd cat gasoline desulfurizer was constructed to treat fluidized catalytic cracked naphtha, and a new Merox contactor to treat the light fluidized catalytic cracked naphtha.
- 15. These projects are subject to the following New Source Performance Standards (NSPS): Subpart Db (Standards of Performance or Industrial Commercial Institutional Steam Generating Units) and Subpart J (Standards of Performance for Petroleum Refineries).
- 16. Phillips 66 (FNA: ConocoPhillips) is one of the 28 source categories subject to PSD permitting if potential emissions of a criteria pollutant exceed 100 tons per year (tpy).
- 17. Phillips 66 (FNA: ConocoPhillips) is a major stationary source that emits more than 100 tons of pollutants per year.
- 18. Amendment 3 qualified as a major modification because NO<sub>X</sub>, CO, and PM<sub>10</sub> have a "significant" emissions increase greater than 40, 100, and 15 tpy, respectively.
- 19. Even though the emission increase of PM is below the PSD significant emission rate of 25 tpy, PM emission limits are included in this permit.
- 20. The emissions of all other air pollutants from the proposed modification are subject to review under Chapter 173-400 WAC and Chapter 173-460 WAC by the NWCAA.
- 21. In the original permit, ConocoPhillips (now Phillips 66) elected to take a federally enforceable limit on the natural gas fired in the CO boiler limiting the boiler to an annual capacity factor of 10 percent for natural gas. This annual capacity factor exempts the boiler from the standards for NO<sub>X</sub> emissions under 40 CFR 60.44b(a) and 60.44b(e).
- 22. Several of the heaters are not able to reach their full capabilities due to undersized burners. Emissions from those units have been calculated below the units rated potential. The limitations are listed in Appendix A to this permit.

- 23. The project in Amendment 3 resulted in an increase of up to 499.63 tpy of NO<sub>X</sub>.
- 24. An ultralow low NO<sub>X</sub> burner has been determined to be Best Available Control Technology (BACT) for the control of NO<sub>X</sub> from the cat gasoline desulfurizer feed heater.
- 25. Proper operation has been determined to be BACT for the control of NO<sub>X</sub> from the FCCU.
- 26. Selective Non-Catalytic Reduction has been determined to be BACT for the control of NO<sub>X</sub> from auxiliary firing from the CO boiler.
- 27. Good operating practices have been selected as BACT for the control of  $NO_X$  from the sulfur recovery unit.
- 28. The project in Amendment 3 resulted in a net emissions increase of up to 332.4 tpy of CO.
- 29. A thermal oxidizer (CO boiler) has been selected to be BACT for control of CO emissions from the FCCU.
- 30. Good Combustion Practices has been determined to be BACT for the control of CO from the CO boiler.
- 31. Good Combustion Practices has been selected to be BACT for the control of CO emissions from the SRU.
- 32. The project in Amendment 3 resulted in a net emissions increase of up to 29.54 tpy of PM<sub>10</sub>.
- 33. The project in Amendment 3 resulted in a net emissions increase of up to 10.14 tpy of PM.
- 34. A wet gas scrubber has been selected to be BACT for controlling PM/PM<sub>10</sub> emissions from the FCCU.
- 35. The project is located in an area that has been designated Class II for the purposes of PSD evaluation and is located approximately 75 km from the North Cascades National Park and 100 km from the Glacier Peak Wilderness Area, the nearest Class I areas.
- 36. The project is located in an area that is currently designated in attainment for all national air quality standards and all state air quality standards.

- 37. The ambient impacts of the proposed increase in emissions associated with Amendment 3 were determined with the EPA's Industrial Source Complex Prime Model and CALPUFF Model in screening mode.
- 38. Modeling results show that there was an increase of  $NO_X$  of approximately 0.09 micrograms per cubic meter ( $\mu g/m^3$ ) (annual average) in the North Cascade National Park due to the original project. There is no change in the increase associated with Amendment 1 or with administrative Amendments 2, 4, 5, 6, 7 and 8.
- 39. Amendment 3 had no significant impact on ambient air quality.
- 40. The project will not have a noticeable effect on industrial, commercial, or residential growth in the Ferndale area.
- 41. Visibility will not be impaired in any Class 1 area due to the project.
- 42. Based upon the Technical Support Document originally dated April 11, 2005, for PSD-00-02, Amendment 3 (updated September 2014 to reflect administrative Amendments 4, 5, 6, and 7), and updated in August 2015 to reflect Amendment 8, Ecology finds that all requirements for PSD have been satisfied. Approval of the PSD application is granted subject to the following conditions.

## APPROVAL CONDITIONS

- 1. Emissions of NO<sub>X</sub> from the cat gasoline desulfurizer feed heater shall not exceed 17 ppmdv at seven percent O<sub>2</sub> over a 1-hour averaging period and 5.1 tpy over a 12-month rolling total. Initial compliance shall be determined in accordance with EPA Reference Method 7E.
- 2. Combined NO<sub>X</sub> emissions from the FCCU and CO boiler, shall not exceed 127 ppmdv at seven percent O<sub>2</sub> over a 30-day rolling averaging period and 308.10 tpy over a 12-month rolling total. Phillips 66 is required to comply with the following June 3, 2014, EPA determination<sup>1</sup> which includes long- and short-term NO<sub>X</sub> limits and requirements:
  - a) The long-term limit shall be 96.1 ppmvd NO<sub>X</sub> at zero percent O<sub>2</sub> on a 365-day rolling average basis. The long-term limit shall apply at all times (including during start-up, shutdown, and malfunction) that the FCCU and/or CO boiler are operating.
  - b) The short-term limit shall be 123.2 ppmvd NO<sub>X</sub> at zero percent O<sub>2</sub> on a 7-day rolling average basis. The short-term limit shall exclude periods of start-up, shutdown, and

<sup>&</sup>lt;sup>1</sup> From: Phillip Brooks, Director Air Enforcement Division, EPA to: Tim Goedeker, Program Manager, US Consent Decrees, Phillips 66 Company. Re: United States et al. v. ConocoPhillips Co., NO. H-05-258 (S.D. Tex) - Final FCCU NO<sub>X</sub> Limits for the Phillips 66 Ferndale Refinery.

- malfunction, but shall apply at all other times that the FCCU and/or CO boiler are operating.
- c) For days in which both the FCCU and CO boiler are not operating, no NO<sub>X</sub> values shall be used in the averages, and those periods shall be skipped in determining the 7-day and 365-day averages.
- 3. Emissions of NO<sub>X</sub> from the sulfur recovery unit shall not exceed 42.2 ppmdv at seven percent O<sub>2</sub> over a 1-hour averaging period and 9.88 tpy. Initial compliance shall be determined by EPA Reference Method 7E.
- 4. Emissions of CO from the cat gasoline desulfurizer feed heater shall not exceed 0.0824 lb/MMBtu over a 1-hour averaging period and 14.4 tpy over a 12-month rolling total. Initial compliance shall be determined in accordance with EPA Reference Method 10, 10A, or 10B.
- 5. Combined CO emissions from the FCCU and CO boiler shall not exceed 500 ppmdv at zero percent O<sub>2</sub> over a 1-hour averaging period and 100 ppmdv at zero percent O<sub>2</sub> over a 365-day rolling average.
- 6. Emissions of CO from the Sulfur Recovery Unit shall not exceed 57.1 ppmdv at seven percent O<sub>2</sub> over a 1-hour averaging period and 8.30 tpy over a 12-month rolling total. Initial compliance shall be determined in accordance with EPA Reference Method 10.
- 7. Combined PM/PM<sub>10</sub> emissions from the FCCU and CO boiler shall not exceed 0.50 lb/1000 lb coke burn-off over a rolling 3-hour average and 0.020 grains per dry standard cubic foot corrected to seven percent O<sub>2</sub> over a rolling 3-hour average.
- 8. Compliance with Approval Conditions 1 and 3 shall be demonstrated by yearly source testing in accordance with EPA Reference Method 7E as found in 40 CFR Part 60, Appendix A, or an alternative approved method. Source testing shall be performed no sooner than 10 months after the previous test and no later than 13 months after the previous test.
- 9. Compliance with Approval Condition 2 shall be demonstrated by a continuous emission monitor for NO<sub>X</sub> meeting the performance specifications of 40 CFR Part 60, Appendix B, and quality control/quality assurance requirements of 40 CFR Part 60, Appendix F.
- 10. Compliance with Approval Condition 5 shall be demonstrated by a Continuous Emission Monitor for CO meeting the performance specifications of 40 CFR Part 60, Appendix B, and quality control/quality assurance requirements of 40 CFR Part 60, Appendix F.
- 11. Compliance with Approval Conditions 4 and 6 shall be demonstrated by yearly source testing in accordance with EPA Reference Method 10, as found in 40 CFR Part 60,

Appendix A, or an alternative approved method. Phillips 66 will identify a surrogate parameter (such as fuel usage) and multiply it by the emission factor derived during the previous source test. Source testing shall be performed no sooner than 10 months after the previous test and no later than 13 months after the previous test.

- 12. Compliance with Approval Condition 7 shall be demonstrated by annual source testing in accordance with EPA Reference Method 5B, as found in 40 CFR Part 60, Appendix A, or an alternative approved method. Source testing shall be performed no sooner than 10 months after the previous test and no later than 13 months after the previous test. Source testing shall be performed at maximum normal FCCU feed rates.
- 13. Within 90 days of start-up, Phillips 66 shall conduct performance test for NO<sub>X</sub> emissions from the cat gasoline desulfurizer feed heater, combined emissions from the FCCU and CO boiler and the sulfur recovery unit, conducted by an independent testing firm. A test plan shall be submitted to Ecology for approval at least 30 days prior to testing. The term start-up is defined by 40 CFR 60.2.
- 14. Use of natural gas shall be limited to 111,252 MMBtu/yr, over a 12-month rolling total.
- 15. The maximum firing rate of the cat gasoline desulfurizer feed heater, FCC combustion air heater, cat gasoline desulfurizer feed heater, CO boiler, and sulfur recover unit shall be limited to the values listed in Appendix A.
- 16. Within 90 days of initial start-up of the boiler, Phillips 66 shall identify boiler operational parameters and practices that have been described as "good combustion practice." These operational parameters and practices shall be included in an operation and maintenance (O&M) manual for the boiler. The O&M manual shall also include a description of records that will be maintained to insure the continuous application of "good combustion practice." The O&M manual shall be maintained by Phillips 66 and be available for review by state, federal, and local agencies. Emissions that result from a failure to follow the requirements of the O&M manual may be considered credible evidence that emission violations have occurred.
- 17. Phillips 66 shall report the following monitoring data to the NWCAA and Ecology. It will no longer be necessary to report to Ecology when PSD compliance and enforcement delegated NWCAA or once the NWCAA has issued a Title V permit.
  - a) Submit the performance test data from the initial performance test and the performance evaluation of the continuous emission monitor's using the applicable performance specifications in 40 CFR Appendix B.
  - b) Submit a report within 30 days of the end of each calendar month, or on another approved reporting schedule, and in the format approved by Ecology, including the following:

- 1) Calendar date.
- 2) Average NO<sub>X</sub>, CO, and PM/PM<sub>10</sub> emission rates from the FCC/CO boiler wet gas scrubber.
- 3) Identification of any steam generating days for which NO<sub>X</sub> data were not obtained, including reasons for not obtaining sufficient data and description of corrective actions taken.
- 4) Identification of times emission data are excluded from the calculated average emission rate and the reasons for excluding the data.
- c) Submittal of monthly reports satisfies the quarterly reporting requirements of 40 CFR 60.49b, except that Phillips 66 shall submit a quarterly report, within 30 days after the end of each calendar quarter, including the following continuous emission monitor test data:
  - 1) Days for which data were not collected.
  - 2) Reasons for which data were not collected.
  - 3) Identification of times when the pollutant concentration exceeds span of the continuous emission monitor.
  - 4) Description of any modifications to the continuous emission monitor system that could affect the ability of the system to comply with performance specifications 2 or 3.
  - 5) Results of any continuous emission monitor drift tests.
- d) In addition, Phillips 66 shall maintain monitoring records on-site for at least five years and shall submit:
  - 1) Excess emission reports to Ecology and the NWCAA, as appropriate.
  - 2) Results of any compliance source tests.
- 18. Any activity, which is undertaken by the company or others, in a manner, which is inconsistent with the application and this determination, shall be subject to enforcement under the applicable regulations.
- 19. Access to the source by the EPA, state, and local regulatory personnel shall be permitted upon request for the purposes of compliance assurance inspections. Failure to allow such access is grounds for an enforcement action.

- 20. This approval shall become invalid if construction of the project is not commenced within eighteen (18) months after receipt of the final approval, or if construction of the facility is discontinued for a period of eighteen (18) months, unless Ecology extends the 18-month period upon satisfactorily showing that an extension is justified, pursuant to WAC 173-400-730(5).
- 21. A PSD permit, any conditions contained in a PSD permit, or the denial of PSD permit may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW.

Prepared by:

Robert C. Burmark, P.E.

Science and Engineering Section

Air Quality Program

Washington State Department of Ecology

Approved by:

Stuart A. Clark

Air Quality Program Manager

Washington State Department of Ecology

9/15/15

Date

#### APPENDIX A

Unit	WEDS ID#	Maximum Firing Rate (MMBtu/hr) Unless Otherwise Noted
Sulfur recovery unit	.17	23
Cat gasoline desulfurizer feed heater	Α	40
FCC combustion air heater	С	70
CO boiler	E	109*
* Applies when auxiliary firing fuel gas.		

# APPENDIX B

Emission Limits				
Emissions	Cat Gas Desulfurizer Feed Heater	FCCU & CO Boiler	SRU	
NOx	17 ppmdv & 5.1 tpy	<ul> <li>123.2 ppmvd NO<sub>x</sub> at 0% O<sub>2</sub> on a 7-day rolling average;</li> <li>127 ppmdv at 7% O<sub>2</sub> over a 30-day rolling average;</li> <li>96.1 ppmvd at 0% O<sub>2</sub> on a 365-day rolling average;</li> <li>308.10 tpy (12-month rolling total);</li> </ul>	42.2 ppmdv & 9.88 tpy	
СО	0.0842 lb/MMBtu & 14.4 tpy	500 ppmdv (1-hr) 100 ppmdv (365-day)	57.1 ppmdv & 8.3 tpy	
PM <sub>10</sub>		0.50 lb/1000 lb coke burned**		

# WASHINGTON STATE DEPARTMENT OF ECOLOGY POST OFFICE BOX 47600 OLYMPIA, WASHINGTON 98504-7600

IN THE MATTER OF:		
	]	NO. PSD-05-01
ConocoPhillips Company	Ī	
Ferndale Refinery	j	FINAL APPROVAL
3901 Unick Road, P.O. Box 8	Ī	OF PSD APPLICATION
Ferndale, Washington 98248	Ī	

Pursuant to the federal Prevention of Significant Deterioration (PSD) regulations, 40 Code of Federal Regulations (CFR) 52.21, and the Washington State Department of Ecology (Ecology) general regulations for air pollution sources, Chapter 173-400 Washington Administrative Code (WAC), Ecology now finds the following:

### **FINDINGS**

- 1 The ConocoPhillips Company (ConocoPhillips) has applied to modify its refinery to increase their crude charge, fluidized catalytic cracking (FCC) charge, and sulfur removal capacity near Ferndale, Washington.
- 2. A PSD application was submitted on January 6, 2005. Supplemental information was received on February 23, 2005, March 29, 2005, May, 18, 2005, June 22, 2005, and August, 5, 2005. On September 23, 2005, the application was found to be sufficiently complete to begin developing permit conditions.
- 3. ConocoPhillips refinery is located in the city of Ferndale near Whatcom County, Washington The Ferndale Refinery is situated in Sections 32 and 33, Township 39N, Range 1E, Willamette Meridian.
- 4. The facility is located in a Class II Area that is designated as "attainment or unclassified" for the purpose of PSD permitting for all pollutants. The distances to the nearest Class I Areas are shown in the following table:

Class I Area	Distance in kilometers
North Cascades National Park	75
Glacier Peak Wilderness Area	100

- 5. The proposed project, referred to as the Crude/Fluidized Catalytic Cracking/Sulfur Recovery Unit (CFS) project, consists of the following components:
  - > Increasing crude charge from 98 thousand barrels per day (MBPD) to 105 MBPD.
  - ➤ Increasing FCC charge from 35 MBPD to 36.5 MBPD.

- > Increasing primary amine system capacity.
- > Installing a new SRU for reliability and additional sulfur removal capacity.
- 6. The Ferndale Refinery is one of the 28-listed sources with a 100-ton major stationary source threshold.
- 7. The Ferndale Refinery qualifies as a major stationary source because it emits or has the potential to emit greater than 100 tons per year of PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>X</sub>, VOC, and CO
- 8. ConocoPhillips has elected to "Net Out" of PSD review for SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> A 5-year contemporaneous analysis resulted in the following analysis:

	SO <sub>2</sub> in tons per year	H <sub>2</sub> SO <sub>4</sub> in tons per year
Project Emissions	, 661.02	11.37
Emissions Increases	0.00	0.00
Emission Decreases	(1426.69)	(24.47)
Net Emission Increase	(765.67)	(13.10)
PSD SER	40	7
PSD Triggered	NO	NO

9. The table below compares the project emissions to the PSD Significant Emission Rates (SER).

TRANSPORTER CONTRACTOR	PM	PM <sub>10</sub>	SO <sub>2</sub>	$NO_{X}$	VOC	CO	$H_2SO_4$
Project Emissions in tons per	57.52	18.45	(765.67)	463.95	153.08	357.41	(13.10)
year					T. T		
PSD Significant Emission Rate	25	15	40	40	40	100	7
(SER)							
Subject to PSD Y or N	Y	Y	N	Y	Y	Y	N

- 10. Emission increases of all other pollutants are subject to New Source Review (NSR) by the Northwest Clean Air Agency (NWCAA).
- 11. The SRU is being physically modified and is therefore subject to Best Available Control Technology (BACT). BACT for the SRU has been selected to be:

<b>Emission Unit</b>	Pollutant	Proposed BACT
New SRU	NO <sub>X</sub>	Low-NO <sub>X</sub> Burners 42.2 ppmdv @7% 0 <sub>2</sub> , 1-hr average
	CO	Good Combustion Practices
		57.1 ppmdv

12. ConcoPhillips is subject to the following New Source Performance Standards and NESHAPS requirements:

New Source Performance Standard	40 CFR 60, Subpart A
New Source Performance Standard	40 CFR 60, Subpart J
New Source Performance Standard	40 CFR 60, Subpart GGG
New Source Performance Standard	40 CFR 60, Subpart QQQ
National Emission Standards for Hazardous Air Pollutants	40 CFR 63, Subpart CC
	40 CFR 63, Subpart UUU

13. The modeling showed that emissions from the proposed project are below the Class 1 modeling significance levels and Class 1 PSD increment has not been over consumed as shown in the following table:

Pollutant	Averaging Period	Class I Area Modeling Significance Levels (µg/m³)	Class I PSD Increment (μg/m³)
$PM_{10}$	24-hour	0.3	вания в верои по от простория в постория в п В
	Annual	0.2	4
$NO_2$	Annual	0.1	2.5
CO	1-hour	N/A	N/A
	8-hour	N/A	N/A
Ozone	1-hour	N/A	N/A
f	8-hour	N/A	N/A

- 14. The project will not have a noticeable effect on industrial, commercial, or residential growth in the Ferndale area.
- 15 Based upon the Technical Support Document prepared on September 23, 2005 and the application, Ecology finds that all requirements for PSD have been satisfied and will comply with all applicable federal NSPS. Approval of the PSD application is granted subject to the following conditions:

### APPROVAL CONDITIONS

#### **Emission Limits**

- 1 NO<sub>X</sub> emissions from the SRU:
  - a. Emissions shall not exceed 42.2 ppmdv @7% 0<sub>2</sub>, 1-hr average, measured as provided in Approval Condition 4.
  - b. Emissions shall not exceed 2.3 pounds per hour, measured as provided in Approval Condition 4.
- 2. CO emissions from the SRU:
  - a. Emissions shall not exceed 57.1 ppmdv @7% 0<sub>2</sub>, 1-hr average, measured as provided in Approval Condition 5.

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b. Emissions shall not exceed 1.9 pounds per hour, measured as provided in Approval Condition 5.

## **Compliance Determination Methods**

- 3. Compliance with Approval Condition 1 shall be determined by 40 CFR 60 Appendix A, Method 7E or an equivalent method approved in advance by Ecology.
- 4. Compliance with Approval Condition 2 shall be determined by 40 CFR 60 Appendix A, Method 10 or an equivalent method approved in advance by Ecology.

## **Monitoring Methods**

- 5 Compliance with Approval Condition 1 shall be monitored by annual source testing in accordance with Approval Condition 3.
- 6. Compliance with Approval Condition 2 shall be monitored by annual source testing in accordance with Approval Condition 4.

### Other Conditions

- 7. After incorporation of the approval conditions of this PSD permit into ConocoPhillips' Title V permit (40 CFR Part 70), each occurrence of emissions measured in excess of the limit specified in Approval Conditions 1 and 2 be reported in writing to NWCAA as required by the Title V permit in accordance with WAC 173-401-615(3)(b).
- 8 Within 90 days of startup, ConocoPhillips shall identify operational parameters and practices that will constitute "proper operational practices" of the operation of the new SRU relative to compliance with the conditions of this permit. These operational parameters and practices shall be included in an O&M manual for the facility. The O&M manual shall be maintained and followed by ConocoPhillips and shall be available for review by Ecology, NWCAA, or EPA. Emissions that result from a failure to follow the requirements of the O&M manual relative to compliance with the conditions of this permit may be considered credible evidence that emission violations have occurred.
- 9 Access to the source by Ecology, NWCAA, or the EPA, shall be permitted upon request. Failure to allow such access is grounds for an enforcement action under the federal Clean Air Act or the Washington State Clean Air Act.
- 10. This approval shall become invalid if construction of the project is not commenced within eighteen (18) months after receipt of the final approval, or if construction of the facility is discontinued for a period of eighteen (18) months, unless Ecology extends the 18 month period, pursuant to 40 CFR 52.21(r)(2) and applicable EPA guidance.
- 11. The effective date of this permit shall not be earlier than the date upon which the US EPA notifies Ecology that the US EPA has satisfied its obligations, if any, under Section 7 of the Endangered Species Act 16 U.S.C. § 1531 et seq., 50 C.F.R. Part 402, subpart B (Consultation Procedures) and Section 305(b)(2) of the Magnuson-Stevens Fishery and

ConocoPhillips PSD-05-01 November 14, 2005 Page 5 of 5

> Conservation Act 16 U.S.C. § 1801 et seq., 50 C.F.R. Part 600, subpart K (EFH Coordination, Consultation, and Recommendations)

- 12. For federal regulatory purposes and in accordance with 40 CFR 124.15 and 124.19: If there was a public comment requesting a change in the preliminary determination or a proposed permit condition during the public review and comment period, the effective date of this permit shall not be earlier than 30 days after service of notice to the commenters and applicant on the preliminary determination.
  - a. If a review of the final determination is requested under 40 CFR 124.19 within the 30 day period following the date of the final determination, the effective date of the permit is suspended until such time as the review and any subsequent appeal against the permit are resolved.
  - b. If there was no public comment requesting a change in the preliminary determination or a proposed permit condition during the public review and comment period, this permit is effective upon the date of finalization subject to consideration of Condition 11 (EPA's ESA requirement) above.

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Approved by:

Stuart A. Clark, Program Manager

Air Quality Program

Washington State Department of Ecology

Ecology was notified by the USEPA that the USEPA has satisfied its obligations under the Endangered Species and Magnuson-Stevens Acts relative to PSD Permit 05-01 issued to ConocoPhillips on:

Date of USEPA Notification

10 6 05

Stuart A. Clark, Program Manager

Air Quality Program

Washington State Department of Ecology