#### IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS

| UNITED STATES of AMERICA,     | )               |
|-------------------------------|-----------------|
|                               | )               |
| Plaintiff, and the            | )               |
|                               | )               |
| State of Colorado,            | )               |
| Plaintiff-Intervener, and the | )               |
| State of Louisiana,           | )               |
| Plaintiff-Intervener, and the | )               |
| State of Oklahoma,            | )               |
| Plaintiff-Intervener, and the | )               |
| State of Montana,             | )               |
| Plaintiff-Intervener,         | )               |
| v.                            | ) Civil Action  |
|                               | ) No. H-01-4430 |
| Conoco Inc.                   | )               |
|                               | í               |
| Defendant.                    | í               |
|                               | )               |
|                               |                 |

#### FIRST AMENDMENT TO CONSENT DECREE

WHEREAS, Plaintiff, the United States of America (hereinafter "Plaintiff" or 
"the United States"); the State of Colorado, the State of Louisiana, the State of Montana 
and the State of Oklahoma (hereinafter "Plaintiff Interveners"); and Conoco Inc., 
(hereinafter "ConocoPhillips" or "Company"), are parties to a Consent Decree entered by 
this Court on April 30, 2002 (hereinafter "the Consent Decree"); and

WHEREAS Conoco Inc. merged with Phillips Company to form ConocoPhillips Company; and

WHEREAS, ConocoPhillips has agreed to sell and Suncor Energy (U.S.A.) Inc.

("Suncor") Suncor has agreed to buy one of the refineries covered by that Consent

Decree, to wit: the Commerce City refinery located in Commerce City, Colorado

(hereinafter, the "Denver Refinery"); and

WHEREAS, Suncor has contractually agreed to assume the obligations of, and to be bound by the terms and conditions of, the Consent Decree as such obligations, terms and conditions relate to the Denver Refinery, as of the date the transfer of ownership is completed (hereinafter the "Date of Purchase"); and

WHEREAS, the United States and the Plaintiff-Interveners agree, based on Suncor's representations, that Suncor has the financial and technical ability to assume the obligations and liabilities of the Consent Decree as they relate to the Denver Refinery; and

WHEREAS, the United States, Plaintiff Interveners, ConocoPhillips and Suncor desire to amend the Consent Decree to transfer to Suncor the obligations, liabilities, rights and releases of the Consent Decree and any related letters as they pertain to the Denver Refinery as of the Date of Purchase and to release ConocoPhillips from its obligations and liabilities under the Consent Decree arising after the Date of Purchase insofar as they relate to the Denver refinery; and

WHEREAS, the United States, Plaintiff-Interveners, ConocoPhillips and Suncor have identified and wish to correct errors in Paragraph 193, WHEREAS, the United States, Plaintiff Interveners, ConocoPhillips and Suncor want to revise the deadlines for certain catalyst trials, and

WHEREAS, each of the undersigned has reviewed and hereby consents to this

First Amendment; and

WHEREAS, Paragraph 301 of the Consent Decree requires that this Amendment be approved by the Court before it is effective;

NOW, THEREFORE, the United States, Plaintiff-Interveners, Conoco, and Suncor, hereby agree that, upon approval of this Amendment by the Court, the Consent Decree shall thereby be amended as follows:

- 1. Effective on the Date of Purchase, the Suncor hereby assumes, and ConocoPhillips is hereby released from all obligations and liabilities from the Date of Purchase concerning the Denver Refinery, except as otherwise provided in Paragraphs 2 and 3 of this Amendment. On and after the Date of Purchase, the terms of the Consent Decree concerning the Denver Refinery shall exclusively apply to, be binding upon, and be enforceable against Suncor to the same extent as if Suncor were specifically identified and or named in those provisions. ConocoPhillips remains liable for all obligations and liabilities imposed by the Consent Decree on the Denver Refinery from the Date of Lodging or Entry (as appropriate) to the Date of Purchase.
- Suncor shall not be responsible for any portion of the civil penalty provided for in Part XVII, which civil penalty the United States and Plaintiff-Intervener State of Colorado hereby acknowledge has been paid if full.
- The following Paragraphs in the Consent Decree do not apply to Suncor: 18-23, 24-26, 42, new paragraph 55(g) as included below, 56 as amended below, 58, as

amended below, 59, 60, 71, 76(a & b), 84, 103, 108-110, 111-114, 118, 121(d), 161, 162, 163, 164, 165, 166, 167, 168, 176, 180, 204-208, 245, 248-254, 275(b).

- Paragraph 5 is amended as follows:
  - ConocoPhillips owns and operates and is subject to all obligations and liabilities related to the refineries located as follows:

Westlake, Louisiana (hereinafter Lake Charles Refinery, including the Excel Paralubes facility operated and partly owned by ConocoPhillips)
Billings, Montana (hereinafter Billings Refinery)
Ponca City, Oklahoma (hereinafter Ponca City Refinery).
Denver Refinery (prior to Date of Purchase)

Suncor owns and operates and is subject to all obligations and liabilities related to the refinery in Commerce City, Colorado (hereinafter Denver Refinery) beginning as of Date of Purchase.

#### 5. Part IV, REDUCTION OF NOX EMISSION FROM FLUIDIZED

CATALYTIC CRACKING UNITS (FCCUS), is amended as follows:

8. By no later than the dates shown below, ConocoPhillips (for the refineries it owns) and Suncor (for the Denver Refinery) shall begin the determination of the optimized addition rates of low NOx CO promoter and NOx reducing catalyst additive ("Optimization Study") at each of the five (5) FCCUs in accordance with Attachment 2 to this Consent Decree, which is incorporated herein by reference, to establish the optimized catalyst additive addition rate. By mutual agreement, EPA, appropriate Plaintiff-Interveners and ConocoPhillips may further change the dates relating to ConocoPhillips' refineries by written agreement as provided for in Paragraph 301. Similarly, by mutual agreement, EPA, Plaintiff-Intervener State of Colorado, and Suncor may further change the dates relating to the Denver Refinery by written agreement as provided for in Paragraph 301.

 Billings
 December 31, 2005

 Denver
 June 30, 2004

 Lake Charles
 December 31, 2004

 Ponca City No. 4
 June 30, 2004

 Ponca City No. 5
 December 31, 2004

9.(a) By no later than the appropriate date shown below for each FCCU, ConocoPhillips (for the refineries it owns) and Suncor (for the Denver Refinery) will begin the performance demonstration of the catalyst additives at the optimized addition rates ("NOx Additive Demonstration"). ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall demonstrate the performance of the NOx additive at the optimized rate for the fourteen (14) or eighteen (18) month period indicated below to yield the lowest NOx concentration feasible from the FCCU at that optimized rate. By mutual agreement, EPA, appropriate Plaintiff-Interveners, and ConocoPhillips may further change the dates relating to ConocoPhillips' refineries by written agreement as provided for in Paragraph 301. Similarly, by mutual agreement, EPA, Plaintiff-Intervener State of Colorado, and Suncor may further change the dates relating to the Denver Refinery by written agreement as provided for in Paragraph 301.

Billings June 30, 2006 to December 31, 2007

Denver December 31, 2004 to February 28, 2006

Lake Charles June 30, 2005 to December 31, 2006

Ponca City No. 4 December 31, 2004 to June 30, 2006

Ponca City No. 5 June 30, 2005 to December 31, 2006

- 9.(b) <u>Identification of Commercially Available Products</u>: At least one month prior to beginning the short term trials in Paragraph 9c below, ConocoPhillips (for the refineries it owns) shall notify EPA in writing of all NOx reducing catalyst additives that are commercially available and shall identify each NOx reducing catalyst additive, up to the maximum of four, that ConocoPhillips proposes to use for the short term trials required at each ConocoPhillips refinery. Unless EPA objects prior to the beginning the trials, to one or more of the products identified, ConocoPhillips shall commence the short term trials.
- 9.(c) Short Term Trials of NOx Reducing Catalyst Additives: By no later than the dates shown below, ConocoPhillips (for the refineries it owns) shall commence trials of up to twelve (12) months of the commercially available NOx reducing catalyst additives for the purpose of identifying the comparative NOx reduction effectiveness of each product. After completion of the trials and at least one month prior to beginning the optimization period, ConocoPhillips (for its refineries) shall submit a report that sets forth the comparative NOx reduction effectiveness of each commercially available NOx reducing catalyst additive. ConocoPhillips shall propose for EPA's approval the particular NOx reducing catalyst additive that ConocoPhillips proposes to use in the optimization and demonstration periods for each respective FCCU. If ConocoPhillips intends to use a NOx reducing

catalyst additive that is not the best performing NOx reducing catalyst additive (as required by Attachment 2), ConocoPhillips shall also propose for EPA's approval adjustments to: 1) the incremental pick-up factor, and 2) total catalyst additive addition rate. Subject to EPA's approval, a NOx reducing catalyst additive shall not be deemed the best performing additive if it impairs the performance of the FCCU.

 Billings
 December 31, 2004

 Lake Charles
 December 31, 2003

 Ponca City No. 4
 June 30, 2003

 Ponca City No. 5
 December 31, 2003

- 9(d). In lieu of conducting NOx trials in 9(c) above at the Denver Refinery, Suncor shall use the NOx reducing catalyst additive approved for use by EPA per the procedures found in 9(c) above at the ConocoPhillips' Ponca City No. 4 FCCU. ConocoPhillips will provide Suncor with a summary of the results of each short term NOx trial at Ponca City No. 4 as soon as possible upon completion of each trial and will notify Suncor of the selected additive from the Ponca City No. 4 short-term NOx reducing catalyst trials by May 31, 2004. In addition, at the same time that ConocoPhillips submits the report to EPA required under Paragraph 9(c), it shall submit a copy of the report to Suncor. As indicated in revised Paragraph 8 above, Denver shall begin the optimization study using this catalyst no later than June 30, 2004. In the event that ConocoPhillips does not notify Suncor of the selected additive by May 31, 2004, or for any other reason by mutual agreement, EPA, Plaintiff-Intervener State of Colorado, and Suncor may change the dates of the optimization study by written agreement as provided for in Paragraph 301. Additionally, Suncor shall continue to add SOx reducing catalyst during the NOx Optimization period. The amount of SOx reducting catalyst to be added will be determined during the SOx Optimization Study provided for in Paragraph 31 as revised.
- 10. By no later than thirty (30) days prior to beginning the determination of the optimized addition rates of low-NOx CO promoter and NOx reducing catalyst additive at each FCCU, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall notify EPA in writing of which low-NOx CO promoter and NOx reducing catalyst additive that it intends to use in the optimization and demonstration periods, and shall submit a protocol for the optimization which describes, at a minimum, the methods that will be used to calculate control effectiveness (pounds NOx reduced per pound of additive), cost effectiveness (dollars per ton of NOx reduced), and percent additive added.

- 11. By no later than 30 days after completion of the baseline data collection period shown below, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall submit baseline data for each FCCU as shown below, to EPA. The data for each FCCU that shall include at a minimum the following data on a daily average basis:
  - Regenerator flue gas temperature;
  - (2) Coke burn rate;
  - (3) FCCU feed rate;
  - (4) FCCU feed API gravity;
  - (5) FCCU feed nitrogen content;
  - (6) Estimated percentage of each type of FCCU feed component (i.e. atmospheric gas oil, vacuum gas oil, atmospheric tower bottoms, vacuum tower bottoms, etc.) by volume;
  - (7) Estimated percentage by volume of the FCCU feed that is hydrotreated;
  - (8) CO boiler firing rate and fuel type for Ponca City No. 5 FCCU;
  - (9) CO boiler combustion temperature for Ponca City No. 5 FCCU;
  - (10) Total catalyst addition rate;
  - (11) NOx reducing catalyst additive and NOx reducing catalyst additive addition rates and
  - (12) Hourly and daily SO2, NOx, CO and O2 concentrations.

#### Baseline data collection dates are:

Billings June 30, 2003 to June 30, 2004

Denver December 31, 2002 to December 31, 2003

Lake Charles December 31, 2002 to June 30, 2003

Ponca City No. 4 March 31, 2002 to December 31, 2002

Ponca City No. 5 June 30, 2002 to June 30, 2003

Upon mutual agreement, EPA, appropriate Plaintiff-Interveners, and ConocoPhillips may further change the dates relating to ConocoPhillips' refineries by written agreement as provided for in Paragraph 301. Similarly, by mutual agreement, EPA, Plaintiff-Intervener State of Colorado, and Suncor may further change the dates relating to the Denver Refinery by written agreement as provided for in Paragraph 301.

12. By no later than thirty (30) days prior to beginning demonstration period referenced in Paragraph 9(a) above at each FCCU, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall notify EPA in writing of the proposed optimized additive addition rate for each FCCU with an explanation and the supporting data that demonstrates that the requirements of Attachment 2 have been met in establishing the optimized rates. During the demonstration, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall add catalyst additive at the optimized rate and in a consistent manner (evenly over time) that minimizes NOx emissions.

- 13. No later than sixty (60) days after the completion of the demonstration period, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall report to EPA the results of the demonstration for each FCCU. The report shall include, at a minimum, each of the parameters reported in the baseline data set required in Paragraph 11. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall report the data or measurements to EPA in electronic format. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) also shall submit the information to the appropriate state agency.
- ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall determine the NOx and O<sub>2</sub> concentrations at the point of emission to the atmosphere by CEMS.

#### B. Establishing FCCU NOx Emission Limits at the Denver, Lake Charles, Billings, Ponca City No. 4 and Ponca City No. 5 FCCUs

- 15. As part of its demonstration report required in Paragraph 13, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall propose to the EPA 3-hour rolling average and 365-day rolling average concentration based limits (ppmvd), each at 0% oxygen, for NOx emissions from each of its FCCUs. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall comply with the limits they propose for their respective FCCUs beginning immediately upon submission of their reports to EPA, until such time as they are required to comply with the emissions limits set by EPA, as specified below.
- 16. EPA will use the data collected from each FCCU during the baseline, optimization, and demonstration periods and all other available pertinent information to establish limits for NOx emissions from the FCCUs. EPA may establish 3-hour rolling average and 365-day rolling average concentration based limits (ppmvd), each at 0% oxygen, for NOx emissions from each of ConocoPhillips's FCCUs and for Suncor's FCCU based on the level of performance during the baseline, optimization, and demonstration periods, a reasonable certainty of compliance, and any other available pertinent information.

- 17. EPA will notify ConocoPhillips and Suncor of its determinations of NOx concentration limits for the units, and ConocoPhillips and Suncor shall immediately comply if the EPA limit is equal to or less stringent than the limit proposed by ConocoPhillips and Suncor respectively. If the limits established by EPA are more stringent than the limit proposed by ConocoPhillips or Suncor, ConocoPhillips or Suncor will comply with the EPA established emission limit within 30 days.
- C. Installation of SNCR System and Continued
  Addition/Optimization/Demonstration of Low-NOx CO Promoter
  and NOx Reducing Catalyst Additives at Ponca City No. 5 FCCU
- By no later than December 31, 2006, ConocoPhillips shall install and operate a selective non-catalytic reduction system (SNCR) on the CO Boiler at the Ponca City No. 5 FCCU.
- 19. After the installation of the SNCR and by no later than March 31, 2007, ConocoPhillips shall begin the determination of the optimized addition rates of low-NOx CO promoter and NOx reducing catalyst additive at Ponca City No. 5 FCCU (SNCR Optimization Study) in accordance with Attachment 2 to this Consent Decree, which is incorporated herein by reference, to establish the optimized catalyst additive addition rate.
- 20. By no later than September 30, 2007, ConocoPhillips will begin the performance demonstration of the catalyst additive at the optimized addition rate over a twelve (12) month period to yield the lowest NOx concentration feasible from the FCCU at that optimized rate.
- 21. After installation of the SNCR and by no later than sixty (60) days prior to beginning the additive optimization at Ponca City No. 5 FCCU, ConocoPhillips shall notify EPA in writing of which low-NOx CO promoter and NOx reducing catalyst additive that it intends to use in the optimization and demonstration periods, and shall submit a protocol for the optimization which describes, at a minimum, the methods that will be used to calculate control effectiveness (pounds NOx reduced per pound of additive), cost effectiveness (dollars per ton of NOx reduced), and percent additive added.
- 22. After the installation of the SNCR and by no later than thirty (30) days prior to beginning the twelve (12) month demonstration at Ponca City No. 5 FCCU, ConocoPhillips shall notify EPA in writing of the optimized additive addition rate for Ponca City No. 5 FCCU with an explanation and the supporting data that demonstrates that the

requirements of Attachment 2 have been met in establishing the optimized rates. During the demonstration, ConocoPhillips shall add catalyst additive at the optimized rate and in a consistent manner (evenly over time) that minimizes NOx emissions.

23. No later than sixty (60) days after the completion of the twelve (12) month demonstration, ConocoPhillips shall report to EPA the results of the demonstration for Ponca City No. 5 FCCU. The report shall include, at a minimum, each of the parameters reported in the baseline data set required in Paragraph 11. ConocoPhillips shall report the data or measurements to EPA in electronic format.

#### D. Establishing FCCU NOx Emission Limits for SNCR System, Low-NOx CO Promoter and NOx Reducing Catalyst Additive at Ponca City No. 5 FCCU

- 24. As part of its demonstration report required in Paragraph 23 above, ConocoPhillips shall propose to the EPA 3-hour rolling average and 365-day rolling average concentration based limits (ppmvd), each at 0% oxygen, for NOx emissions for Ponca City No. 5 FCCU. ConocoPhillips shall comply with the limits it proposes for Ponca City No. 5 FCCU beginning immediately upon submission of its report to EPA, until such time as ConocoPhillips is required to comply with the emissions limits set by EPA, as specified in Paragraph 26.
- 25. EPA will use the data collected from Ponca City No. 5 FCCU during the baseline, optimization, and demonstration periods and all other available pertinent information to establish limits for NOx emissions from the Ponca City No. 5 FCCU. EPA may establish 3-hour rolling average and 365-day rolling average concentration based limits (ppmvd), each at 0% oxygen, for NOx emissions from the Ponca City No. 5 FCCU based on the level of performance during the baseline, optimization, and demonstration periods, a reasonable certainty of compliance, and any other available pertinent information.
- 26. EPA will notify ConocoPhillips of its determination of NOx concentration limits for the Ponca City No. 5 FCCU, and ConocoPhillips shall immediately comply if the EPA limit is equal to or less stringent than the limit proposed by ConocoPhillips. If the Ponca City No. 5 FCCU limit established by EPA is more stringent than the limit proposed by ConocoPhillips, ConocoPhillips will comply with the EPA established emission limit within thirty (30) days.

#### E. Hydrotreater Outages

 No later than one hundred eighty (180) days from the Date of Lodging of the Consent Decree, ConocoPhillips shall submit to EPA for its approval a plan to minimize NOx emissions from its Billings, Denver, Lake Charles and Ponca City FCCUs (including associated air pollution control equipment) during hydrotreater outages. This plan will address how to calculate the impact of the period(s) of the hydrotreater outages on the annual average emission limits for the FCCUs and may allow for exclusion from the 365-day average those 3-hour average concentrations during periods of hydrotreater outages. ConocoPhillips shall comply with the plan at all times including periods of startup, shutdown, and malfunction of the hydrotreater. Suncor shall comply with the plan as it relates to the Denver Refinery as of the Date of Purchase. The 3-hour NOx emission limits established for the FCCUs as provided in this Order shall not apply to ConocoPhillips during periods of hydrotreater outages at the Billings, Lake Charles, Ponca City No. 4 (if a gas oil hydrotreater is installed) and Ponca City No. 5 FCCUs, provided that ConocoPhillips is maintaining and operating its FCCUs (including associated air pollution control equipment) in a manner consistent with good air pollution control practices for minimizing emissions in accordance with the EPA-approved good air pollution control practices plan. Similarly, the 3 hour NOx emission limits shall not apply to Suncor during hydrotreater outages at the Denver Refinery provided that Suncor is maintaining and operating its FCCU (including associated air pollution control equipment) in a manner consistent with good air pollution practices for minimizing emissions in accordance with the EPA-approved good air pollution control practices plan.

#### F. Demonstrating Compliance with FCCU NOx Emission Limits

- 28. Beginning no later than twelve (12) months from the Date of Lodging where CEMS are in place, and eighteen (18) months from the Date of Lodging where CEMS are yet to be installed, ConocoPhillips shall use a NOx and O<sub>2</sub> CEMS to monitor performance of each FCCU during the baseline, optimization, and demonstration periods, and to report compliance with the terms and conditions of this Consent Decree. As all such CEMS have been installed at the Denver Refinery, Suncor shall comply with the requirements of this paragraph on the Date of Purchase.
- 29.ConocoPhillips shall make CEMS and process data available to EPA upon demand as soon as practicable. Suncor shall comply with the requirements of this paragraph beginning on the Date of Purchase.

- 30.ConocoPhillips shall install, certify, calibrate, maintain, and operate all CEMS required by this Part in accordance with the requirements of Paragraphs 202 and 203. Suncor shall comply with the requirements of this paragraph beginning on the Date of Purchase.
- Part V, REDUCTION OF SO2 EMISSIONS FROM FCCUS, is amended as follows:

<u>Program Summary</u>: ConocoPhillips shall implement a program to reduce SO<sub>2</sub> emissions from refinery FCCUs by the use of SO<sub>2</sub> adsorbing catalyst additives at each of its five (5) FCCUs. ConocoPhillips shall incorporate lower SO<sub>2</sub> emission limits into operating permits and will demonstrate future compliance with the lower emission limits through the use of CEMS.

- A. Application of SO<sub>2</sub> Adsorbing Catalyst Additive at the Denver, Lake Charles, Billings, Ponca City No. 4 and Ponca City No. 5 FCCUs
- 31. By no later than the dates shown below, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall begin to add SO<sub>2</sub> adsorbing catalyst additive (Optimization Study) to each of the five (5) FCCUs in accordance with Attachment 2 to this Consent Decree, which is incorporated herein by reference, to establish the optimized catalyst additive addition rate.

Billings June 30, 2004
Denver December 31, 2003
Lake Charles June 30, 2003
Ponca City No. 4 December 31, 2002
Ponca City No. 5 June 30, 2003

By mutual agreement, EPA, appropriate Plaintiff-Interveners, and Suncor (for the Denver Refinery) or EPA, Plaintiff-Intervener State of Colorado and ConocoPhillips (for its refineries) may further change these dates by written agreement as provided for in Paragraph 301.

32. By no later than the date shown below for each FCCU, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) will begin the performance demonstration of the catalyst additive at the optimized addition rate. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall demonstrate the performance of the SOx catalyst additive at the optimized rate for the period of time indicated below to yield the lowest SO<sub>2</sub> concentration feasible from the FCCU at that optimized rate. By mutual agreement, EPA, appropriate Plaintiff-Interveners, and ConocoPhillips may further change the dates relating

to ConocoPhillips' refineries by written agreement as provided for in Paragraph 301. Similarly, by mutual agreement, EPA, Plaintiff-Intervener State of Colorado and Suncor may further change the dates relating to the Denver Refinery by written agreement as provided for in Paragraph 301.

Billings December 31, 2004 to December 31, 2005

Denver June 30, 2004 to December 31, 2005

Lake Charles December 31, 2003 to June 30, 2005

Ponca City No. 4 December 31, 2003 to December 31, 2004

December 31, 2003 to December 31, 2004

#### B. SO<sub>2</sub> Adsorbing Catalyst Additives Optimizations and Demonstrations

- By no later than sixty (60) days prior to beginning the additive optimization at each FCCU, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall notify EPA in writing of which SO<sub>2</sub> adsorbing catalyst additive that they intend to use in the optimization and demonstration periods, and shall submit a protocol for the optimization which describes, at a minimum, the methods that will be used to calculate control effectiveness (pounds SO2 reduced per pound of additive), cost effectiveness (dollars per ton of SO2 reduced), and percent additive added. If the Lake Charles Refinery intends to use a SO2 reducing catalyst additive that is not the best performing SO2 reducing catalyst additive as of this Amendment's Lodging Date, ConocoPhillips shall also propose for EPA's approval adjustments to: 1) the incremental pick-up factor, and 2) total catalyst additive addition rate. Subject to EPA's approval, a SO2 reducing catalyst additive shall not be deemed the best performing additive if it impairs the performance of the FCCU
- 34. By no later than 30 days after completion of the baseline data collection period shown below, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall submit baseline data, to EPA for each FCCU that shall include at a minimum the following data on a daily average basis:
  - (1) Regenerator flue gas temperature;
  - (2) Coke burn rate;
  - (3) FCCU feed rate:
  - (4) FCCU feed API gravity;
  - (5) FCCU feed sulfur content;
  - (6) Estimated percentage by volume of each type of FCCU feed component (i.e. atmospheric gas oil, vacuum gas oil, atmospheric tower bottoms, vacuum tower bottoms, etc.);

- (7) Estimated percentage by volume of the FCCU feed that is hydrotreated;
- (8) CO boiler firing rate and fuel type for Ponca City No. 5 FCCU;
- (9) CO boiler combustion temperature for Ponca City No. 5 FCCU;
- (10) Total catalyst addition rate;
- (11) SO<sub>2</sub> adsorbing catalyst additive type and additive addition rates and
- (12) Hourly and daily SO<sub>2</sub>, NOx, CO and O<sub>2</sub> concentrations.

#### Baseline data collection dates are:

| Billings         | June 30, 2003 to June 30, 2004         |
|------------------|--|
| Denver           | December 31, 2002 to December 31, 2003 |
| Lake Charles     | December 1, 2002 to June 30, 2003      |
| Ponca City No. 4 | March 31, 2002 to December 31, 2002    |
| Ponca City No. 5 | June 30, 2002 to June 30, 2003         |

Upon mutual agreement, EPA, appropriate Plaintiff-Interveners, and ConocoPhillips may further change the dates relating to ConocoPhillips' refineries by written agreement as provided for in Paragraph 301. Similarly, by mutual agreement, EPA, Plaintiff-Intervener State of Colorado, and Suncormay further change the dates relating to the Denver Refinery by written agreement as provided for in Paragraph 301.

- 35. By no later than thirty (30) days prior to beginning the twelve (12) month demonstration at each FCCU, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall notify EPA in writing of the optimized additive addition rate for each FCCU with an explanation and the supporting data that demonstrates that the requirements of Attachment 2 have been met in establishing the optimized rates. During the demonstration, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall add catalyst additive at the optimized rate and in a consistent manner (evenly over time) that minimizes SO<sub>2</sub> emissions.
- 36. No later than sixty (60) days after the completion of the twelve (12) month demonstration, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall report to EPA the results of the demonstration for each FCCU. The report shall include, at a minimum, each of the parameters reported in the baseline data set required in Paragraph 34. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall report the data or

- measurements to EPA in electronic format. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) also shall submit the information to the appropriate state agency.
- ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall determine the SO<sub>2</sub> and O<sub>2</sub> concentrations at the point of emission to the atmosphere by CEMS.

#### C. Establishing FCCU SO<sub>2</sub> Emission Limits

- 38. As part of its demonstration report required in Paragraph 36, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall propose to the EPA 7-day rolling average and 365-day rolling average concentration based limits (ppmvd), each at 0% oxygen, for SO<sub>2</sub> emissions from each of its FCCUs. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall comply with the limits it proposes for each FCCU beginning immediately upon submission of its report to EPA, until such time as they are required to comply with the emissions limits set by EPA, as specified in Paragraph 40.
- 39. EPA will use the data collected from each FCCU during the baseline, optimization, and demonstration periods and all other available pertinent information to establish limits for SO<sub>2</sub> emissions from the FCCUs. EPA may establish 7-day rolling average and 365-day rolling average concentration based limits (ppmvd), each at 0% oxygen, for SO<sub>2</sub> emissions from each of ConocoPhillips's FCCUs and from Suncor's FCCUs at the Denver Refinery based on the level of performance during the baseline, optimization, and demonstration periods, a reasonable certainty of compliance, and any other available pertinent information.
- 40. EPA will notify ConocoPhillips and Suncor of its determination of SO<sub>2</sub> concentration limits for the respective units, and ConocoPhillips (for its Refineries) and Suncor (for the Denver refinery) shall immediately comply if the EPA limit is equal to or less stringent than the limit proposed for each FCCU. If the SO<sub>2</sub> limit established by EPA is more stringent than the limit proposed by ConocoPhillips or Suncor, ConocoPhillips or Suncor will comply with the EPA established emission limit within thirty (30) days.

#### D. Hydrotreater Outages

 No later than one hundred-eighty (180) days from the Date of Lodging of the Consent Decree, ConocoPhillips shall submit to EPA for its

approval a plan to minimize SO<sub>2</sub> emissions from the Billings, Denver, Lake Charles and Ponca City FCCUs (including associated air pollution control equipment) during hydrotreater outages. This plan will address how to calculate the impact of the period(s) of the hydrotreater outages on the annual average emission limits for the FCCUs and may allow for exclusion from the 365-day average those daily average concentrations during periods of hydrotreater outages. ConocoPhillips shall comply with the plan at all times including periods of startup, shutdown, and malfunction of the hydrotreater. Suncor shall comply with the plan as it relates to the Denver Refinery as of the Date of Purchase. The seven (7) day SO<sub>2</sub> emission limits established for the FCCUs as provided in this Order shall not apply during periods of hydrotreater outages at the Billings, Lake Charles, Ponca City No. 4 (if a gas oil hydrotreater is installed) and Ponca City No. 5 FCCUs, provided that ConocoPhillips is maintaining and operating its FCCUs (including associated air pollution control equipment) in a manner consistent with good air pollution control practices for minimizing emissions in accordance with the EPAapproved good air pollution control practices plan. Similarly, the seven (7) day SO<sub>2</sub> emissions limits shall not apply to Suncor during hydrotreater outages at the Denver Refinery provided that Suncor is maintaining and operating the Denver Refinery FCCU (including associated air pollution control equipment) in a manner consistent with good air pollution practices for minimizing emissions in accordance with the EPA-approved good air pollution control practices plan. Following the installation of a wet gas scrubber at an FCCU, this Paragraph shall no longer apply to that FCCU.

# E. <u>Final FCCU SO<sub>2</sub> Emission Limits for the Billings</u>, Ponca City No. 4 and Ponca City No. 5 FCCUs

42. If the 365-day rolling average limit or the 7-day rolling average limit established pursuant to Paragraph 38 is greater than 25 ppmvd at 0% O<sub>2</sub> or 50 ppmvd at 0% O<sub>2</sub>, respectively, for the Billings, Ponca City No. 4, or Ponca City No. 5 FCCU, ConocoPhillips shall, by the dates specified below, install additional SO<sub>2</sub> control technology and meet SO<sub>2</sub> emission limits of 25 ppmvd at 0% O<sub>2</sub> on a 365-day rolling average limit and 50 ppmvd at 0% O<sub>2</sub> on a 7-day rolling average:

| (1) | Billings FCCU    | June 30, 2007;     |
|-----|------------------|--------------------|
| (2) | Ponca City No. 4 | December 31, 2008; |
| (3) | Ponca City No. 5 | December 31, 2006. |

# F. Demonstrating Compliance with FCCU SO<sub>2</sub> Emission Limits

and

- 43. Beginning no later than twelve (12) months from the Date of Lodging ConocoPhillips shall use a SO<sub>2</sub> and O<sub>2</sub> CEMS to monitor performance of each FCCU during the baseline, optimization, and demonstration periods, and to report compliance with the terms and conditions of this Consent Decree. Suncor shall comply with the requirements of this paragraph as of the Date of Purchase.
- 44.ConocoPhillips shall make CEMS and process data available to EPA upon demand as soon as practicable. Suncor shall comply with the requirements of this paragraph as of the Date of Purchase.
- 45.ConocoPhillips shall install, certify, calibrate, maintain, and operate all CEMS required by this Part in accordance with the requirements of Paragraph 202 and 203. Suncor shall comply with the requirements of this paragraph as of the Date of Purchase.
- Part VI, REDUCTIONS OF OTHER EMISSIONS FROM FCCUS, SUBPART C, FCCU REGENERATOR NSPS SUBPARTS A and J APPLICABILITY is revised to read as follows:

#### A. Reductions of PM Emissions From FCCUs

46. ConocoPhillips or Suncor (as the case may be) shall install and operate PM controls as follows:

Lake Charles: On the Date of Lodging of the Consent Decree, ConocoPhillips shall continue to comply with a PM emissions limit of 1 pound per 1000 pounds of coke burned as demonstrated by a stack test as described in Paragraph 47.

Denver: By no later than June 30, 2006, Suncor shall comply with a PM emissions limit of 1 pound per 1000 pounds of coke burned as demonstrated by a stack test as described in Paragraph 47.

**Billings**: By no later than June 30, 2007, ConocoPhillips shall comply with a PM emissions limit of 1 pound per 1000 pounds of coke burned as demonstrated by a stack test as described in Paragraph 47.

Ponca City No. 4: By no later than December 31, 2008, ConocoPhillips shall comply with a PM emissions limit of 1 pound per 1000 pounds of coke burned as demonstrated by a stack test as described in Paragraph 47. Ponca City No. 5: By no later than December 31, 2006, ConocoPhillips shall comply with a PM emissions limit of 1 pound per 1000 pounds of coke burned as demonstrated by a stack test as described in Paragraph 47.

- 47. (a) PM Monitoring FCCU. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall follow an EPA-approved stack test protocol to monitor PM emissions on each FCCU at each refinery. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall propose and submit the stack test protocol for approval to EPA and the Plaintiff-Interveners no later than two hundred forty (240) days following Date of Lodging of this Consent Decree. During the first two (2) years of operations following installation of the control device selected for that particular facility, the facilities shall conduct annual stack tests at each FCCU. Tests may be conducted less frequently than annually upon a showing of at least three (3) annual tests that limits are not being exceeded.
- 47. (b) Opacity Monitoring FCCU. ConocoPhillips shall install Continuous Opacity Monitoring System (COMS) on each FCCU at each refinery by no later than twelve (12) months after the Date of Lodging. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall install, certify, calibrate, maintain, and operate all COMS required by this Part in accordance with the requirements of Paragraph 202 and 203.
- 49. By no later than the Date of Lodging, ConocoPhillips shall meet an emission limit of 500 ppmvd CO at 0% O2 on a 1-hour average basis. Compliance by ConocoPhillips (for its refineries) and by Suncor (for the Denver Refinery as of the Date of Purchase) will not have to be demonstrated until certification of CO CEMS, and future compliance will be demonstrated with the CEM.
- 50. By no later than June 30, 2003, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery) shall meet an emission limit of 150 ppmvd CO at 0% O2 on a 365-day rolling average basis.
- 51. Beginning no later than twelve (12) months from the Date of Lodging, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall use a CO CEMS to monitor performance of each FCCU and to report compliance with the terms and conditions of this Consent Decree.

- 52. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall make CEMS and process data available to EPA upon demand as soon as practicable.
- 53. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall install, certify, calibrate, maintain, and operate all CEMS required by this Part in accordance with the requirements of Paragraph 202 and 203.
- 54. ConocoPhillips's FCCU Regenerators and Suncor'sFCCU Regenerator at the Denver Refinery shall be affected facilities subject to the requirements of NSPS Subpart A and J for each relevant pollutant by the dates specified below:

# Denver: SO2 - June 30, 2004 PM - June 30, 2006 CO - June 30, 2003 Opacity - June 30, 2006 Lake Charles:

SO2 - Date of Lodging
PM - Date of Lodging
CO - Date of Lodging
Opacity - Date of Lodging

Billings:

SO2 - February 1, 2005 PM - June 30, 2007 CO - June 30, 2003 Opacity - June 30, 2007

Ponca City No. 4:

SO2 - August 1, 2003 PM - December 31, 2008 CO - June 30, 2003 Opacity - December 31, 2008

Ponca City No. 5:

SO2 - February 1, 2004 PM - December 31, 2006 CO - June 30, 2003 Opacity - December 31, 2006  Part VII, Subpart A NOx Reductions, is amended as follows, including the addition of new paragraphs 55(a), 55(b), 55(c) and 61(a):

#### A. NOx Reductions

- 55(a). On or before December 31, 2004, Suncor shall complete a program to reduce the overall NOx emissions from the Controlled Heaters and Boilers at the Denver Refinery in an amount greater than or equal to 90 tons per year as demonstrated by the inequality in Paragraph 55b. For purposes of this Part, Controlled Heaters and Boilers shall mean heaters and boilers which have been either shut down, or for which the refinery has installed one of the following NOx control technologies: SCR, SNCR, current or next generation ultra-low NOx burners, or technologies that Suncor, after the Date of Purchase, demonstrates to EPA's satisfaction will reduce NOx emissions to 0.040 lbs per mmBTU or lower.
- 55(b). Reductions at the Denver Refinery shall be calculated from a prior actual to future allowable basis so as to satisfy the following inequality:

$$\sum_{i=1}^{n} [(E_{Actual})_i - (E_{Allowable})_i] \ge 90 \text{ tons of NOx per year}$$

Where:

- (E<sub>Allowable</sub>)<sub>i</sub> = The requested portion of the permitted allowable pounds of NOx per million BTU for heater or boiler i)/(2000 pounds per ton)] x [(the lower of permitted or maximum heat input rate capacity in million BTU per hour for heater or boiler i) x (the lower of 8760 or permitted hours per year)];
- (E<sub>Actual</sub>)<sub>i</sub> = The tons of NOx per year prior actual emissions (unless prior actuals exceed allowable emissions, then use allowable) as shown in Attachment 1 for controlled heater or boiler i; and
- n = The number of heaters and boilers at all refineries that are controlled.
- 55(c). Suncor shall demonstrate compliance with Paragraph 55(a) by demonstrating in its March 31, 2005, annual report that it has installed NOx controls and applied for enforceable limits that will achieve the required reductions, pursuant to Part XIII (Permitting). For purposes of this Consent Decree, "applied for" shall mean that Suncor (after the Date

of Purchase) has submitted a complete and timely application for the appropriate permit, permit modification, and/or permit waiver.

 Suncor shall install Ultra Low-NOx Burners (0.025 lb/MMBtu capable technology) on B-6 by December 31, 2003. Suncor shall conduct an initial 3-hour performance test on B-6 for NOx and CO within one hundred eighty (180) days of start-up of NOx Controls on B-6 to demonstrate compliance with the limits for NOx and CO referenced in this subparagraph. Suncor shall submit a permit application to incorporate a NOx emissions limit of 0.040 lb NOx/mmBTU on a 365-day rolling average and the CO emissions limits enumerated in Paragraph 73(a) for B-6 into federally enforceable limits within 90 days of receiving the test results referenced herein, or within 150 days after completion of the performance test, whichever is earlier. Suncor shall install NOx and CO CEMS on B-6 at the time of the installation of the NOx and CO CEMS on B-8 in 2004, or by December 31, 2004, whichever is earlier. By no later than one hundred eighty (180) days after installation of the CEMS for B-6, Suncor shall certify, calibrate, maintain and operate the B-6 CEMS pursuant to Paragraphs 202 and 203. After certification of the CEMs for B-6, if Suncor demonstrates that the actual monitoring data show that an emission rate less than 0.04 lb NOx/mmBTU on a 365-day rolling average basis can be consistently maintained for compliance purposes, Suncor shall submit a permit modification application to decrease the NOx emission limits within 90 days of CEMs certification. If, after this initial period, Suncor reasonably demonstrates that the data available in this time period are not representative of actual emissions over the full range of operating conditions or the data do not otherwise provide an adequate basis for demonstrating a decreased NOx emissions limit, Suncor, EPA and Plaintiff-Intervener State of Colorado, upon mutual consent, may change the dates for data collection as provided for in Paragraph 301. The CEMS will be used to demonstrate compliance with the annual and 24hour average emission limits established under this Paragraph 55.

55(e). Suncor shall install Ultra-Low NOx Burners (0.025 lb/mmBTU capable technology) on B-8 by December 31, 2004. Suncor shall install NOx and CO CEMS on B-8 at the time the NOx Control is installed on B-8. Within one hundred eighty (180) days after commencement of operation of the NOx controls on B-8, Suncor shall certify, calibrate, maintain and operate the B-8 CEMS pursuant to Paragraphs 202 and 203. After certification of the CEMs for B-8, if Suncor demonstrates that the actual monitoring data show that an emission rate less than 0.04 lb NOx/mmBTU on a 365-day rolling average basis can be consistently maintained for compliance purposes, Suncor shall submit a permit modification application to decrease the NOx emission limits within 90

days of CEMs certification. If, after this initial period, Suncor reasonably demonstrates that the data available in this time period are not representative of actual emissions over the full range of operating conditions or the data do not otherwise provide an adequate basis for determining a decreased NOx emissions limit, Suncor, EPA and Plaintiff-Intervener State of Colorado, upon mutual consent, may change the dates for data collection as provided for in Paragraph 301. The CEMS will be used to demonstrate compliance with annual and 24-hour average emission limits established under this Paragraph 55.

- 55(f). On or before December 31, 2004, Suncor shall have installed NOx controls on at least 30% of the heater and boiler capacity greater than 40 mmBTU per hour located at the Denver refinery. The heater and boiler capacity at the Denver refinery shall be based on the maximum Heat Input Capacity during the 1999/2000 baseline period. Suncor may include in the 30% capacity demonstration those heaters and boilers which have been either shut down, or for which the refinery has installed one of the following NOx control technologies: SCR, SNCR, current or next generation ultra-low NOx burners, or technologies that Suncor demonstrates to EPA's satisfaction will reduce NOx emissions to 0.040 lbs per mmBTU or lower.
- 55.(g) On or before July 31, 2009, ConocoPhillips shall complete a program to reduce the overall NOx emissions from the Controlled Heaters and Boilers at its refineries in an amount greater than or equal to 1443 tons per year as demonstrated by the inequality in Paragraph 56. For purposes of this Part, Controlled Heaters and Boilers shall mean heaters and boilers which have been either shut down, or for which the refinery has installed one of the following NOx control technologies: SCR, SNCR, current or next generation ultra-low NOx burners, or technologies that ConocoPhillips demonstrates to EPA's satisfaction will reduce NOx emissions to 0.040 lbs per mmBTU or lower.
- 55.(h) A "Current Generation Ultra Low-NOx Burner" is one that is defined as a burner currently on the market that is designed to achieve a NOx emission rate of 0.03 to 0.04 lb/mmBTU with consideration given for variations in specific heater operating conditions such as air preheat, fuel composition and bridgewall temperature. A "Next Generation Ultra-Low NOx Burner" is defined as a burner new to the market that is designed to an emission rate of 0.012 to 0.015 lb/mmBTU (HHV), when firing natural gas at typical industry firing conditions at full design load. Upon EPA approval, ConocoPhillips or Suncor may also include technology designed and installed to meet less than 0.040 lbs per mmBTU.

56. ConocoPhillips's selection of control technology for its refineries must at a minimum reduce overall NOx emissions from the Controlled Heaters and Boilers by at least 1443 tons per year from a prior actual to future allowable basis (equivalent to at least a 50% reduction) so as to satisfy the following inequality:

n  $\Sigma \left[ (E_{Actual})_i - (E_{Allowable})_i \right] \ge 1443 \text{ tons of NOx per year}$  i = 1

Where:

 $(E_{Allowable})_I = The re$ 

The requested portion of the permitted allowable pounds of NOx per million BTU for heater or boiler i)/(2000 pounds per ton)] x [(the lower of permitted or maximum heat input rate capacity in million BTU per hour for heater or boiler i) x (the lower of 8760 or permitted hours per year)];

(E<sub>Actual</sub>)<sub>i</sub> = The tons of NOx per year prior actual emissions (unless prior actuals exceed allowable emissions, then use allowable) as shown in Attachment 1 for controlled heater or boiler i; and

n = The number of heaters and boilers at all refineries that are controlled.

- 57. Attachment 1 to this Consent Decree provides the following information for each of the heaters and boilers greater than 40 mmBTU per hour at each refinery identified in Paragraph 5:
  - the maximum heat input capacities mmBTU/hr;
  - the baseline emission rate for both calendar years 1999 and 2000 in lbs/mmBTU and tons per year; and
  - (3) the type of data used to derive the emission estimate (i.e. emission factor, stack test, or CEMS data) and the averaging period for the emissions data.
- 58. ConocoPhillips shall achieve two-thirds of the combined NOx emissions reductions from the Controlled Heaters and Boilers at its refineries as set forth in Paragraph 56, by December 31, 2005. ConocoPhillips shall demonstrate compliance with this requirement by demonstrating in their March 31, 2006, annual report that they have installed NOx controls and applied for enforceable limits that will achieve

the required reductions, pursuant to Part XIII (Permitting). For purposes of this Consent Decree, "applied for" shall mean that ConocoPhillips have submitted a complete and timely application for the appropriate permit, permit modification, and/or permit waiver. For purposes of this Paragraph only, Controlled Heaters and Boilers may include the following units that accept the annual average heat input rate (mmBTU/hr) as listed below:

Billings: B-1 & B-2: 5.5 & 5.5

Lake Charles: B-3 & B-4: 8.0 & 9.0

Ponca City: B-6 & B-7: 26.1 & 31.5

- 59. On or before July 31, 2009, ConocoPhillips shall have installed NOx controls on at least 30% of the heater and boiler capacity greater than 40 mmBTU per hour located at each of its refineries. The heater and boiler capacity at each refinery shall be based on the maximum Heat Input Capacity during the 1999/2000 baseline period.
- 60. ConocoPhillips may include in the 30% capacity demonstration those heaters and boilers which have been either shut down, or for which the refinery has installed one of the following NOx control technologies: SCR, SNCR, current or next generation ultra-low NOx burners, or technologies that ConocoPhillips demonstrates to EPA's satisfaction will reduce NOx emissions to 0.040 lbs per mmBTU or lower.
- ConocoPhillips shall submit a detailed NOx Control Plan (Control Plan) to EPA for approval by no later than four (4) months after the Date of Lodging of the Consent Decree. ConocoPhillips or Suncor (for the Denver Refinery as of the Date of Purchase) shall submit annual updates ("Updates") no later than March 31 of each year for the life of the Consent Decree. EPA shall approve the Control Plan provided that it meets the requirements of the Consent Decree. Upon receipt of EPA's approval of the initial Control Plan, ConocoPhillips or Suncor (for the Denver Refinery as of the Date of Purchase) shall implement the Control Plan. Initial control plans were submitted and approved in 2002 as required. The Control Plan and its updates shall describe the progress of the NOx emissions reductions program for heaters and boilers greater than or equal to 40 mmBTU per hour towards meeting the requirements of Paragraph 56 (for the ConocoPhillips-owned refineries) and Paragraph 55(b) (for the Denver Refinery) and shall contain the following for each such heater and boiler at each refinery:
  - (a) All of the information required as identified in Attachment 1;
  - (b) The baseline utilization rate in average mmBTU/hr for calendar years 1999 and 2000;

- (c) Reserved.
- (d) Identification of all heaters and boilers that ConocoPhillips or Suncor (for the Denver Refinery, as of the Date of Purchase) has controlled to reduce NOx emissions and plans to control in accordance with Paragraphs 55b or56;
- (e) Identification of the type of controls installed or planned with date installed or planned;
- (f) The allowable NOx emissions (in lbs/mmBTU) and allowable heat input rate (in mmBTU/hr) obtained or planned, dates obtained or planned, and identification of the permits in which the limits were obtained;
- (g) The results of emissions tests and annual average CEMS data (in ppmvd at 3% O<sub>2</sub>, lb/mmBTU, and tons per year) conducted pursuant to Paragraph 56 or Paragraph 55(b);
- (h) The amount in tons per year applied or to be applied toward satisfying Paragraph 56 or Paragraph 55(b); and
- A description of the achieved and anticipated annual progress toward satisfying Paragraph 56 or Paragraph 55(b) described on a refinery-by-refinery basis.
- The Control Plan and Updates required under Paragraph 61 shall be certified as provided in Paragraph 212
- 63. For heaters and boilers with a capacity of less than 100 mmBTU/hr Higher Heating Value (HHV), but greater than or equal to 40 mmBTU/hr (HHV) for which NOx Controls are installed pursuant to Paragraph 55(for 56 of this Consent Decree (for the ConocoPhillipsowned refineries) or pursuant to Paragraph 55(a) or 55(b) for the Denver Refinery, ConocoPhillips or Suncor, (as the case may be) shall conduct an initial performance test for NOx and CO within one hundred eighty (180) days of each heater and boiler start-up following installation of NOx Controls.
- 64. For heaters and boilers with a capacity of less than 150 mmBTU/hr (HHV), but greater than or equal to 100 mmBTU/hr (HHV) for which NOx Controls are installed pursuant to Paragraph 55(a) or 56 of this Consent Decree (for the ConocoPhillips-owned refineries) or pursuant to Paragraph 55(a) or 55(b) for the Denver Refinery, ConocoPhillips or Suncor (as the case may be) shall conduct an initial performance test or CEMS certification for NOx and CO within one hundred eighty (180) days of each heater and boiler start-up following installation of NOx Controls, and either:
  - (a) Install, or continue to operate, a NOx and CO CEMS at the time of the installation of the NOx Control. ConocoPhillips

- (for its refineries) or Suncor (for the Denver refinery) shall install, calibrate, maintain and operate the CEMS pursuant to Paragraph 202 and 203. These CEMS will be used to demonstrate compliance with emission limits established under this Part; or
- (b) Use or develop an approved Parametric Emissions Monitoring System (PEMS) for NOx and CO within one hundred eighty (180) days of each unit's start-up following installation of NOx Control, considering the full range of operating conditions.
- 65. For heaters and boilers with a capacity of 150 mmBTU/hr (HHV) or greater, for which NOx Controls are installed pursuant to Paragraph 55(a) or 56 of this Consent Decree(for the ConocoPhillips-owned refineries) or pursuant to Paragraph 55(a) or 55(b) for the Denver Refinery, ConocoPhillips or Suncor (as the case may be) shall install, or continue to operate, a NOx and CO CEMS at the time the NOx Control(s) is (are) installed under this Consent Decree. In the event two (2) or more heaters or boilers vent to a common stack, and one (1) heater or boiler has not had NOx Controls installed, the CEMS sampling point must be set such that the unit(s) with the installed NOx Control is monitored directly.
- 66. For heaters and boilers that require CEMS, by no later than one hundred eighty (180) days after commencement of operation of the NOx controls, ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall install, certify, calibrate, maintain and operate CEMS pursuant to Paragraph 202 and 203.
- 67. The requirements of this Part do not exempt ConocoPhillips from complying with any and all Federal, state or local requirements that may require technology upgrades based on actions or activities occurring after the Date of Entry of this Consent Decree. Similarly, the requirements of this Part do not exempt Suncor from complying with any and all Federal, state or local requirements that may require technology upgrades based on actions or activities occurring after the Date of Entry of the First Amendment to the Consent Decree
- 68. ConocoPhillips (for its refineries) and Suncor (for the Denver Refinery as of the Date of Purchase) shall retain all records required to support their reporting requirements under this Part, for the life of this Consent Decree, unless other regulations require the records to be maintained longer.
- 9. Part VIII, Subpart H is revised to read:

100. During the life of this Consent Decree, ConocoPhillips shall conduct subsequent laboratory audits, such that each laboratory is audited every two (2) years. ConocoPhillips may rely upon audit results obtained by another company that has similar audit requirements if that company has audited the same laboratory within the past twelve (12) months.

#### 10. Part IX, Subpart G is revised to read:

139. ConocoPhillips shall implement "first attempt at repair" beginning no later than ninety (90) days after the Date of Entry of the Consent Decree. ConocoPhillips shall promptly make a "first attempt at repair" on any valve that has a reading greater than 200 ppm of VOCs excluding control valves, pumps, and components that LDAR personnel are not authorized to repair. The timing for the "first attempt at repair" of those components which the monitoring personnel are not authorized to repair will be consistent with the existing regulatory requirements. "First attempt at repair" will be made promptly (no later than the next business day) for the valves over 200 ppm that the LDAR monitoring personnel are authorized to attempt repair. The "first attempt at repair" will be re-monitored no later than four business days following the repair at that refinery to assure the leak is not worse. No other action will be required unless the leak exceeds the then-applicable leak definition for the refinery. If, after two (2) years, ConocoPhillips can demonstrate with sufficient monitoring data that the "first attempt at repair" at 200 ppm will worsen or not improve the Refinery's leak rates, ConocoPhillips may request that EPA reconsider or amend this requirement.

## 11. Part X, Subpart E is revised to read:

# E. Sulfur Recovery Plant Optimization

- 176. During the life of the Consent Decree, ConocoPhillips shall continue to maintain its ConocoPhillips Sulfur Processing Best Practices Network as a means to optimize sulfur plant operations. This network charter is included in Attachment 6. The network, at a minimum, will review:
  - (a) operator and engineer training for SRP and amine treating operations;
  - (b) operating parameters, material balances and efficiencies;
  - (c) acid gas and SWS gas composition;
  - (d) operating problems and corrective actions;

- (e) incremental improvements achieved;
- (f) new or modified operating procedures; and
- (g) root cause and corrective action performed as a result of any incident investigation performed as a result of an Acid Gas Flaring Incident or Tail Gas Flaring Incident.

176(a). In lieu of maintaining a best practices network, Suncor shall conduct and document a sulfur plant optimization study for the sulfur plants located at the Denver refinery. This study shall be completed within one year of the Entry Date of this Amended Consent Decree and shall include:

- A detailed evaluation of plant design and capacity, operating parameters and efficiencies- including catalytic activity and material balances;
- An analysis of the composition of the acid gas and sour water stripper gas resulting from the processing of crude slate actually used or expected to be used, in the SRP;
- c) Identify and review each critical piece of process equipment and instrumentation in the Claus train that is designed to correct deficiencies or problems that prevent the Claus train from achieving its optimal sulfur recovery efficiency and expanded period of operation;
- d) Establishment of a thermodynamic process model of the Claus train:
- e) For any key parameters that have been determined to be at less than optimal levels, initiation of logical, sequential or stepwise changes designed to move such parameters to their optimal values:
- f) Verification through testing, analysis of continuous emission monitoring data or other means, of incremental and cumulative improvements in sulfur recovery efficiency, if any;
- g) Identify any needed new operating procedures for long term efficient operation and implement as soon as practicable; and
- Such study shall be conducted to optimize the performance of the Claus train in light of the actual characteristics of the feeds to the SRUs.

# Part X, Subpart I is revised to read:

# I. Requirements Related to All Flaring Incidents

 Investigation and Reporting. No later than forty-five (45) days following the end of an Acid Gas Flaring Incident, Tail Gas Incident, HC Flaring Incident, or a Denver No. 1 Incinerator Incident (individually and collectively referred to as "Flaring Incident"), ConocoPhillips shall prepare a report that sets forth the following:

- 183a. ConocoPhillips shall submit the report prepared in Paragraph 183 for AG Flaring Incidents, Tail Gas Incidents and Denver No. 1 Incinerator Incidents to the Addresses listed in Paragraph 296. ConocoPhillips shall maintain the reports prepared for Hydrocarbon Flaring Incidents onsite. ConocoPhillips shall summarize the Hydrocarbon Flaring incidents in the Quarterly Progress Reports.
- Paragraph 192(a)(2) is revised as shown below:
  - (2) If the Root Cause of the Acid Gas Flaring Incident was sudden and infrequent, yet was reasonably preventable through the exercise of good engineering practice, then ConocoPhillips (for its refineries) or Suncor (for the Denver Refinery) shall implement corrective action(s) pursuant to Paragraph 184;
- 14. Paragraph 193 is revised as shown below to correct the formula:

Tons of SO2 = [FR][TD][ConcH2S][8.44 x 10-5].

- 15. Paragraph 219 is amended as follows:
  - 219. <u>Tier 2 Gasoline</u>. From the reductions made pursuant to the Consent Decree, Suncor shall use only 50 total tons per year of NOx and 50 total tons per year of SO<sub>2</sub> from the Denver Refinery necessary for use as credits or offsets in any PSD, major non-attainment and/or minor NSR permit or permit proceeding occurring after the Date of Lodging of the Consent Decree for Tier 2 Gasoline projects. ConocoPhillips shall use only 50 total tons per year of NOx and 50 total tons per year of SO<sub>2</sub> from the refineries identified in Paragraph 5 other than the Denver refinery necessary for use as credits or offsets in any PSD, major non-attainment and/or minor NSR permit or permit proceeding occurring after the Date of Lodging of the Consent Decree for Tier 2 Gasoline projects.
- 16. Paragraph 221 is revised to read as follows:
  - 221. Low Sulfur Diesel. From the reductions made pursuant to this Consent Decree, Suncor may use total 25 tons per year of NOx and 25 total tons per year of SO<sub>2</sub> from the Denver Refinery as credits or offsets in

any PSD, major non-attainment and/or minor NSR permit or permit proceeding occurring after the Date of Lodging of this Consent Decree necessary to permit the Low Sulfur Diesel projects at the Denver Refinery. ConocoPhillips may use total 175 tons per year of NOx and 175 total tons per year of SO<sub>2</sub> from the refineries identified in Paragraph 5 other than the Denver Refinery as credits or offsets in any PSD, major non-attainment and/or minor NSR permit or permit proceeding occurring after the Date of Lodging of this Consent Decree necessary to permit the Low Sulfur Diesel projects at each refinery.

#### 17. Paragraph 223 is hereby amended to read:

223. If ConocoPhillips (for its refineries) or Suncor (for the Denver Refinery) can make a showing to EPA that additional credits are necessary for construction or modification of emission units required by the Tier 2 Gasoline or Low Sulfur Diesel regulations, ConocoPhillips or Suncor, as the case may be, may request that EPA allow use of additional credits for that purpose in accordance with this Part, not to exceed 5% each for NOx and SO<sub>2</sub> of any refinery's total reductions achieved by that date under this Consent Decree.

#### Paragraph 224 is hereby amended to read:

224. ConocoPhillips shall only use the credits available to it under this Part if it can demonstrate to the United States that, at the time the credits are to be applied, it is otherwise in compliance with all other requirements of this Consent Decree at each of its refineries. If it is in violation of any Consent decree requirement at any of its refineries, ConocoPhillips shall be prohibited from using any credits until the violation(s) is corrected and any stipulated penalties are paid in full. Similarly, Suncor shall only use the credits available for the Denver Refinery under this Part if it can demonstrate to the United States that, at the time the credits are to be applied, Suncor is otherwise in compliance with all other requirements of this Consent Decree at the Denver Refinery. If Suncor is in violation of any Consent Decree requirement at the Denver Refinery, Suncor shall be prohibited from using any credits until the violation(s) is corrected and any stipulated penalties are paid in full. The credits shall become available upon construction of the projects that generate the credits and nothing in this language shall be construed to require ConocoPhillips or Suncor to complete any requirement earlier than is required in the Consent Decree or this Amendment.

## Paragraph 256(f) is amended as follows:

(f) Requirements for Heaters/Boilers (Part VII):

- (1) Failure to meet the emission limits and to demonstrate compliance with Paragraphs 55(f) and 56 for the ConocoPhillips refineries and Paragraphs 55(a) and 55(b) for the Denver Refinery;
  - (i) \$800 per day for each heater or boiler with capacity of 150 mmBTU/hr (HHV) or greater
  - (ii) \$400 per day for each heater or boiler with capacity of less than 150 mmBTU/hr (HHV)
- (2) Failure to achieve the total combined NOx reductions in accordance with Paragraph 56 for the ConocoPhillips Refinery and Paragraph 55(b) for the Denver Refinery: \$100,000 per quarter, per refinery
- (3) Failure to achieve two-thirds (2/3) of the combined NOx reductions in accordance with Paragraph 58 for the ConocoPhillips Refinery: \$200,000 per quarter, per refinery
- (4) Failure to install NOx controls on at least 30% of the heater and boiler capacity in accordance with Paragraphs 59 and 60 for the ConocoPhillips Refinery and Paragraphs 55(e) for the Denver Refinery: \$100,000 per quarter, per refinery

#### Paragraph 258 is amended as follows:

 Should either ConocoPhillips or Suncor dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the United States or the appropriate Plaintiff-Intervener by placing the disputed amount demanded by the United States or the appropriate Plaintiff-Intervener, not to exceed \$50,500 for any given event or related series of events at any one refinery, in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Part XXII within the time provided in this Part for payment of stipulated penalties. If the dispute is thereafter resolved in ConocoPhillips' or Suncor's favor, the escrowed amount plus accrued interest shall be returned to ConocoPhillips or Suncor, as the case may be, otherwise the United States or the appropriate Plaintiff-Intervener shall be entitled to the escrowed amount that was determined to be due by the Court plus the interest that has accrued on such amount, with the balance, if any, returned to ConocoPhillips or Suncor, as the case may be.

#### Part XXI of the Consent Decree is amended as follows:

272. Heaters and Boilers. This Consent Decree constitutes full settlement of and shall resolve all civil liability of ConocoPhillips and Suncor, as the case may be, to the United States and the appropriate Plaintiff-Interveners for the violations alleged in the United States and the Plaintiff-Interveners'
Complaints and all civil liability occurring prior to entry of this Consent
Decree under the Prevention of Significant Deterioration (PSD) and NonAttainment New Source Review requirements at Parts C and D of the Act,
and the regulations promulgated thereunder at 40 CFR § 52.21 (the "PSD"
rules), and state and local regulations which incorporate and/or implement
those rules, for any increase in SO2, NOx, and CO emissions resulting from
the construction, modification, or operation of the process heaters and
boilers at the refineries identified in Paragraph 5. During the life of the
Consent Decree, these units shall be on a compliance schedule and any
modification to these units, as defined in 40 CFR § 52.21, which is not
required by this Consent Decree is beyond the scope of this release.

- 273. VOCs. Upon ConocoPhillips' and Suncor's (as the case may be) implementation of the enhanced LDAR program and submittal of the applications for revised permits pursuant to Paragraph 210 (b), the United States and the appropriate Plaintiff-Interveners covenant not to sue ConocoPhillips or Suncor for civil penalties for increases in VOC emissions resulting from identification of new components through the audits conducted pursuant to Paragraphs 128 through 130. The United States and Plaintiff-Interveners expressly reserve their right to bring PSD/NSR claims for any other VOC emissions units at the refinery and to consider the implications of the revised emission estimates on past PSD/NSR applicability determinations.
- 274. Subpart J. This Consent Decree constitutes full settlement of and shall resolve all civil liability of ConocoPhillips and Suncor (as the case may be) to the United States and the Plaintiff-Interveners for the violations alleged in the United States' and Plaintiff-Interveners' Complaints and all civil liability of ConocoPhillips and Suncor (as the case may be) for any violations at the refineries identified in Paragraph 5 based on events that occurred during the relevant time period under the following statutory and regulatory provisions: NSPS Subpart J for (1) FCCU regenerators located at the facilities and as per the schedule set out in Paragraph 54, (2) the fuel gas combustion devices including the flares listed in Paragraph 154(h) and all heaters and boilers, and (3) the SRPs and the relevant state and local regulations which incorporate and/or implement the above-listed federal regulations. For purposes of this Paragraph, the "relevant time period" shall mean the period beginning when the United States' claims and/or Plaintiff-Interveners' claims under the statutes and regulations identified in this Paragraph accrued, through the Date of Entry of the Consent Decree.
- 275.(a) NSPS Subpart A and J Releases. ConocoPhillips and Suncor's (as the case may be) submission of notifications of compliance with respect to the flares listed in Paragraphs 155 and 161 constitutes full settlement of and shall

resolve all past civil liability of ConocoPhillips or Suncor (as the case may be) to the United States and the appropriate Plaintiff-Interveners for NSPS Subpart A and J for those flares through the date of the demonstrated or certified compliance.

- 275.(b) NSPS Subpart H Release. ConocoPhillips shall continue to comply with the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart H for Sulfuric Acid Plants at the Lake Charles refinery. ConocoPhillips' application to modify existing permits to incorporate the Subpart H requirements, and receipt of the modified permits, shall resolve all civil liability of ConocoPhillips for any violations that occurred during the period beginning when the United States' claims and or Plaintiff-Intervener's claims under Subpart H accrued, through the Date of Lodging of the Consent Decree.
- 276. Benzene Waste and LDAR Releases. ConocoPhillips' and Suncor's (as the case may be) performance of the measures required pursuant to Parts VIII and IX, constitutes full settlement of and shall resolve all civil liability of ConocoPhillips and Suncor (as the case may be) to the United States and the appropriate Plaintiff-Intervener for any violations at the refineries identified in Paragraph 5 based on events that occurred during the "relevant time period" under the following statutory and regulatory provisions: Leak Detection and Repair (LDAR), 40 CFR Part 60, Subparts VV and GGG, and 40 CFR Part 63, Subparts F, H, and CC; and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Benzene, 40 CFR Part 61, Subparts FF, J and V pursuant to Section 112(d) of the Act, and state and local regulations which incorporate or implement those rules. This release also includes those events that continued past the Date of Lodging, provided those events were identified in or prior to the submittal of each Refinery's initial Third Party LDAR audit conducted pursuant to Paragraph 129 or the BWON Compliance Verification Review conducted pursuant to Paragraphs 78 and 80 and these events are addressed pursuant to Paragraphs 83, 84, 85, and 86 or 132 as appropriate. This release specifically includes, but is not limited to, those violations which ConocoPhillips has previously selfdisclosed to Plaintiff-Interveners Colorado and Montana as a result of audits conducted in 2000 and/or 2001. For purposes of this Paragraph, the "relevant time period" shall mean the period beginning when the United States' claims and/or Plaintiff-Interveners' claims under the statutes and regulations identified in this Paragraph accrued through Date of Lodging.
- 277. Other Issues. ConocoPhillips' and Suncor's (as the case may be) completion of the injunctive requirements set forth in Parts I-XI of this Consent Decree and EPA's and Plaintiff-Interveners' concurrence shall also constitute full settlement of all civil liability of ConocoPhillips and Suncor to the United States and Plaintiff-Interveners for previously identified state or federal PSD

issues for SO2, NOx, and CO, and BWON, LDAR and NSPS Subpart J matters, including the following specific alleged violations at the refineries identified in Paragraph 5:

(a) Billings Refinery: This Consent Decree resolves ConocoPhillips' discharge of process oily wastewater into the segregated stormwater systems in violation of Subpart QQQ as alleged in the United States' Complaint.

(b) Ponca City, Oklahoma: This Consent Decree resolves the BWON, LDAR, PSD, and NSPS Subpart J issues addressed in Oklahoma DEQ Consent Order No. 01-395 and all Clean Air Act issues identified in the Oklahoma DEQ Compliance Inspection conducted on May 22-23, 2001.

- (c) Lake Charles, Louisiana: This Consent Decree resolves the violations outlined in the Louisiana Department of Environmental Quality Consolidated Compliance Order and Notice of Potential Penalty No. AE-CN-01-0008 dated January 26, 2001, and No. AE-CN-01-0192 dated November 13, 2001.
- (d) Denver, Colorado: This Consent Decree resolves the Clean Air Act violations noted as being referred to the United States Environmental Protection Agency in the December, 2001 Compliance Order on Consent between Colorado and Conoco Inc.

#### Part XXII of the Consent Decree is amended as follows:

- 281. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the United States and the appropriate Plaintiff-Intervener and ConocoPhillips or the Suncor, as the case may be, unless the parties' representatives agree to shorten or extend this period.
- 282. If these dispute resolution procedures are invoked to resolve a dispute regarding particular work practice or the contents of a compliance plan, ConocoPhillips or the Suncor, as the case may be, shall comply with the elements of the plan or emission limit it has proposed until such time as the dispute is completely resolved.
- 283. In the event that the parties are unable to reach agreement during such informal negotiation period, the United States and the appropriate Plaintiff-Intervener shall provide ConocoPhillips or the Suncor, as the case may be, with a written summary of its position regarding the dispute. The position advanced by the United States and the appropriate Plaintiff-Intervener shall be considered binding unless, within forty-five (45) calendar days of ConocoPhillips' or the

Suncor's receipt of the written summary of the United States and the appropriate Plaintiff- Intervener' position, ConocoPhillips or the Suncor, as the case may be, files with this Court a petition which describes the nature of the dispute. In the event that the United States and the appropriate Plaintiff-Intervener are unable to reach agreement with regard to ConocoPhillips' or the Suncor's claim, the position of the United States shall be the Plaintiffs' final position.

287. As part of the resolution of any dispute submitted to dispute resolution, the parties by agreement, or this Court by order, in appropriate circumstances, may extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. ConocoPhillips or the Suncor, as the case may be, shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

#### Part XXIII of the Consent Decree is amended as follows:

288. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve ConocoPhillips or Suncor, as the case may be, of its obligation to comply with all applicable federal, state and local laws and regulations. Subject to Paragraph 260 (Election of Remedy), nothing contained in this Consent Decree shall be construed to prevent, alter or limit the ability of the United States' and the appropriate Plaintiff-Interveners' rights to seek or obtain other remedies or sanctions available under other federal, state or local statutes or regulations, by virtue of ConocoPhillips' or Suncor's violation of this Consent Decree or of the statutes and regulations applicable to violations of this Consent Decree. This shall include the United States' and the appropriate Plaintiff-Interveners' right to invoke the authority of the Court to order ConocoPhillips' or Suncor's compliance with this Consent Decree in a subsequent contempt action.

289. Use of Contractors to Meet ConocoPhillips' or Suncor's Obligations. Except where expressly prohibited, ConocoPhillips or Suncor may use a contractor to fulfill its obligations under this Consent Decree. Where ConocoPhillips or Suncor uses one or more contractors to comply with its obligations, ConocoPhillips or Suncor, as the case may be, shall ensure that the contractor is aware of and in compliance with the requirements of the Consent Decree.

24. Paragraph 296 is hereby amended to include the following information:

As to Suncor:

Janice Odegaard Secretary, Suncor Energy (U.S.A.) Inc. 112 4<sup>th</sup> Avenue, SW Calgary, Alberta CANADA T2P 2V5

Tel: (403) 269 8159

- 25. Attachment I is amended to include the list of heaters and boilers with firing capacities greater than 40 MMBtu/hour at the Billings, Denver, Lake Charles and Ponca City refineries.
- 26. The undersigned representatives are fully authorized to enter into the terms and conditions of this Amendment.
- This Amendment may be executed in several counterparts, each of which will be considered an original.

#### ORDER

Before the taking of any testimony, without adjudication of any issue of fact or law, and upon the consent and agreement of the Parties, it is:

ORDERED, ADJUDGED and DECREED that this Amendment to the Consent Decree is hereby approved and entered as a final order of this Court.

| Dated and entered this | day of             | , 2003   |   |
|------------------------|--------------------|----------|---|
|                        |                    |          |   |
|                        |                    |          | _ |
| Un                     | ited States Distri | ct Judge |   |

2003

# WE HEREBY CONSENT to the foregoing Amendment to the Consent Decree entered in

United States, et al., v. Conoco, Civil Action H-01-4430 on April 30, 2002.

#### FOR PLAINTIFF THE UNITED STATE OF AMERICA

| Date: | *  |
|-------|--|
|       | THOMAS L. SANSONETTI                         |
|       | Assistant Attorney General                   |
|       | Environmental and Natural Resources Division |
|       | U. S. Department of Justice                  |
| Date: |  |
|       | DIANNE M SHAWLEY                             |

DIANNE M. SHAWLEY
Senior Counsel
Environmental Enforcement Section
Environmental and Natural Resources Division
U. S. Department of Justice
P. O. Box 7611
Washington, D.C. 20044-7611
202-514-0096

| WE HEREBY CONSENT to the            | foregoing Amendment to the Consent Decree entered in |
|-------------------------------------|--|
| United States, et al., v. Conoco, C | Civil Action H-01-4430 on April 30, 2002.            |
| FOR DEFENDANT, CONOCOR              | PHILLIPS, INC.                                       |
| Date:                               |  |
|                                     | NAME   |
|                                     | Title  |

WE HEREBY CONSENT to the foregoing Amendment to the Consent Decree entered in United States, et al., v. Conoco, Civil Action H-01-4430 on April 30, 2002.

FOR Suncor Energy (U.S.A.) Inc.

Date: \_\_\_\_\_

JANICE ODEGAARD Secretary Suncor Energy (U.S.A.) Inc. 112 4<sup>th</sup> Avenue, SW Calgary, Alberta CANADA T2P 2V5 Tel: (403) 269 8159

| WE HEREBY CONSENT t            | o the foregoing Amendment to the Consent Decree entered in |
|--------------------------------|--|
| United States, et al., v. Cond | oco, Civil Action H-01-4430 on April 30, 2002.             |
| FOR THE STATE OF COL           | ORADO  |
| Date:                          |  |
|                                | NAME   |
|                                | Title  |

| WE HEREBY CONSENT to the          | foregoing Amendment to the Consent Decree entered in |
|-----------------------------------|--|
| United States, et al., v. Conoco, | Civil Action H-01-4430 on April 30, 2002.            |
| FOR THE STATE OF LOUISIA          | NA   |
| Date:                             |  |
|                                   | NAME   |
|                                   | Title  |

| WE HEREBY CONSENT to the            | foregoing Amendment to the Consent Decree entered in |
|-------------------------------------|--|
| United States, et al., v. Conoco, C | Civil Action H-01-4430 on April 30, 2002.            |
| FOR STATE OF MONTANA                |  |
| Date:                               |  |
|                                     | NAME   |
|                                     | Title  |

| WE HEREBY CONSENT to             | the foregoing Amendment to the Consent Decree entered in |
|----------------------------------|--|
| United States, et al., v. Conocc | o, Civil Action H-01-4430 on April 30, 2002.             |
| FOR STATE OF OKLAHOM             | A  |
| Date:                            |  |
|                                  | NAME<br>Title  |