

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF INDIANA
HAMMOND DIVISION

UNITED STATES OF AMERICA,)
)
Plaintiff,) Civil No. 2:96 CV 095 RL
)
and) Judge Rudy Lozano
)
THE STATE OF INDIANA, STATE OF OHIO, and)
the NORTHWEST AIR POLLUTION AUTHORITY,)
WASHINGTON,)
)
Plaintiff-Intervenors,)
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v.)
)
BP EXPLORATION & OIL CO., ET AL.)
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Defendants.)
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FOURTH AMENDMENT TO CONSENT DECREE

WHEREAS the United States of America (hereinafter “the United States”); the State of Indiana, the State of Ohio, and the Northwest Pollution Control Authority of the State of Washington (hereinafter “Plaintiff-Intervenors”); and BP Products North America Inc. (successor to BP Exploration and Oil, Co., and Amoco Oil Company), and West Coast Products LLC (the owner of refining assets previously owned by Atlantic Richfield Company) (hereinafter, collectively, “BP”) are parties to a Consent Decree entered by this Court on August 29, 2001 (hereinafter “the Consent Decree”); and

WHEREAS BP sold its Mandan and Salt Lake City Refineries to Tesoro Petroleum Corporation (“Tesoro”) on September 6, 2001, and Tesoro assumed the obligations of the Consent Decree as they relate to the Mandan and Salt Lake City Refineries pursuant to the First Amendment To Consent Decree, which was approved and entered as a final order of the Court on October 2, 2001; and

WHEREAS BP sold its Yorktown Refinery to Giant Yorktown, Inc., (“Giant”) on May 14, 2002, and Giant assumed the obligations of the Consent Decree as they relate to the Yorktown Refinery pursuant to the Second Amendment To Consent Decree, which was approved and entered as a final order of the Court on June 7, 2002; and

WHEREAS, BP sold a hydrogen plant located at its Texas City Refinery to Praxair on August 6, 2004 and Praxair assumed the obligations of the Consent Decree as they relate to that hydrogen plant pursuant to the Third Amendment To Consent Decree, which was approved and entered as a final order of the Court on October 25, 2004; and

WHEREAS Paragraphs 14 and 16 of the Consent Decree require BP to conduct demonstrations of various technologies for reducing emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x) from the fluid catalytic cracking units (FCCUs) at the Carson, Texas City, Toledo and Whiting Facilities; and

WHEREAS these Paragraphs provide that EPA, in consultation with BP and the appropriate Plaintiff-Intervenor, will establish final long-term and short-term average SO₂ and NO_x emission limits for each such FCCU; and

WHEREAS if BP disagrees with any emission limit established by EPA pursuant to Paragraphs 14 or 16, BP may contest that limit in a dispute resolution proceeding before this Court; and

WHEREAS the United States, BP, and the Plaintiff-Intervenors share an interest in reaching negotiated agreement on the levels at which final limits are to be set in order to avoid the costs and risks of potential disputes over the emission limits; and

WHEREAS the United States, BP and the Plaintiff-Intervenors agree that there is currently sufficient information available to establish mutually acceptable emission limits that are consistent with the purposes and intent of the Consent Decree for most of BP’s FCCUs; and

WHEREAS the United States and BP, after extensive negotiations and thorough consideration of all available and relevant data and information, and of the terms and conditions

of the Consent Decree, have reached agreement on all but one of the final long-term and short-term SO₂ and NO_x emission limits contemplated by the Decree for BP's FCCUs; and

WHEREAS prior to the effective date for the final long-term and short-term SO₂ and NO_x emission limits contained in this Amendment, BP is required to continue to comply with the emission limits it proposed in its previously submitted demonstration reports, and expects in some cases to use emission-reducing catalyst additives at its FCCUs in amounts greater than required for interim compliance to assess alternative methods for meeting the final limits; and

WHEREAS EPA and Giant have agreed to lengthen the demonstration period for the Yorktown FCCU to gather additional emissions data; and

WHEREAS each of the Plaintiff-Intervenors concurs in the appropriateness of these final emission limits and has reviewed and hereby consents to this Amendment; and

WHEREAS the terms of this Amendment do not affect any rights of interests of Tesoro, or Praxair; and

WHEREAS Paragraph 85 of the Consent Decree requires that this Amendment be approved by the Court before it is effective;

NOW THEREFORE, the United States, Plaintiff-Intervenors, BP and Giant hereby agree that, upon approval of this Amendment by the Court, the Consent Decree shall be amended as follows:

I. NO_x controls (Paragraph 14):

1. The heading of Paragraph 14.A. is amended to read as follows:

"A. Emission Limits at Texas City FCCU 2 and Whiting FCU 600:"

2. Paragraph 14.A.i, related to Texas City FCCU 2, is revised as follows:

a. Paragraph 14.A.i.a is deleted and marked "[Reserved]".

b. Paragraph 14.A.i.b is deleted and marked "[Reserved]".

c. Paragraph 14.A.i.c. is deleted and marked “[Reserved]”.

d. Paragraph 14.A.i.d is revised to read as follows:

“d. Beginning no later than December 31, 2001, BP shall reduce NOx emissions from the Texas City Facility FCCU 2 by use of low-NOx combustion promoter (if and when CO promoter is used) and NOx adsorbing catalyst additive in accordance with Appendix F to achieve an interim concentration-based limit to be set in accordance with Paragraph 14.F.ii. BP will determine an optimized rate for the catalyst additives and demonstrate the performance of the catalyst additives at the optimized rate over a fifteen-month period. The fifteen-month optimization and demonstration at the optimized rate shall begin no later than December 31, 2001. The optimization shall be completed no later than June 30, 2002. Prior to beginning the demonstration, BP shall notify EPA of the optimized catalyst addition rate. During the demonstration, BP shall add catalyst additive according to the requirements of Paragraph 14.E of this Consent Decree. No later than the end of the third full month after the completion of the demonstration, BP shall report to EPA the results of the demonstration as specified in Paragraph 14.F of this Consent Decree. In its report, BP may propose an interim NOx emissions limit based on a 3-hour rolling average and a 365-day rolling average. From and after the date this report is submitted to EPA, BP shall comply with its proposed emissions limit until the effective date of the final limits in Paragraph 14.A.i.e. Beginning no later than June 30, 2001, BP shall use a NOx CEMS to monitor performance of FCCU 2 and to report compliance with the terms and conditions of the Consent Decree.”

e. Paragraph 14.A.i.e is revised to read as follows:

“e. Beginning July 1, 2006, BP shall comply with a NOx emissions limit of 20 ppmvd at 0% O2 on a 365-day rolling average and 40 ppmvd at 0% O2 on a 7-day rolling average basis from the Texas City FCCU 2.”

3. Paragraph 14.A.ii, related to Whiting FCU 600, is revised as follows:

a. Paragraph 14.A.ii.c is deleted except for the final two sentences thereof. As revised Paragraph 14.A.ii.c. reads as follows:

“c. Beginning no later than the turnaround in calendar year 2003, BP shall use a NOx CEMS to monitor performance of Whiting FCU 600 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.”

b. The following is added as a new subparagraph 14.A.ii.d:

“d. Beginning on the effective date of the Fourth Amendment to this Consent Decree, BP shall comply with a NOx emissions limit of 20 ppmvd at 0% O2 on a 365-day rolling average and 40 ppmvd at 0% O2 on a 7-day rolling average basis from the Whiting FCU 600.”

4. Paragraph 14.B.iii, related to the Toledo FCCU, is revised as follows:

a. The first two sentences are deleted and the following substituted in lieu thereof:

“BP will conclude a demonstration of the performance of the SNCR system by December 31, 2005.”

b. The fourth sentence is deleted and the following substituted in lieu thereof:

“By no later than the end of the third full month following the end of the demonstration period, BP shall report to EPA the results of the SNCR demonstration as specified in Paragraph 14.F. of this Consent Decree.”

5. Paragraph 14.C.i, related to the Carson FCCU, is deleted and the following substituted in lieu thereof:

“i. Carson, California FCCU: Beginning on the effective date of the Fourth Amendment to this Consent Decree, BP shall comply with a NOx emissions limit of 20 ppmvd at 0% O2 on a 365-day rolling average and 60 ppmvd at 0% O2 on a 7-day rolling average basis from the Carson, California FCCU. Beginning no later than December 31, 2002, BP shall use a NOx CEMS to monitor performance of the Carson FCCU and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.”

6. Paragraph 14.C.ii, related to the Texas City FCCU 1, Texas City FCCU 3 and Whiting FCU 500 is deleted and the following substituted in lieu thereof:

“ii. Texas City FCCU 1, Texas City FCCU 3 and Whiting FCU 500:

a. Texas City FCCU 1:

(1) Beginning on the effective date of the Fourth Amendment of this Consent Decree, BP shall comply with a NOx emissions limit of 40 ppmvd at 0% O2 on a 365-day rolling average, and 80 ppmvd at 0% O2 on a 7-day rolling average basis from the Texas City Facility FCCU 1, except as provided in Paragraph 14.C.ii.a.(2) below.

(2) Alternative Operating Scenario For Hydrotreater Outages: The applicable 7-day NOx emission limits for the Texas City FCCU 1 shall apply during the period of a hydrotreater outage, except as provided in this subparagraph. By no later than three months prior to the first hydrotreater outage for which BP wishes to utilize the alternative operating scenario provided for in this subparagraph, BP shall submit for approval by EPA a plan for the operation of the Texas City FCCU 1 (including associated air pollution control equipment) during hydrotreater outages in a way that minimizes emissions as much as practicable. The plan shall, at a minimum, consider the use of low sulfur feed, storage of hydrotreated feed, and an increase in additive

addition rate. The applicable 7-day average NOx emission limits shall not apply during periods of FCCU feed hydrotreater outages provided that BP is in compliance with the plan and is maintaining and operating the FCCU in a manner consistent with good air pollution control practices. In addition, in the event that BP asserts that the basis for a specific Hydrotreater Outage is a shutdown (where no catalyst changeout occurs) required by ASME pressure vessel requirements or applicable state boiler requirements, BP shall submit a report to EPA that identifies the relevant requirements and justifies BP's decision to implement the shutdown during the selected time period."

(3) Beginning no later than the end of the 2003 turnaround for Texas City FCCU 1, BP shall use a NOx CEMS to monitor performance of FCCU 1 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.

b. Texas City FCCU 3:

(1) BP shall begin adding NOx adsorbing catalyst in conjunction with low-NOx combustion promoter (if and when CO promoter is used) in accordance with Appendix F by no later than December 31, 2001. BP will determine the optimized rate for the catalyst additives and demonstrate the performance of the catalyst additives at the optimized rate over a fifteen month period to yield the lowest NOx concentration feasible at that optimized rate. The optimization and demonstration of the optimized catalyst addition rates shall begin no later than December 31, 2001. The optimization shall be completed no later than June 30, 2002. Prior to beginning the demonstration, BP shall notify EPA of the optimized additive addition rate. During the demonstration, BP shall add catalyst in accordance with the requirements of Paragraph 14. E of the Consent Decree. No later than the end of the third full month after the completion of the demonstration, BP shall report to EPA the results of the demonstration as required by Paragraph 14.F of this Consent Decree. In its report, BP may propose a NOx emissions limit based on a 3-hour rolling average and a 365-day rolling average. From and after the date its report is submitted to EPA, BP shall comply with its proposed emissions limits for the FCCU until the effective date of the final limits in Paragraph 14.C.ii.b.(2).

(2) Beginning July 1, 2007, BP shall comply with a NOx emissions limit of 20 ppmvd at 0% O2 on a 365-day rolling average and 40 ppmvd at 0% O2 on a 7-day rolling average basis from Texas City FCCU 3, if BP has installed an SCR on the FCCU. If BP has not installed an SCR on Texas City FCCU 3, beginning July 1, 2007, BP shall comply with a NOx emissions limit of 30 ppmvd at 0% O2 on a 365-day rolling average and 60 ppmvd at 0% O2 on a 7-day rolling average basis from the Texas City 3 FCCU.

(3) Alternate Operating Scenario: In lieu of complying with the applicable rolling 7-day average NOx emission limit in Paragraph 14.C.ii.b.(2), BP shall limit NOx emissions from the Texas City Facility's FCCU 3 to 120 ppmvd at 0% O2 during NOx control device outages that occur for reasons other than Startup, Shutdown or Malfunction of the NOx control device and that are necessary for one or more of the following reasons:

- (A) For an SCR: Replacement or cleaning of the SCR catalyst and/or maintenance of ductwork and other components of the SCR that was necessary to prevent or rectify a situation which:
 - (i) Was resulting in or was reasonably likely to result in non-compliance with applicable NOx emission limitations;
 - (ii) Was interfering or was reasonably likely to interfere with proper operation of the FCCU and/or other FCCU control equipment; or
 - (iii) Posed or was reasonably likely to pose a threat to the safety or health of employees or the public.

- (B) For NOx control device outages other than an SCR: Maintenance of any NOx control device (other than an SCR) that was necessary to prevent or rectify a situation which:
 - (i) Was resulting in or was reasonably likely to result in non-compliance with applicable NOx emission limitations;
 - (ii) Was interfering or was reasonably likely to interfere with proper operation of the FCCU and/or other FCCU control equipment; or
 - (iii) Posed or was reasonably likely to pose a threat to the safety or health of employees or the public.

(4) To qualify for the alternative 7-day average limit in Paragraph 14.C.ii.b.(3) above, BP must demonstrate to EPA's satisfaction, in a report submitted to EPA within 30 days of the end of the NOx control device outage, that:

- (A) The NOx control device outage was necessary for one or more of the reasons listed in Paragraph 14.C.ii.b.(3)(A) or (B), above; and
- (B) The total duration of outages covered by Paragraph 14.C.ii.b.(3) has not exceeded 30 days in the most recent rolling thirty (30) month period.

(5) Beginning no later than December 31, 2001, BP shall use a NOx CEMS to monitor performance of FCCU 3 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.

c. Whiting FCU 500:

(1) BP shall begin adding NOx adsorbing catalyst in conjunction with low-NOx combustion promoter (if and when CO promoter is used) in accordance with Appendix F by no later than March 31, 2002. BP will determine the optimized rate for the catalyst additives and demonstrate the performance of the catalyst additives

at the optimized rate over a fifteen-month period to yield the lowest NOx concentration feasible at that optimized rate. The optimization and demonstration of the optimized catalyst addition rates shall begin no later than March 31, 2002. The optimization shall be completed by no later than September 30, 2002. Prior to beginning the demonstration, BP shall notify EPA of the optimized additive addition rate. During the demonstration, BP shall add catalyst in accordance with the requirements of Paragraph 14. E of the Consent Decree. No later than the end of the third full month after the completion of the demonstration, BP shall report to EPA the results of the demonstration as required by Paragraph 14.F of this Consent Decree. In its report, BP may propose a NOx emissions limit based on a 3-hour rolling average and a 365-day rolling average. From and after the date its report is submitted to EPA, BP shall comply with its proposed emissions limits for the FCU until the effective date of the final limits in Paragraph 14.C.ii.c.(2).

(2) Beginning July 1, 2006, BP shall comply with a NOx emissions limit of 40 ppmvd at 0% O2 on a 365-day rolling average and 80 ppmvd at 0% O2 on a 7-day rolling average basis from Whiting Facility's FCU 500.

(3) Alternate Operating Scenario: In lieu of complying with the applicable rolling 7-day average NOx emission limit in Paragraph 14.C.ii.c.(2), BP may elect to comply with the provisions of this subparagraph. BP may use conventional Pt-based combustion promoter on an intermittent basis, in such amounts as may be necessary to avoid unsafe operations of the FCU regenerator and to comply with CO emission limits. BP will undertake appropriate measures and/or adjust operating parameters with the goal of eliminating use of conventional Pt-based combustion promoter, but BP will not then be required to adjust operating parameters in a way that would limit conversion or processing rates. Within 30 days of any such use of conventional Pt-based combustion promoter, BP will submit a report to EPA documenting when and why it used the conventional Pt-based combustion promoter and the actions, if any, taken to return to the minimized level of use. During such usage, and for a period of up to 4 weeks following the end thereof, BP shall limit NOx emissions from the Whiting Facility's FCU 500 to 120 ppmvd at 0% O2 on a 7-day rolling average basis in lieu of complying with the 7-day average limit in Paragraph 14.C.ii.c.(2) above."

(4) Beginning no later than March 31, 2002, BP shall use a NOx CEMS to monitor performance of Whiting FCU 500 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable."

II. SO2 controls (Paragraph 16):

1. The heading for Paragraph 16.A is amended to read as follows:

“A. Installation of Wet Gas Scrubbers (“WGS”) and Emission Limits:”

2. Paragraph 16.A.i., related to the Whiting FCU 500 is revised as follows:
 - a. Paragraph 16.A.i.a is deleted and marked “[Reserved]”.
 - b. Paragraph 16.A.i.b shall be deleted and marked “[Reserved]”.
 - c. Paragraph 16.A.i.c is deleted except for the last two sentences thereof. As revised, Paragraph 16.A.i.c. reads as follows:

“c. Beginning no later than September 30, 2001, BP shall use a SO₂ CEMS to monitor performance of Whiting FCU 500 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.”
 - d. Paragraph 16.A.i.d is revised to read as follows:

“d. Beginning no later than December 31, 2001, BP shall reduce SO₂ emissions from the Whiting FCU 500 by use of SO₂ adsorbing catalyst additive in accordance with Appendix F. BP will demonstrate performance of the SO₂ adsorbing catalyst additive in accordance with Appendix F over a 12-month period. The 12-month demonstration shall begin no later than December 31, 2001. No later than the end of the third full month after the completion of the 12-month demonstration, BP shall report to EPA the results of the demonstration as specified in Paragraph 16.E. of this Consent Decree. In such report, BP shall either agree to an interim SO₂ limit of 117 ppmvd (at 0% oxygen) on a 365-day rolling average basis or propose an alternative 365-day rolling average concentration-based SO₂ emission limit that is based on the performance of the SO₂ adsorbing catalyst additive during the demonstration and is consistent with the provisions of Paragraph 16.E.ii and Appendix F. From and after the date this report is submitted, BP shall comply with its proposed emission limit until the effective date of the final limits in Paragraph 16.A.i.e. At all times during the demonstration period, BP shall optimize the levels of catalyst addition rates according to the criteria identified in Paragraph 16.G, below.”
 - e. Paragraph 16.A.i.e is revised to read as follows:

“e. Beginning July 1, 2006, BP shall comply with an SO₂ emissions limit of 25 ppmvd at 0% O₂ on a 365-day rolling average and 50 ppmvd at 0% O₂ on a 7-day rolling average basis from the Texas City FCCU 3.”
3. Paragraph 16.A.ii.a. related to the Texas City FCCU 3 is revised as follows:
 - a. Paragraph 16.A.ii.a is deleted and marked “[Reserved]”.
 - b. Paragraph 16.A.ii.b shall be deleted and marked “[Reserved]”.
 - c. Paragraph 16.A.ii.c is deleted except for the last two sentences thereof. As revised,

Paragraph 16.A.ii.c. reads as follows:

“c. Beginning no later than June 30, 2001, BP shall use a SO₂ CEMS to monitor performance of Texas City FCCU 3 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.”

d. Paragraph 16.A.ii.d is revised to read as follows:

“d. Beginning no later than June 30, 2001, BP shall reduce SO₂ emissions from the Texas City FCCU 3 by use of SO₂ adsorbing catalyst additive in accordance with Appendix F. BP will demonstrate performance of the SO₂ adsorbing catalyst additive at the addition rate determined in accordance with Appendix F over a 12-month period. The 12-month demonstration shall begin no later than June 30, 2001. No later than the end of the third full month after the completion of the 12-month demonstration, BP shall report to EPA the results of the demonstration as specified in Paragraph 16.E. of this Consent Decree. In such report, BP shall either agree to an interim SO₂ limit of 117 ppmvd (at 0% oxygen) on a 365-day rolling average basis or propose an alternative 365-day rolling average concentration-based SO₂ emission limit that is based on the performance of the SO₂ adsorbing catalyst additive during the demonstration and is consistent with the provisions of Paragraph 16.E.ii. and Appendix F. From and after the date this report is submitted, BP shall comply with its proposed emission limit until the effective date of the final limits in Paragraph 16.A.ii.e.. At all times during the demonstration period, BP shall optimize the levels of catalyst addition rates according to the criteria identified in Paragraph 16.G, below.”

e. Paragraph 16.A.ii.e is revised to read as follows:

“e. Beginning July 1, 2007, BP shall comply with an SO₂ emissions limit of 25 ppmvd at 0% O₂ on a 365-day rolling average and 50 ppmvd at 0% O₂ on a 7-day rolling average basis from the Texas City FCCU 3.”

4. Paragraph 16.B.ii related to the Yorktown FCCU and the Whiting FCU 600 is revised to read as follows:

“a. Yorktown FCCU: Giant shall initiate twelve-month demonstration of SO₂ adsorbing catalyst additive by no later than March 31, 2003 for Yorktown FCCU. Giant will demonstrate performance of the SO₂ adsorbing catalyst for the FCCU at the addition rate determined for each FCCU in accordance with Appendix F over a 12-month period. No later than sixty(60) days after the completion of the 12-month demonstration, Giant shall report to EPA the results of the demonstration as specified in Paragraph 16.E.ii. of this Consent Decree. In such report, Giant shall propose a 365-day rolling average concentration-based emission limit for the FCCU that is consistent with Paragraph 16.E.ii and the applicable provisions of Appendix F. In such report, Giant also shall propose a 7-day rolling average concentration-based SO₂ emission limit for the FCCU that is based on the performance of the SO₂ adsorbing catalyst additive during the demonstration for the FCCU and is consistent with the provisions of Paragraph 16.E.ii and Appendix F. From and after the date the

report is submitted, Giant shall comply with its proposed emission limit for the FCCU until EPA sets a final interim limit. At all times during the demonstration periods, Giant shall optimize the levels of catalyst addition rates according to Paragraph 16.D, below. Beginning no later than September 30, 2001, Giant shall use SO2 CEMS to monitor performance of the FCCU and to report compliance with the terms and conditions of the Consent Decree. EPA will use the information provided by Giant in its reports, CEMS data collected during the demonstration, the information Giant is required to submit in Paragraph 16.E, and all other available and relevant information to establish representative SO2 emission limits for the Yorktown FCCU in accordance with Paragraph 16.E.ii and Appendix F, provided however that these limits may not be more stringent than 25 ppmvd (at 0% O2) on a 365-day rolling average. Giant shall comply with the emissions limits set by EPA at the time such emissions limits are set by EPA, provided that if the emissions limit established by EPA for the FCCU is more stringent than the limit proposed by Giant for the FCCU, Giant shall comply with that more stringent limit no later than 45 days after receipt of notice thereof from EPA. If Giant disagrees with the more stringent emissions limit set by EPA, it shall invoke Dispute Resolution within the same forty-five (45) day period.

b. Whiting FCU 600: Beginning on July 1, 2006, BP shall comply with an SO2 emissions limit of 50 ppmvd at 0% O2 on a 365-day rolling average and 125 ppmvd at 0% O2 on a 7-day rolling average basis from the Whiting FCU 600. Beginning no later than June 30, 2003, BP shall use a SO2 CEMS to monitor performance of Whiting FCU 600 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable. “

5. Paragraph 16.B.iii related to the Carson FCCU, Texas City FCCU 2, and Toledo FCCU is deleted and the following substituted in lieu thereof:

“iii. Carson FCCU, Texas City FCCU 2, and Toledo FCCU:

a. Carson FCCU: Beginning on the effective date of The Fourth Amendment to this Consent Decree, BP shall comply with an SO2 emissions limit of 50 ppmvd at 0% O2 on a 365-day rolling average and 150 ppmvd at 0% O2 on a 7-day rolling average basis from the Carson FCCU. Beginning no later than June 30, 2001, BP shall use a SO2 CEMS to monitor performance of Carson FCCU and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon as practicable.

b. Texas City FCCU 2: Beginning on the effective date of the Fourth Amendment to this Consent Decree, BP shall comply with an SO2 emissions limit of 126 ppmvd at 0% O2 on a 365-day rolling average and 250 ppmvd at 0% O2 on a 7-day rolling average basis from the Texas City FCCU 2. Beginning no later than September 30, 2001, BP shall use a SO2 CEMS to monitor performance of Texas City FCCU 2 and to report compliance with the terms and conditions of the Consent Decree. All CEMS data collected by BP during the effective life of the Consent Decree shall be made available to EPA upon demand as soon

as practicable.

c. Toledo FCCU

(1) Beginning no later than June 30, 2001, BP shall use SO₂ CEMS to monitor performance of Toledo FCCU and to report compliance with the terms and conditions of the Consent Decree.

(2) BP shall initiate a 12-month demonstration of SO₂ adsorbing catalyst additive in accordance with Appendix F and in conjunction with continued hydrotreatment of FCCU feed at existing levels by no later than June 30, 2001. BP will demonstrate performance of the combination of FCCU feed hydrotreatment and SO₂ adsorbing catalyst additive at the addition rate determined in accordance with Appendix F over a 12-month period. No later than the end of the third full month after the completion of the 12-month demonstration, BP shall report to EPA the results of that demonstration as specified in Paragraph 16.E. of this Consent Decree. In such report, BP shall propose a 365-day rolling average concentration-based emission limit for Toledo FCCU that is consistent with Paragraph 16.E.ii and the applicable provisions of Appendix F. In such report, BP also shall propose a 7-day rolling average concentration-based SO₂ emission limit that is based on the performance of the SO₂ adsorbing catalyst additive during the demonstration for Toledo FCCU and is consistent with the provisions of Paragraph 16.E.ii and Appendix F. From and after the date the report is submitted, BP shall comply with its proposed emission limit for Toledo FCCU until the effective date of the limits in Paragraph 16.B.iii.c.(3).

(3) Beginning July 1, 2006, BP shall comply with an SO₂ emissions limit of 160 ppmvd at 0% O₂ on a 365-day rolling average and 260 ppmvd at 0% O₂ on a 7-day rolling average basis from the Toledo FCCU.”

6. Paragraph 16.B.iv, related to the Texas City FCCU 1, is deleted and the following substituted in lieu thereof:

“iv. Texas City FCCU 1:

a. Beginning on the effective date of the Fourth Amendment to this Consent Decree, BP shall comply with an SO₂ emissions limit of 50 ppmvd at 0% O₂ on a 365-day rolling average and 150 ppmvd at 0% O₂ on a 7-day rolling average basis from the Texas City Facility’s FCCU 1, except as provided in Paragraph 16.B.iv.b. below.

b. Alternative Operating Scenario For Hydrotreater Outages: The applicable 7-day SO₂ emission limits for the Texas City FCCU 1 shall apply during the period of a hydrotreater outage, except as provided in this subsection. By no later than three months prior to the first hydrotreater outage for which BP wishes to utilize the alternative operating scenario provided for in this subparagraph, BP shall submit for approval by EPA a plan for the operation of the Texas City FCCU 1 (including associated air pollution control equipment) during hydrotreater outages in a way that

minimizes emissions as much as practicable. The plan shall, at a minimum, consider the use of low sulfur feed, storage of hydrotreated feed, and an increase in additive addition rate. The applicable 7-day average SO₂ emission limits shall not apply during periods of FCCU feed hydrotreater outages provided that BP is in compliance with the plan and is maintaining and operating the FCCU in a manner consistent with good air pollution control practices. In addition, in the event that BP asserts that the basis for a specific Hydrotreater Outage is a shutdown (where no catalyst changeout occurs) required by ASME pressure vessel requirements or applicable state boiler requirements, BP shall submit a report to EPA that identifies the relevant requirements and justifies BP's decision to implement the shutdown during the selected time period.

c. BP shall use an SO₂ CEMS to monitor performance of Texas City FCCU 1 and to report compliance with the terms and conditions of the Consent Decree."

III. Additional Amendments:

1. The following new paragraph 16A is added between Paragraphs 16 and 17:

"16A. Additional Provisions Related To SO₂ and NO_x Emission Limits For BP's FCCUs: Startup, Shutdown or Malfunction: Emissions during periods of Startup, Shutdown or Malfunction shall not be considered in determining compliance with the 7-day rolling average emissions limits set out in Paragraph 14 (in the case of NO_x) and Paragraph 16 (in the case of SO₂), provided that during such periods BP implements good air pollution control practices for minimizing SO₂ and/or NO_x emissions, as applicable. For purposes of these limits, the phrase "affected facility" as used in the definitions of "Startup" and "Shutdown" in Paragraphs 13. II. and GG of the Consent Decree shall mean each FCCU for which a final emissions limit has been established."

2. Paragraph 39.D is revised to read as follows:

"D. For failure to meet the emission limits proposed by BP (final or interim) or established by EPA (final or interim) for NO_x and CO pursuant to Paragraph 14, per day, per unit: \$2500 for each calendar day on which the specified rolling average exceeds the applicable limit. Stipulated penalties shall not start to accrue with respect to a final NO_x emission limit until there is noncompliance with that emission limit for five percent (5%) or more of the applicable FCCU's operating time during any calendar quarter."

3. Paragraph 41.D is revised to read as follows:

"D. For failure to meet emission limits proposed by BP (final or interim) or established by EPA (final or interim) pursuant to Paragraph 16, per day, per unit: \$3000 for each calendar day on which the specified rolling average exceeds the applicable limit. Stipulated penalties shall not start to accrue with respect to a final

SO2 emission limit until there is noncompliance with that emission limit for five percent (5%) or more of the applicable FCCU's operating time during any calendar quarter.”

The undersigned representatives are fully authorized to enter into the terms and conditions of this Fourth Amendment. This Fourth 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 the foregoing Fourth Amendment to the Consent Decree is hereby approved and entered as a final order of this court.

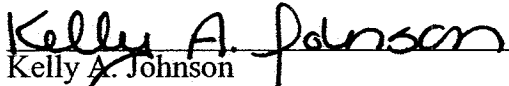
Dated and entered this ____ day of _____, 2005

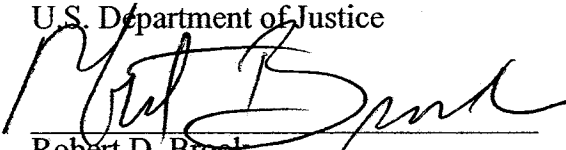
United States District Judge

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR PLAINTIFF THE UNITED STATES OF AMERICA

Date: 7/11/05


Kelly A. Johnson
Acting Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice


Robert D. Brook
Assistant Section Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044
(202) 514-2738

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR U.S. ENVIRONMENTAL PROTECTION AGENCY

Date:

6/10/05


Walker B. Smith

Director

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

Ariel Rios Building

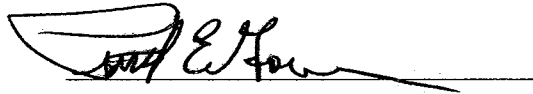
1200 Pennsylvania Avenue, N.W.

Washington, D.C. 20460

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR DEFENDANTS BP PRODUCTS NORTH AMERICA INC. (SUCCESSOR TO BP EXPLORATION AND OIL, CO., AMOCO OIL COMPANY), AND WEST COAST PRODUCTS LLC (THE OWNER OF REFINING ASSETS PREVIOUSLY OWNED BY ATLANTIC RICHFIELD COMPANY)

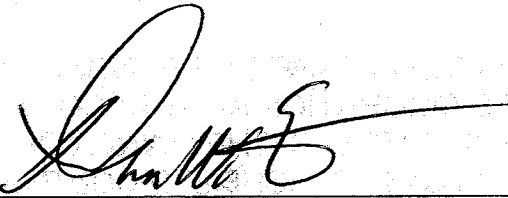
Date: June 15, 2005

A handwritten signature in black ink, appearing to read "W. E. How", written over a horizontal line.

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR THE STATE OF INDIANA

Date: JUNE 1, 2005

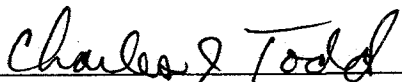


THOMAS W. EASTERLY
Commissioner
Indiana Department of Environmental
Management

Approved as to form and legality:

STEVE CARTER
Indiana Attorney General

Date: 6-17-05

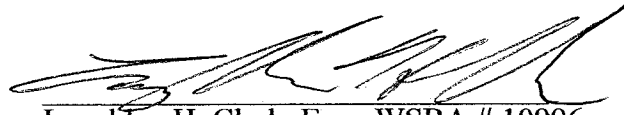


CHARLES J. TODD
Chief Operating Officer
Office of the Attorney General
Indiana Government Center South
5th Floor
302 West Washington Street
Indianapolis, IN 46204

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR THE NORTHWEST CLEAN AIR AGENCY (f/k/a NORTHWEST AIR POLLUTION AUTHORITY) OF THE STATE OF WASHINGTON

Date: 6/20/05



Laughlan H. Clark, Esq. WSBA # 10996
Zender Thurston, P.S.
1700 D Street
P. O. Box 5226
Bellingham WA 98227
(360) 647-1500

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR THE STATE OF OHIO

Date: 5/25/05



John K. McManus
Assistant Attorney General

WE HEREBY CONSENT to the foregoing Fourth Amendment to the Consent Decree entered in *United States, et al., v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL on August 29, 2001.

FOR DEFENDANT GIANT YORKTOWN, INC.,

Date: July 8, 2005



Carl D. Shook
Executive Vice President