

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

UNITED STATES OF AMERICA, and  
THE STATE OF INDIANA,

Plaintiffs,

and

THE SIERRA CLUB, SAVE THE DUNES,  
THE NATURAL RESOURCES DEFENSE  
COUNCIL, THE HOOSIER  
ENVIRONMENTAL COUNCIL, SUSAN  
ELEUTERIO and TOM TSOURLIS,

Plaintiff-Intervenors

v.

BP PRODUCTS NORTH AMERICA INC.,

Defendant

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Civil No. 2:12 CV 207

CONSENT DECREE

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**CONSENT DECREE**

WHEREAS, Plaintiff the United States of America (“United States”), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the United States Environmental Protection Agency (“EPA”), has simultaneously filed a Complaint and lodged this Consent Decree against defendant BP Products North America Inc., (“BPP” or “Defendant”) for alleged environmental violations at its refinery located in Whiting, Indiana (the “Whiting Refinery”);

WHEREAS, the State of Indiana (“Indiana”) has joined in this matter alleging violations of its applicable State Implementation Plan provisions and/or other state rules, regulations, and permits incorporating and implementing the requirements of the Clean Air Act;

WHEREAS, the Sierra Club, Save the Dunes, the Natural Resources Defense Council, the Hoosier Environmental Council, the Environmental Integrity Project, the Environmental Law and Policy Center, Susan Eleuterio and Tom Tsourlis (“Citizen-Intervenors”) by their execution of and entry into this Consent Decree are hereby seeking to intervene in this action, with the consent of the United States, Indiana and BPP, for the purpose of resolving claims they have made concerning the adequacy of certain permits issued to BPP by Indiana, and the entry of this Consent Decree shall constitute the granting of such intervention;

WHEREAS, the United States, Indiana and BPP are among the parties to a Consent Decree entered by this Court in Civ. No. 2:96 CV 095 RL on August 29, 2001 (the “2001 Consent Decree”), which has been amended several times between 2001 and 2009, and which covers the five refineries owned and operated by BP, including the Whiting Refinery;

WHEREAS, EPA has issued several Notices of Violation and Findings of Violations to BPP relating to the Whiting Refinery’s compliance with various requirements of both the 2001 Consent Decree and the Clean Air Act;

WHEREAS, BPP is presently engaged in a capital improvement project, referred to by BPP as the Whiting Refinery Modernization Project (“WRMP”), that will

modernize much of the Refinery and will enable BPP to substitute Canadian crude oil for a major portion of its existing crude slate;

WHEREAS on May 1, 2008, the Indiana Department of Environmental Management (“IDEM”) issued a final Significant Source Modification permit authorizing BPP to proceed with the construction needed to implement the WRMP (“the WRMP Construction Permit”);

WHEREAS, the terms and conditions of the WRMP Construction Permit were added to the Whiting Refinery’s existing Title V operating permit (Operation Permit No. T089-6741-00453, hereinafter “the WRMP Operating Permit”) on June 16, 2008;

WHEREAS, pursuant to these permits, BPP has been engaged in the construction activities necessary to implement the WRMP;

WHEREAS, on May 19, 2008, several of the Citizen-Intervenors jointly filed petitions for review with the Indiana Office of Environmental Adjudication (“OEA”) challenging both the WRMP Construction Permit and the WRMP Operating Permit, which petitions for review are still pending before OEA in, Cause Nos. 08-A-J-4115 and 08-A-J-4142;

WHEREAS, on August 19, 2008, the Environmental Law and Policy Center, Hoosier Environmental Council, Natural Resources Defense Council, Save the Dunes Council, Inc., Sierra Club, Inc., Susan Eleuterio and Tom Tsourlis (“Title V Petitioners”) submitted a petition to EPA pursuant to Section 505(b)(2) of the Clean Air Act (“Title V Petition”) requesting that EPA object to the Title V permit modification issued by IDEM on June 16, 2008;

WHEREAS, the Title V Petitioners alleged in their Title V Petition that the Title V permit did not comply with Clean Air Act requirements because, *inter alia*, BPP’s permit application omitted emissions data necessary to determine applicable Clean Air Act requirements and to establish appropriate emission limits, that the calculation to determine appropriate NSR requirements was done incorrectly and that the permit did not include appropriate BACT or LAER limits for flares and other sources, among other items;

WHEREAS, on October 16, 2009, EPA issued an order (“EPA Order”) granting in part and denying in part the Title V Petition;

WHEREAS, the EPA Order specified that the NSR emissions calculations and analyses for the Whiting Refinery did not appropriately address the following emissions: emissions from new and existing flaring devices resulting from start-up, shut-down and malfunction of refinery process units; emissions from vessel depressurization; emissions from increased coking and coke drum depressurization; and emissions of fugitive sulfur compounds. The EPA Order also granted the Title V Petition on the issue that IDEM had not provided a sufficient rationale and response to comment on the issue of sulfur content of the Canadian crude oil feedstock to be refined at the Whiting Refinery. The EPA Order also directed IDEM to re-evaluate the issues of concerns and, if necessary, modify BPP's permit;

WHEREAS, the injunctive relief required by Part V of this Consent Decree ("Affirmative Relief/Environmental Projects") covers the matters on which the EPA Order granted the Title V Petitioners' request to object to BPP's Title V permit;

WHEREAS, the Parties intend that, once the applicable requirements of Part V of this Consent Decree are incorporated into a revised Title V permit for the Whiting Refinery, and such permit is issued by IDEM, the matters raised by the EPA Order will be addressed;

WHEREAS, by entering into this Consent Decree, BPP is committed to undertake an extensive set of projects at the Whiting Refinery (i) to assure present and future compliance with the Clean Air Act, and regulations and permits issued thereunder and (ii) to substantially reduce emissions of pollutants from the Whiting Refinery;

WHEREAS, the design cycle time for the New Coker built as part of WRMP includes five hours for the Quench Water Fill Time (and this Consent Decree requires no less than a 45-minute Quench Water Soak Time);

WHEREAS, BPP intends to continue to operate the fenceline monitoring program described in Appendix E of this Consent Decree beyond the minimum term specified in Appendix E;

WHEREAS, in conjunction with the negotiation of this Consent Decree, BPP has applied to IDEM for a Significant Source Permit Modification that incorporates terms and conditions implementing various requirements of this Consent Decree and to add those terms and conditions into the Whiting Title V Permit;

WHEREAS, because this Consent Decree incorporates all remaining obligations and requirements of the 2001 Consent Decree and its amendments that pertain to the Whiting Refinery (in addition to resolution of the matters described above), simultaneously with the lodging of this Consent Decree, the United States, Indiana and BPP have lodged a Seventh Amendment to the 2001 Consent Decree that would terminate all obligations under the 2001 Consent Decree that apply to the Whiting Refinery and otherwise amend the 2001 Consent Decree as needed to reflect the termination of the provisions applicable to the Whiting Refinery;

WHEREAS, by entering into this Consent Decree, BPP is committed to proactively resolving environmental concerns related to its operations;

WHEREAS, discussions between the Parties have resulted in the settlement embodied in this Consent Decree;

WHEREAS, BPP has waived any applicable federal or state requirements of statutory notice of the alleged violations;

WHEREAS, notwithstanding the foregoing reservations, the Parties agree that: (a) settlement of the matters set forth in the Complaint is in the best interests of the Parties and the public; and (b) entry of the Consent Decree without litigation is the most appropriate means of resolving this matter; and

WHEREAS, the Parties recognize, and the Court by entering the Consent Decree finds, that the Consent Decree has been negotiated at arms length and in good faith and that the Consent Decree is fair, reasonable, and in the public interest;

NOW THEREFORE, with respect to the matters set forth in the Complaint, and in Part XV of the Consent Decree (“Effect of Settlement”), and before the taking of any testimony, without adjudication of any issue of fact or law, and upon the consent and agreement of the Parties to the Consent Decree, it is hereby ORDERED, ADJUDGED and DECREED as follows:

## **I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action and over the Parties pursuant to 28 U.S.C. §§ 1331, 1345, and 1355. In addition, this Court has jurisdiction over the subject matter of this action pursuant to Sections 113(b) and 167 of



the CAA, 42 U.S.C. §§ 7413(b) and 7477. The United States' Complaint states a claim upon which relief may be granted for injunctive relief and civil penalties against BPP under the Clean Air Act. Authority to bring this suit is vested in the United States Department of Justice by 28 U.S.C. §§ 516 and 519 and Section 305 of the CAA, 42 U.S.C. § 7605.

2. Venue is proper in the Northern District of Indiana pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a). BPP consents to the personal jurisdiction of this Court, waives any objections to venue in this District, and does not object to the participation of the State of Indiana in this action.

3. Notice of the commencement of this action has been given to the State of Indiana in accordance with Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), and as required by Section 113(b) of the CAA, 42 U.S.C. § 7413(b).

## **II. APPLICABILITY AND BINDING EFFECT**

4. The provisions of this Consent Decree shall apply to the Whiting Refinery, and shall be binding upon the United States, the State of Indiana, the Sierra Club, Save the Dunes, the Natural Resources Defense Council, the Hoosier Environmental Council, the Environmental Integrity Project, the Environmental Law and Policy Center, Susan Eleuterio and Tom Tsourlis and BPP and their agents, successors, and assigns.

5. BPP agrees not to contest the validity of this Consent Decree in any subsequent proceeding to implement or enforce its terms. BPP further agrees that, in any action to enforce this Consent Decree, it shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

6. Effective from the Date of Entry of this Consent Decree until termination pursuant to Part XVII, BPP agrees that the Whiting Refinery is covered by this Consent Decree. Effective from the Date of Entry of this Consent Decree, BPP shall give written notice of this Consent Decree to any successors in interest to the Whiting Refinery prior to the transfer of ownership or operation of any portion of the refinery and shall provide a copy of this Consent Decree to any successor in interest. BPP shall notify the United States and Indiana, in accordance with the notice provisions set forth in Paragraph 210

(“Notice”), of any successor in interest at least 30 days prior to any such transfer.

7. BPP shall condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling, non-operational shareholder or membership interest) in the Whiting Refinery upon the execution by the transferee of a modification to this Consent Decree, which makes the terms and conditions of this Consent Decree applicable to the transferee. In the event of such transfer, BPP shall notify the United States and the State of Indiana in accordance with the notice provisions in Paragraph 210 (“Notice”). By no earlier than 30 days after such notice, BPP may file a motion to modify this Consent Decree with the Court to make the terms and conditions of this Consent Decree applicable to the transferee. BPP shall be released from the obligations and liabilities of this Consent Decree unless the United States or the State of Indiana opposes the motion and the Court finds that the transferee does not have the financial and technical ability to assume the obligations and liabilities under this Consent Decree.

8. Except as provided in Paragraph 7, BPP shall be solely responsible for ensuring that performance of the work required under this Consent Decree is undertaken in accordance with the deadlines and requirements contained in this Consent Decree and any attachments hereto. BPP shall provide a copy of the applicable provisions of this Consent Decree (or a link to the information on the internet) to each consulting or contracting firm that is retained to perform work required under this Consent Decree upon execution of any contract relating to such work. Copies of the applicable portions of this Consent Decree (or a link to the information on the internet) do not need to be supplied to firms who are retained solely to supply materials or equipment to satisfy the requirements of this Consent Decree.

### **III. OBJECTIVES**

9. It is the purpose of the Parties to this Consent Decree to further the objectives of the Clean Air Act.

### **IV. DEFINITIONS**

10. Unless otherwise defined herein, terms used in this Consent Decree shall

have the meaning given to those terms in the Clean Air Act and the implementing regulations promulgated thereunder. The following terms used in this Consent Decree shall be defined, solely for purposes of this Consent Decree and the reports and documents submitted pursuant thereto, as follows:

A. “7-day rolling average” shall mean the average daily emission rate or concentration during the preceding 7 days. For purposes of clarity, the first day used in a 7-day rolling average compliance period is the first day on which the emission limit is effective, and the first complete 7-day average compliance period is 7 days later (*e.g.*, for a limit effective on January 1, the first day in the period is January 1 and the first complete 7-day period is January 1 through January 7).

B. “365-day rolling average” shall mean the average daily emission rate or concentration during the preceding 365 days. For purposes of clarity, the first day used in a 365-day rolling average compliance period is the first day on which the emission limit is effective, and the first complete 365-day average compliance period is 365 days later (*e.g.*, for a limit effective on January 1, the first day in the period is January 1 and the first complete 365-day period is January 1 through December 31).

C. “12-month rolling average” shall mean the sum of the average rate or concentration of the pollutant in question for the most recent complete calendar month and each of the previous 11 calendar months, divided by 12. A new 12-month rolling average shall be calculated for each new complete month. For purposes of clarity, the first month used in a 12-month rolling average compliance period is the first full calendar month in which the emission limit is effective, and the first complete 12-month rolling average compliance period is 12 calendar months later (*e.g.*, for a limit effective on December 31, the first month in the period is January and the first complete 12-month period is January through the following December).

D. “Calendar Quarter” shall mean any one of the three month periods ending on March 31st, June 30th, September 30th, and December 31<sup>st</sup>.

E. “CEMS” shall mean a continuous emissions monitoring system.

F. “CEMS Root Cause Failure Analysis” means a process of analysis and investigation to determine the primary cause(s) for CEMS downtime.

G. “Claus Offgas Treater” or “COT” shall mean a “reduction control

system” as defined in 40 C.F.R 60.101a followed by an incinerator.

H. “CO” shall mean carbon monoxide.

I. “Coke Drum” shall mean a pressurized vessel where coke is formed. The New Coker has the following Coke Drums: CD-201, CD-202, CD-203, CD-204, CD-205, and CD-206.

J. “Coke Drum Overhead Pressure” or “Coke Drum OH Pressure” shall mean the difference between the absolute pressure inside a Coke Drum and atmospheric pressure, expressed as psig, as measured on the coke drum overhead vapor line, during the coke steaming and quenching operations prior to commencing Coke Drum Venting.

K. “Coke Drum Steam Vent” or “Steam Vent” shall mean the vent and associated valves and piping on a Coke Drum that is used to vent vapors to the atmosphere. “Coke Drum Steam Vents” do not include the opening at the top of the Coke Drum used to insert the coke cutting device or the opening at the base of the Coke Drum used to discharge coke. The New Coker Coke Drums have the following Coke Drum Steam Vents:

<u>Identification of Coke Drum</u>	<u>Identification of Coke Drum Steam Vents Valves</u>
CD-201	XZV38160A/B
CD-202	XZV38260A/B
CD-203	XZV38360A/B
CD-204	XZV38460A/B
CD-205	XZV38560A/B
CD-206	XZV38660A/B

L. “Coke Drum Venting” or “Venting” shall mean the period between the opening of both of the Coke Drum’s Steam Vent Valves and visual verification of no significant steam exiting the steam vent to the atmosphere.

M. “Coke Pit” shall mean a walled area into which coke and Quench Water are discharged from the opening at the base of the Coke Drum after cooling and cutting.

N. “Consent Decree” or “Decree” shall mean this Consent Decree, including any and all appendices attached to this Consent Decree, and any amendments thereto.

O. “Continuously Operate” or “Continuous Operation” shall mean, with respect to SCR, that it shall be used at all times the associated unit is in operation, except

as necessary for consistency with the manufacturer's specifications and good engineering and maintenance practices for such equipment and the unit.

P. "Date of Entry" shall mean the date on which this Consent Decree is entered by the United States District Court for the Northern District of Indiana.

Q. "Date of Lodging" shall mean the date this Consent Decree is lodged with the United States District Court for the Northern District of Indiana.

R. "Day" or "Days" shall mean a calendar day or days. "Working Day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business on the next Working Day, except that when a compliance date is specified in this Consent Decree, compliance must be achieved on or before that date.

S. "Downtime" or "monitor downtime" shall mean the period of time during operation of the emission unit being monitored in which any of the required CEMS data are either not recorded or are invalid for any reason (*e.g.*, monitor malfunctions, data system failures, preventive maintenance, unknown causes, etc.), but shall not include downtime associated with routine CEMS zero and span checks and QA/QC activities required by this Consent Decree. CEMS data that meet the requirements of 40 C.F.R. § 60.13 shall be considered valid for purposes of determining downtime.

T. "EPA" or "U.S. EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

U. "ESP" shall mean electrostatic precipitator.

V. "Federal Financial Assistance Transaction" shall mean a grant, cooperative agreement, loan, federally-guaranteed loan or other mechanism for providing federal financial assistance. An "open" Federal Financial Assistance Transaction is one for which the performance period has not yet expired.

W. "FCCU" or "FCU" as used herein shall mean a fluidized catalytic cracking unit and its regenerator.

X. "Fuel gas" or "refinery fuel gas" shall have the meaning set out in 40 C.F.R. § 60.101a.

Y. “Fuel gas combustion device” shall have the meaning set out in 40 C.F.R. § 60.101a.

Z. “Fuel gas system” or “refinery fuel gas system” shall mean the piping and control system that gathers gaseous streams generated by the Whiting Refinery’s operations (including any that are blended with other sources of gas), and that are used as fuel in refinery heaters, furnaces, boilers, incinerators, gas turbines, and any other fuel gas combustion devices.

AA. “Fuel Oil” shall mean any liquid fossil fuel with sulfur content of greater than 0.05% by weight.

BB. “IDEM” shall mean the Indiana Department of Environmental Management and any successor departments or agencies of the State of Indiana.

CC. “Low NOx Burner” or “LNB” shall mean a burner that is designed to achieve a NOx emission rate of less than or equal to 0.040 lb NOx/mmBTU (HHV) when firing natural gas at 3% stack oxygen at full design load without air preheat, even if upon installation actual emissions exceed 0.040 lb NOx/mmBTU (HHV).

DD. “Malfunction” shall mean, as specified in 40 C.F.R. § 60.2, “any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.”

EE. “New Coker” or “Whiting New Coker” shall mean the delayed coking unit at the Whiting Refinery identified as the “New #2 Coker” in the WRMP Operating Permit. The New Coker includes, but is not limited to, the Coke Drums, the Quench Water System, and the associated coke handling systems.

FF. “NOx” shall mean nitrogen oxides.

GG. “Paragraph” shall mean a portion of this Consent Decree identified by an Arabic numeral.

HH. “Part” shall mean a portion of this Consent Decree identified by a Roman numeral.

II. “Parties” shall mean the United States, the State of Indiana, Citizen-Intervenors and BPP.

JJ. “PM” shall mean particulate matter as measured by EPA Methods 5B or 5F as specified in 40 C.F.R. Part 60, Subpart Ja. “PM<sub>10</sub>” shall mean all filterable and condensable particulate matter ten microns or less in diameter, as measured by EPA Methods 201A and 202. “PM<sub>TOTAL</sub>” shall mean all filterable and condensable matter, regardless of size, as measured by EPA Methods 5 and 202.

KK. “PSIG” or “psig” shall mean pounds per square inch gauge, which is the difference between absolute pressure at the measurement point and atmospheric pressure.

LL. “Quench Water” shall mean the water, in liquid phase, used to cool coke after it is formed in a Coke Drum.

MM. “Quench Water Fill Time” shall mean the duration of time between (i) the commencement of the initial addition of Quench Water to a Coke Drum after discontinuing the steam sweep and (ii) the point at which the coke bed has been covered with water and the water addition rate drops below 100 gallons per minute.

NN. “Quench Water Soak Time” shall mean the duration of time from the end of the Quench Water Fill Time and the start of Quench Water draining.

OO. “Quench Water Make-Up” shall mean the water, in liquid phase, added to the Quench Water System to compensate for water loss.

PP. “Quench Water System” shall mean the system used to receive, manage, treat, or convey Quench Water commencing from the point of discharge from the coke drum drains continuing through the Coke Pit, maze (coke fines settling basin), clean water sump and Quench Water Tank to the Coke Drums.

QQ. “Quench Water Tank” shall mean any tank that holds Quench Water.

RR. “Section” shall mean a portion of this Consent Decree identified by a capital letter.

SS. “Selective Catalytic Reduction” or “SCR” shall mean an air pollution control device consisting of ammonia injection and a catalyst bed to selectively catalyze the reduction of NO<sub>x</sub> with ammonia to nitrogen and water.

TT. “SO<sub>2</sub>” shall mean sulfur dioxide.

UU. “Startup,” as specified in 40 C.F.R. § 60.2, shall mean the setting in operation of equipment for any purpose.

VV. “Shutdown,” as specified in 40 C.F.R. § 60.2, shall mean the cessation of operation of equipment for any purpose.

WW. “Tier III Motor Vehicle Emission and Fuel Standards” shall mean the new standards that EPA intends to promulgate pursuant to Title II of the Clean Air Act (42 U.S.C. § 7521 et. seq.), including Clean Air Act sections 202(a) and 211(v), as described in the Unified Agenda of Federal Regulatory and Deregulatory Actions under Regulatory Identification Number (RIN) 2060-AQ86.

XX. “Total Quench Time” shall mean the sum of Quench Water Fill Time and Quench Water Soak Time.

YY. “Total sulfur” shall mean all sulfur containing compounds, measured in parts per million.

ZZ. “Whiting Refinery” shall mean the refinery owned and operated by BPP and located at 2815 Indianapolis Boulevard in Whiting, Indiana.

AAA. “Ultra-Low NOx Burners” or “ULNBs” shall mean those burners that are designed to achieve a NOx emission rate of less than or equal to 0.020 lb/mmBTU HHV when firing natural gas at 3% stack oxygen at full design load without air preheat, even if upon installation actual emissions exceed 0.020 lb/mmBTU HHV.

BBB. “United States” shall mean the United States of America, including the United States Department of Justice and the United States Environmental Protection Agency.

CCC. “2001 Consent Decree” shall mean the civil consent decree entered in *United States, et al. v. BP Exploration and Oil, et al.*, Civil No. 2:96 CV 095 RL (N.D. Ind.) on August 29, 2001 and as thereafter amended.

## **V. AFFIRMATIVE RELIEF/ENVIRONMENTAL PROJECTS**

### **A. NOx Emissions Reductions from FCCUs**

Summary: BPP shall reduce NOx emissions at the Whiting Refinery FCCUs. BPP is also required to incorporate the NOx emission limits into its operating permits and will demonstrate future compliance with the lower emission limits through the use of CEMS. CEMS required under this Section are to be operated and data recorded pursuant to applicable law.



11. NSPS Applicability to FCCUs. By no later than the Date of Entry, FCU 500 and FCU 600 at the Whiting Refinery shall each be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, and shall be subject to and comply with the requirements of 40 C.F.R. Part 60, Subparts A and Ja, for NO<sub>x</sub> applicable to FCCUs. Entry of this Consent Decree and compliance with the relevant monitoring requirements of this Consent Decree for the FCCUs shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a).

12. Interim and Final FCCU NO<sub>x</sub> Emission Limits.

a. Interim Limits. Beginning on the Date of Entry, BPP shall comply with the following NO<sub>x</sub> emission limits at the Whiting Refinery:

i. FCU 500: BPP shall continue to comply with a long-term FCCU emission limit of 40 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (365-day rolling average) and a short-term FCCU emission limit of 80 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (7-day rolling average).

ii. FCU 600: BPP shall continue to comply with a long-term FCCU emission limit of 20 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (365-day rolling average) and a short-term FCCU emission limit of 40 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (7-day rolling average).

b. Final Limits. By no later than 90 Days after the Date of Entry, BPP shall comply with the following NO<sub>x</sub> emission limits at the Whiting Refinery:

i. FCU 500: BPP shall comply with a long-term FCCU emission limit of 35 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (365-day rolling average) and a short-term FCCU emission limit of 80 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (7-day rolling average); and

ii. FCU 600: BPP shall comply with a long-term FCCU emission limit of 10 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (365-day rolling average) and a short-term FCCU emission limit of 40 ppmvd NO<sub>x</sub> @ 0% O<sub>2</sub> (7-day rolling average).

c. NO<sub>x</sub> emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the 7-day rolling

average emission limit required by this Paragraph, provided that during such periods BPP implements good air pollution control practices as required by 40 C.F.R. § 60.11(d) to minimize NO<sub>x</sub> emissions. NO<sub>x</sub> emissions during periods of Startup, Shutdown, or Malfunction shall be used in determining compliance with the 365-day rolling average emission limit required by this Paragraph.

13. Demonstrating Compliance with FCCU NO<sub>x</sub> Emission Limits. By no later than the Date of Entry, BPP shall use NO<sub>x</sub> and O<sub>2</sub> CEMS to monitor performance of the Whiting Refinery FCCUs and to report compliance with the terms and conditions of this Consent Decree. CEMS will be used to demonstrate compliance with the NO<sub>x</sub> emission limits established pursuant to Paragraph 12. BPP shall make CEMS data available to EPA and IDEM (as applicable) upon request. BPP shall install, certify, calibrate, maintain, and operate all CEMS required by this Paragraph at the Whiting Refinery in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B. BPP must also conduct Cylinder Gas Audits each Calendar Quarter during which a Relative Accuracy Audit (“RAA”) or a Relative Accuracy Test Audit (“RATA”) is not performed.

**B. SO<sub>2</sub> Emissions Reductions from FCCUs**

Summary: BPP is required to limit SO<sub>2</sub> emissions at the Whiting Refinery FCCUs. BPP is also required to incorporate the lower SO<sub>2</sub> emission limits into its operating permits and will demonstrate future compliance with these limits through the use of CEMS. CEMS required under this Section are to be operated and data recorded pursuant to applicable law.

14. NSPS Applicability to FCCUs. By no later than the Date of Entry, FCU 500 and FCU 600 at the Whiting Refinery shall each be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and Ja. By no later than the Date of Entry, FCU 500 shall be subject to and comply with the requirements of 40 C.F.R. Part 60, Subparts A and Ja, for SO<sub>2</sub> applicable to FCCUs, and by no later than September 1, 2013, FCU 600 shall be subject to and comply with the requirements of 40 C.F.R. Part 60, Subparts A and Ja, for SO<sub>2</sub> applicable to FCCUs. Entry of this Consent Decree and

compliance with the relevant monitoring requirements of this Consent Decree for the FCCUs shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a).

15. Interim and Final FCCU SO<sub>2</sub> Emission Limits.

a. Interim Limits. Beginning on the Date of Entry, BPP shall comply with the following SO<sub>2</sub> emission limits at the Whiting Refinery:

i. FCU 500: BPP shall continue to comply with a FCCU emissions limit of 25 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (365-day rolling average) and 50 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (7-day rolling average).

ii. FCU 600: BPP shall continue to comply with a long-term FCCU emission limit of 50 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (365-day rolling average) and a short-term FCCU emission limit of 125 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (7-day rolling average).

b. Final Limits. BPP shall comply with the following SO<sub>2</sub> emission limits at the Whiting Refinery:

i. FCU 500: By no later than December 31, 2012, BPP shall comply with a FCCU emissions limit of 10 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (365-day rolling average) and 50 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (7-day rolling average).

ii. FCU 600: By no later than September 1, 2013, BPP shall comply with a FCCU emissions limit of 10 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (365-day rolling average) and 50 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> (7-day rolling average).

c. SO<sub>2</sub> emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the 7-day rolling average emission limit required by this Paragraph, provided that during such periods BPP implements good air pollution control practices as required by 40 C.F.R. § 60.11(d) to minimize SO<sub>2</sub> emissions. SO<sub>2</sub> emissions during periods of Startup, Shutdown, or Malfunction shall be used in determining compliance with the 365-day rolling average emission limit required by this Paragraph.

16. Demonstrating Compliance with FCCU SO<sub>2</sub> Emission Limits. By no later than Date of Entry, BPP shall use an SO<sub>2</sub> and O<sub>2</sub> CEMS to monitor the performance of the Whiting Refinery FCCUs and to report compliance with the terms and conditions

of this Consent Decree. CEMS will be used to demonstrate compliance with the SO<sub>2</sub> emission limits established pursuant to Paragraph 15. BPP shall make CEMS data available to EPA and IDEM (as applicable) upon request. BPP shall install, certify, calibrate, maintain, and operate all CEMS required by this Paragraph at the Whiting Refinery in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. BPP must also conduct Cylinder Gas Audits each Calendar Quarter during which a RAA or a RATA is not performed.

**C. Particulate Matter Emissions Reductions from FCCUs**

Summary: BPP is required to control and limit emissions of PM, PM<sub>10</sub> and PM<sub>TOTAL</sub> from the Whiting FCCUs as provided in this Section.

17. NSPS Applicability to FCCUs. By no later than the Date of Entry, FCU 500 and FCU 600 at the Whiting Refinery shall each be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, and shall be subject to and comply with the requirements of 40 C.F.R. Part 60, Subparts A and Ja, for PM applicable to FCCUs. Entry of this Consent Decree and compliance with the relevant monitoring requirements of this Consent Decree for the FCCUs shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a).

a. By no later than 180 Days after the Date of Entry, and on a semi-annual basis thereafter, BPP shall conduct a performance test on each of FCU 500 and FCU 600 pursuant to 40 C.F.R. §§ 60.8 and 60.104a. Upon demonstrating through at least four (4) semi-annual tests that the PM limit in 40 C.F.R. § 60.102a(b)(1) is not being exceeded, BPP may reduce the required testing frequency to an annual basis. BPP shall provide notice to EPA no later than 30 Days in advance of the performance testing to be conducted pursuant to this subparagraph, and shall provide the results of such testing upon request by EPA.

b. In addition to the performance testing required by this Paragraph, BPP may conduct testing to identify any parameters that may need to be maintained to assure compliance with the PM limits during testing. BPP shall

provide EPA with notice no later than 30 Days in advance of testing to identify parameters pursuant to this subparagraph, and shall provide the results of such testing upon request by EPA.

18. Emission Limits for PM<sub>10</sub> and PM<sub>TOTAL</sub>. By no later than December 31, 2013, BPP shall comply with the following PM<sub>10</sub> and PM<sub>TOTAL</sub> emission limits at the Whiting Refinery:

a. FCCU 500:

i. BPP shall comply with an emissions limit of 0.9 pound of PM<sub>10</sub> per 1,000 pounds of coke burned, as determined by EPA Methods specified in Paragraph 21.a.ii.

ii. BPP shall comply with an emissions limit of 1.2 pounds of PM<sub>TOTAL</sub> per 1,000 pounds of coke burned, as determined by EPA Methods specified in Paragraph 21.a.ii.

b. FCCU 600:

i. BPP shall comply with an emissions limit of 0.7 pounds of PM<sub>10</sub> per 1,000 pounds of coke burned, as determined by EPA Methods specified in Paragraph 21.a.ii.

ii. BPP shall comply with an emissions limit of 1.2 pounds of PM<sub>TOTAL</sub> per 1,000 pounds of coke burned, as determined by EPA Methods specified in Paragraph 21.a.ii.

19. Supplemental FCCU PM Monitoring Requirements. In addition to the monitoring requirements of this Consent Decree and NSPS Subparts A and Ja applicable to FCCUs, by no later than the Date of Entry, BPP shall monitor and record the daily values for the following operating parameters:

a. The feed rate, in barrels per day, for each FCCU;

b. The average rate, in pounds per hour, at which SO<sub>2</sub>-reducing catalyst additive is added to each FCCU; and

c. The average amount of ammonia in pounds per hour injected into the FCCU 500 ESP and the average amount of ammonia in pounds per hour that is separately injected into the FCCU 600 vaporizer and the ESP.

20. Demonstrating Compliance with PM<sub>10</sub> and PM<sub>TOTAL</sub> Emission Limits.

- a. Compliance with the  $PM_{10}$  and  $PM_{TOTAL}$  emission limits in Paragraphs 18.a.i-ii and 18.b.i-ii shall be based on the emission rate computed from the most recent performance test completed pursuant to Paragraph 21.a.
- b. BPP shall maintain compliance with the PM operating limits established under 40 C.F.R. § 60.102a(c)(1) during its demonstration of compliance with the  $PM_{10}$  and  $PM_{TOTAL}$  emission limits in Paragraph 18.
- c. For the purposes of this Paragraph, BPP may use Method 201A in lieu of Method 5 to determine  $PM_{TOTAL}$  emissions, provided that BPP follows the procedures in Method 201A for the collection and analysis of PM greater than 10 microns.

21. FCCU Performance Testing.

- a. Testing Protocols for  $PM_{10}$  and  $PM_{TOTAL}$  Emissions: By no later than 180 Days after the Date of Entry, BPP shall implement a performance testing protocol as provided in this Paragraph:

- i. Testing Frequency: BPP shall conduct performance tests to measure emissions of  $PM_{10}$  and  $PM_{TOTAL}$  from FCU 500 and FCU 600 on at least a semi-annual basis, with each semi-annual performance test being no sooner than four (4) calendar months from the date of completion of the previous semi-annual test. This shall not preclude BPP from conducting additional performance tests which are more frequent.

- (1) Upon demonstrating, through at least four (4) valid, consecutive semi-annual tests conducted after December 31, 2013 that (i) the  $PM_{10}$  and  $PM_{TOTAL}$  limits are not being exceeded, (ii) the average of all four valid semi-annual tests is not more than 80% of the  $PM_{10}$  and  $PM_{TOTAL}$  limits, and (iii) the average result from any valid semi-annual test is not greater than 90% of the  $PM_{10}$  and  $PM_{TOTAL}$  limits, BPP may reduce the frequency of performance testing to an annual basis.

- (2) BPP may request EPA approval to reduce the frequency of such testing in other circumstances. EPA has sole discretion to approve or disapprove BPP's request, which shall not

be subject to Dispute Resolution. In the event that a subsequent annual test indicates an exceedance of a  $PM_{10}$  or  $PM_{TOTAL}$  limit, EPA may elect to reinstate the requirement for semi-annual testing. EPA's decision to reinstate semi-annual testing shall not be subject to Dispute Resolution.

ii. Test Methods for  $PM_{10}$  and  $PM_{TOTAL}$  Emissions: BPP shall measure  $PM_{10}$  emissions using Methods 201A and 202. BPP may use Method 5 in lieu of Method 201A for purposes of demonstrating compliance with the  $PM_{10}$  emission limit provided that BPP considers all PM measured by Method 5 as  $PM_{10}$ . BPP shall measure  $PM_{TOTAL}$  emissions using Methods 5 and 202. BPP may use Method 201A in lieu of Method 5 for purposes of demonstrating compliance with the  $PM_{TOTAL}$  emission limit provided that BPP also follows the procedures in Method 201A for the collection and analysis of PM greater than 10 microns in diameter.

iii. Test Run Duration: Each performance test shall be comprised of at least three (3) valid two-hour stack test runs. BPP shall discard any invalid test runs, such as those that are compromised because of sample contamination. If a test run is discarded, BPP shall replace it with an additional valid test run. BPP shall report the results of the discarded test runs and shall provide all information necessary to document why the test run was not valid.

iv. Valid Performance Tests: A  $PM_{10}$  and  $PM_{TOTAL}$  test shall not be considered a valid test, and BPP will not have met the requirement of this Paragraph to test, unless each of the following conditions is met for that test:

(1) The average coke burn rate for all runs used in determining compliance with the  $PM_{10}$  and  $PM_{TOTAL}$  emission limits must not be less than the actual average coke burn rate over the time period since the previous performance test;

(2) The average SO<sub>2</sub> concentration for all runs used in determining compliance with the PM<sub>10</sub> and PM<sub>TOTAL</sub> emission limits must not be greater than 10 ppmvd @ 0% O<sub>2</sub>; and

(3) The average total ammonia injection rate for all runs used in determining compliance with the PM<sub>10</sub> and PM<sub>TOTAL</sub> emission limits must not be less than average total ammonia injection rate over the time period since the previous performance test.

(4) Throughout the performance test, BPP shall target the average ESP total primary power since the last stack test. The average ESP total primary power for all the runs used in determining compliance with the PM<sub>10</sub> and PM<sub>TOTAL</sub> emission limits must not be greater than 120% of the average ESP total primary power since the last stack test.

v. Additional Parametric Monitoring During the Tests: BPP shall monitor or calculate and record SO<sub>2</sub> concentration, NO<sub>x</sub> concentration, catalyst additive rates, ammonia addition prior to ESP, ammonia addition at the SCR, ammonia slip, the coke burn-off rate, regenerator overhead temperatures, and FCCU feed rate for each test run. BPP shall reduce this monitoring data to an average that matches the time period of each test run.

22. FCCU Consultation. By no later than 3 months after the Date of Entry, BPP shall retain an outside consultant to evaluate the ESPs for FCU 500 and 600. The outside consultant shall produce a report with recommendations on how to optimize the performance of each ESP to enable each FCU to meet the PM, PM<sub>10</sub> and PM<sub>TOTAL</sub> emission limits in Paragraphs 17 and 18. By no later than 9 months after the Date of Entry, BPP shall provide this report to EPA and Citizen-Intervenors. BPP shall inform EPA and Citizen-Intervenors of any action taken to optimize the ESPs based on this report.



**D. CO Emissions Reductions from FCCUs**

Summary: BPP is required to operate the Whiting Refinery FCCUs in a manner that minimizes CO emissions while complying with the NO<sub>x</sub> limits as required in this Section.

23. NSPS Applicability to FCCUs. By no later than the Date of Entry, FCU 500 and FCU 600 at the Whiting Refinery shall each be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, and shall be subject to and comply with the requirements of 40 C.F.R. Part 60, Subparts A and Ja, for CO applicable to FCCUs. Entry of this Consent Decree and compliance with the relevant monitoring requirements of this Consent Decree for the FCCUs shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a).

24. FCU 500 CO Emissions Limits. By no later than Date of Entry, BPP shall limit CO emissions from FCU 500 to 500 ppmvd or less on a 1-hour block average basis corrected to 0% O<sub>2</sub>.

25. FCU 600 CO Emissions Limits. By no later than Date of Entry, BPP shall limit CO emissions from FCU 600 to 500 ppmvd or less on a 1-hour block average basis corrected to 0% O<sub>2</sub>.

26. CO emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the 1-hour 500 ppmvd emissions limit, provided that during such periods BPP implements good air pollution control practices to minimize CO emissions.

27. Demonstrating Compliance with FCCU CO Emission Limits. By no later than the Date of Entry, BPP shall use a CO CEMS to monitor the performance of each FCCU and to report compliance with the terms and conditions of this Consent Decree. CEMS will be used to demonstrate compliance with the CO emission limits established pursuant to this Section. BPP shall make CEMS data available to EPA and IDEM upon request. BPP shall install, certify, calibrate, maintain, and operate all CEMS at the Whiting Refinery required by this Paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B. BPP

must also conduct Cylinder Gas Audits each Calendar Quarter during which a RAA or a RATA is not performed.

#### **E. VOC Emissions Reductions from FCCUs**

Summary: BPP is required to operate the Whiting Refinery FCCUs in a manner that minimizes VOC emissions as provided in this Section.

28. FCCU 500 VOC Emissions Limits. By no later than December 31, 2013, BPP shall limit VOC emissions from FCCU 500 to 3.3 pounds of VOC per 1000 barrels of fresh feed.

29. FCCU 600 VOC Emissions Limits. By no later than December 31, 2013, BPP shall limit VOC emissions from FCCU 600 to 3.3 pounds of VOC per 1000 barrels of fresh feed.

30. Demonstrating Compliance with FCCU VOC Emission Limits.

a. BPP shall calculate VOC emissions using the following equations:

$$E = \left( \frac{C \times Q \times MW \times 60}{V_m} \right) \times \left( \frac{1000}{F} \right)$$

$$C = C_{total} - C_{methane} - C_{ethane}$$

Where:

E = FCCU VOC Emissions in lb/1000 bbl feed

C = Concentration of non-methane and non-ethane organic carbon as carbon in volume fraction

C<sub>total</sub> = Concentration of total organic carbon in volume fraction, as carbon, as measured by EPA Method 25a

C<sub>methane</sub> = Concentration of methane in volume fraction, as carbon, as measured by EPA Method 18

C<sub>ethane</sub> = Concentration of ethane in volume fraction, as carbon, as measured by EPA Method 18

MW = Molecular weight of carbon = 12.01 lb/lb-mole

Q = FCCU stack flow in dry standard cubic feet per minute as measured by EPA Method (s) 1-4

- 1000 = Conversion factor to put emissions on a per 1000 bbl feed
- $V_m$  = 385.3 dscf of gas per lb-mol at standard conditions (68° F)
- F = FCCU feed rate in bbl/hour, averaged over period of source test
- 60 = conversion factor for 60 minutes per hour

b. BPP shall conduct the first stack test at each FCCU no later than December 31, 2013, and shall thereafter conduct annual stack tests at each FCCU, except as provided in Subparagraph 30.c below.

c. After the first stack test has been conducted for each FCCU pursuant to this Consent Decree:

- i. If a stack test for a FCCU demonstrates that VOC emissions from that FCCU are less than half of the applicable VOC emissions limit, BPP may thereafter elect to conduct stack tests at least once every three (3) years at that FCCU in lieu of annual stack testing.
- ii. If, after BPP exercises the option to conduct stack testing at least once every three (3) years pursuant to this Paragraph, a stack test demonstrates an exceedance of the applicable VOC emissions limit for that FCCU, BPP shall resume annual stack testing for that FCCU.

**F. NOx Emissions Reductions from Heaters and Boilers**

Summary: BPP is required to undertake measures to reduce emissions of NOx from the Heaters and Boilers at the Whiting Refinery, as provided in this Section.

31. Installation of Ultra Low-NOx Burners On Certain Heaters.

a. By no later than the Date of Lodging, BPP shall conduct NOx emission tests on heaters F-2 and F-3 in the 4UF process unit and heater H-1X in the 11A Pipestill process unit for purposes of determining the baseline emission rate of each of these three heaters prior to installation of the controls required by this Paragraph. These tests shall be conducted using 40 C.F.R. Part 60 Appendix

A, Method 7E in combination with either EPA Method 19, or EPA Methods 1, 2, 3, and 4, or an EPA-approved alternative test method.

b. BPP shall install Ultra-Low NO<sub>x</sub> Burners by no later than the dates specified in the table below, and shall maintain, continuously operate and comply with the applicable emission limit by no later than the dates set forth for each listed heater and boiler:

<u>Unit</u>	<u>Installation Date</u>	<u>Emission Limit (12-Month Rolling Average)</u>	<u>Compliance Date</u>
11A Pipestill H-1X	December 31, 2013	0.06 lb/mmBtu	December 31, 2013
4UF F-2 Furnace	December 31, 2016	0.04 lb/mmBtu	December 31, 2016
4UF F-3 Furnace	December 31, 2016	0.04 lb/mmBtu	December 31, 2016

32. By no later than the compliance dates specified in Paragraph 31.b., BPP shall install, operate, calibrate and maintain NO<sub>x</sub> CEMS on each heater identified in that Paragraph and shall use CEMS to demonstrate and report compliance with the NO<sub>x</sub> emission limits applicable to those heaters.

33. NSPS Subparts A & Ja Applicability to New and Modified Heaters and Boilers.

a. Upon the Date of Entry, each of the following heaters and boilers shall be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, and shall be subject to and comply with the applicable requirements of 40 C.F.R. Part 60, Subparts A and Ja for NO<sub>x</sub> emissions for process heaters by the date specified in Subpart Ja:

- i. 12 Pipestill heaters (H-101A, H-101B and H-102).
- ii. #2 Coker heaters (F-201, F-202 and F-203).
- iii. GOHT heaters (F-901A, F-901B).
- iv. BOU F-401 furnace.

b. By no later than December 31, 2013, 11C Pipestill heater H-200 shall be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A

and Ja, and shall be subject to and comply with the applicable requirements of NSPS Subparts A and Ja for NO<sub>x</sub> emissions from process heaters.

c. Entry of this Consent Decree and compliance with the relevant monitoring requirements of Subpart Ja shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a) for each heater listed in this Paragraph.

34. Additional Requirements For New and Modified Heaters.

a. BPP shall comply with the emission limits and Continuously Operate the listed NO<sub>x</sub> control technology listed in the following table by no later than the date of initial startup of the relevant unit:

<u>Unit</u>	<u>Rated Capacity (mmBTU/hr)</u>	<u>Control Technology</u>	<u>Emission Limit</u>
11C Pipestill H-200 Heater	249.5	ULNB	0.05 lbs/mmBtu
12 Pipestill H-101A Heater	355	ULNB	77.7 tpy
12 Pipestill H-101B Heater	355	ULNB	77.7 tpy
12 Pipestill H-102 Heater	331	ULNB	72.5 tpy
BOU F-401 Furnace	35		0.098 lbs/mmBtu
#2 Coker F-201 Heater	208	ULNB & SCR	18.2 tpy
#2 Coker F-202 Heater	208	ULNB & SCR	18.2 tpy
#2 Coker F-203 Heater	208	ULNB & SCR	18.2 tpy
DHT B-601-A Heater	42	ULNB	7.3 tpy
GOHT F-901A Heater	47	ULNB	0.04 lbs/mmBtu
GOHT F-901B Heater	47	ULNB	0.04 lbs/mmBtu

b. The rated capacities listed in Paragraph 34.a are those as of the Date of Lodging and are included solely for purposes of identification of the relevant control technology and emission limit in Paragraph 34.a, and of the relevant monitoring requirement in Paragraph 35.

35. Monitoring and Testing. BPP shall monitor and test the following heaters at the Whiting Refinery as follows:

a. Affected Heaters with a Capacity Greater Than 100 mmBTU/hr.

Once every five years, BPP shall conduct a NO<sub>x</sub> performance test for each of the following process heaters with a rated capacity greater than 100 mmBTU/hr that are not monitored by a NO<sub>x</sub> CEMS :

- i. 4UF Furnaces F-4, F-5, and F-6 (venting through a common stack).
- ii. 4UF Furnaces F-1, F-8A, and F-8B (venting through a common stack).
- iii. ARU Furnace F-200A.
- iv. ARU Furnace F-200B.
- v. 11C Pipestill Heater H-300.
- vi. HU Heater B-501.
- vii. ISOM Heater H-1.

BPP shall comply with the performance test protocols established by EPA Method 7E in conjunction with either EPA Method 19 or EPA Methods 1, 2, 3 and 4, or an EPA-approved alternative test method.

b. New and Modified Heaters with a Capacity Greater Than 100 mmBTU/hr. BPP shall install or continue to operate a NO<sub>x</sub> CEMS on the heaters and boilers listed in Paragraph 34 with a maximum rated capacity greater than 100 mmBTU/hr (HHV) by no later than December 31, 2013 (for the 11C Pipestill H-200 Heater) or the date of initial startup of the heater (for all other heaters).

c. In the permit applications required by Paragraph 83.a, BPP shall apply to remove the authority that is currently contained in the existing permit to replace the existing burners in the ISOM Heater H-1 with larger burners.

36. CEMS Monitoring Requirements.

a. Performance Specifications. Beginning no later than one hundred and eighty (180) days after installing the applicable control technology on a heater or boiler that shall be monitored by use of a NO<sub>x</sub> CEMS required by Paragraph 34, BPP shall install, certify, calibrate, maintain, and operate these CEMS in

accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and 40 C.F.R. Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B. Unless Appendix F requirements are specifically required by NSPS or state regulations, BPP must conduct either a RAA or a RATA on each CEMS at least once every three (3) years in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4. BPP shall conduct a Cylinder Gas Audit each Calendar Quarter during which a RAA or a RATA is not performed.

b. Calculations.

i. NO<sub>x</sub> emissions in lbs/mmBtu shall be calculated using 40 C.F.R. Part 60, Appendix A, Method 19 and either the 12-month rolling average NO<sub>x</sub> concentration as determined by CEMS (for units monitored by a CEMS) or the NO<sub>x</sub> concentration measured in the most recent stack test demonstrating compliance (for units not monitored by a CEMS).

ii. NO<sub>x</sub> emissions in tons/year shall be calculated using the following equation:

$$E_{\text{tpy}} = \text{lb/mmBtu NO}_x * H * 1 \text{ ton}/2000 \text{ lbs.}$$

Where:

$$\begin{aligned} E_{\text{tpy}} &= \text{Stack NO}_x \text{ emissions in tons per year} \\ H &= \text{Total heat input in mmBtu to the unit from} \\ &\quad \text{fuels fired in the unit(s) over the previous} \\ &\quad \text{rolling 12-month period} \\ \text{lb/mmBtu NO}_x &= \text{lb/mmBtu emissions rate determined in} \\ &\quad \text{accordance with Paragraph 36.b.i.} \end{aligned}$$

37. The requirements of this Section do not exempt the Whiting Refinery from complying with any and all Federal, state, regional, and local requirements that may mandate technology, equipment, monitoring, or other upgrades that are: (a) based on actions or activities occurring after the Date of Entry of this Consent Decree; or (b) based upon new or modified regulatory, statutory, or permit requirements after the Date of Lodging.

38. BPP shall retain all records required to support its reporting requirements under this Section of the Consent Decree until its termination pursuant to Part XVII (Termination). BPP shall make such records and all CEMS data and test results available to EPA and IDEM upon request.

**G. SO<sub>2</sub> Emissions Reductions from Heaters and Boilers**

Summary: BPP is required by this Section to undertake measures to reduce SO<sub>2</sub> emissions from refinery heaters and boilers by restricting H<sub>2</sub>S in refinery fuel gas and not burning Fuel Oil, except as specifically permitted under the provisions set forth in this Section.

39. NSPS Applicability to Heaters and Boilers.

a. Subpart Ja Applicability to Certain Existing Heaters and Boilers.

Upon the Date of Entry, each of the following heaters and boilers shall be an “affected facility” for SO<sub>2</sub> as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, and shall be subject to and comply with the applicable requirements of NSPS Subparts A and Ja for SO<sub>2</sub> emissions for fuel gas combustion devices:

- i. 11A Pipestill heaters (H-1X, H-2 and H-3).
- ii. 11C Pipestill heaters (H-200 and H-300).
- iii. New Hydrogen Unit heaters (HU-1 and HU-2).
- iv. BOU F-401 furnace.
- v. ISOM H-1 heater.
- vi. HU B-501.
- vii. CFHU heaters (F-801A, F-801B and F-801C)
- viii. DDU heaters (WB-301 and WB-302).
- ix. 4 UF heaters (F-1, F-2, F-3, F-4, F-5, F-6, F-7, F-8A and F-8B).
- x. ARU heaters (F200A and F-200B).
- xi. 3SPS boilers (#1, #2, #3, #4 and #6).
- xii. 3SPS Duct Burners.
- xiii. CRU heaters (F-101 and F-102A).

b. Subpart Ja Applicability to Certain New Heaters and Boilers.

Upon the date of initial start-up, each of the following heaters and boilers shall be



an “affected facility” for SO<sub>2</sub> as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, and shall be subject to and comply with the applicable requirements of 40 C.F.R. Part 60, Subparts A and Ja for SO<sub>2</sub> emissions for fuel gas combustion devices:

- i. 12 Pipestill heaters (H-101A, H-101B and H-102).
- ii. #2 Coker heaters (F-201, F-202 and F-203).
- iii. GOHT heaters (F-901A, F-901B).
- iv. New Boiler 1.

c. Entry of this Consent Decree and compliance with the relevant monitoring requirements of Subpart Ja shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8(a) for the heaters listed in Paragraph 39.a.

40. Elimination of Fuel Oil Burning.

a. Existing Heaters and Boilers. Effective on the Date of Entry, BPP shall not burn Fuel Oil in any heater or boiler at the Whiting Refinery in existence as of the Date of Lodging.

b. Heaters or Boilers Constructed After Entry. After the Date of Entry, BPP shall not construct any new heater or boiler that burns Fuel Oil unless the air pollution control equipment controlling the combustion device either:

- i. has an SO<sub>2</sub> control efficiency of 90% or greater; or
- ii. achieves an SO<sub>2</sub> concentration of 20 ppm or less at 0% O<sub>2</sub> or less on a 3-hour rolling average basis, rolled hourly.

Nothing in this Paragraph shall exempt BPP from securing all necessary permits before constructing a new heater or boiler at the Whiting Refinery.

**H. Fuel Gas Sulfur Content**

41. Limit on Total Sulfur Content in Refinery Fuel Gas. By no later than July 1, 2014, the total sulfur concentration of refinery fuel gas combusted in any heater, furnace or boiler at the Whiting Refinery shall not exceed 70 ppmvd total sulfur calculated as H<sub>2</sub>S on a 12-month rolling average basis.

42. Demonstrating Compliance with Total Sulfur Emission Limits.

a. By no later than December 31, 2013, BPP shall install three Total Sulfur Continuous Analyzers on the refinery fuel gas systems to continuously monitor, measure and record the total sulfur concentration in refinery fuel gas, and to report compliance with the terms and conditions of this Consent Decree. The Total Sulfur Continuous Analyzers will be used to demonstrate compliance with the fuel gas sulfur concentration limit established pursuant to Paragraph 41. Consistent with 40 C.F.R. § 60.107a(a)(2)(iv), BPP shall monitor refinery fuel gas at locations that accurately represent the total sulfur concentration in the refinery fuel gas being burned in all heaters and boilers in the refinery, other than refinery fuel gas that would be exempt from monitoring under 40 C.F.R. § 60.107a(a)(3). The locations currently planned for these monitors are indicated in Appendix A. If BPP changes the location of any of these monitors, BPP shall notify EPA and submit a revised Appendix A showing the new locations in the next report required by Part VIII.

b. BPP shall begin reporting data from the total sulfur analyzers to EPA and the Citizen-Intervenors once the analyzers are placed into service and certified.

c. The Total Sulfur Continuous Analyzers required by this Paragraph shall be installed, operated and calibrated pursuant to ASTM D7166-10 and 40 C.F.R. Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B, except that in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, BPP must conduct either a RAA or RATA on each Total Sulfur Continuous Analyzer at least once every three (3) years. BPP must also conduct Cylinder Gas Audits each Calendar Quarter during which a RAA or a RATA is not performed. For RATA and RAA reference method comparisons, ASTM D3246-05 shall be used as the reference method. BPP shall make total sulfur analyzer data available to EPA and IDEM (as applicable) upon request.

**I. CEMS Downtime Minimization, O&M and Corrective Action**

43. By no later than 180 days after the Date of Entry, BPP shall develop and submit for EPA review as provided in Paragraph 47 a comprehensive CEMS Operation and Maintenance Plan (“CEMS O&M Plan” or “Plan”) for the Whiting Refinery that is designed to enhance the performance of CEMS components, improve CEMS accuracy and stability, and minimize periods of CEMS downtime. This CEMS O&M Plan shall include at a minimum each of the elements identified in Paragraphs 44 through 46.

44. CEMS Operations and Maintenance Training. The CEMS O&M Plan shall provide for regular training for all individuals (BPP employees and contractors) involved in CEMS operations and maintenance to maintain necessary levels of monitoring competency. All newly-hired individuals (BPP employees and contractors) involved in CEMS operations and maintenance shall be trained prior to undertaking any CEMS-related responsibilities. The CEMS O&M Plan shall additionally ensure that all individuals involved in CEMS operations and maintenance have access to and are familiar with the CEMS O&M Plan.

45. CEMS Testing and Calibration. BPP shall certify, calibrate, maintain, and operate all CEMS in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B. These requirements shall be included in the CEMS O&M Plan.

46. Preventative Maintenance and Repair, and Quality Assurance/Quality Control (“QA/QC”). The Whiting Refinery’s CEMS O&M Plan shall include the following:

- a. A CEMS preventive maintenance program to provide for a regularly scheduled set of activities designed to prevent problems before they occur. Such activities and procedures may be based initially on the CEMS vendor’s recommendations. Routine preventative maintenance procedures shall be updated periodically to include such procedures as may be necessary or appropriate based on experience with each CEMS.

b. A CEMS QA/QC program to include provisions for assessing and maintaining the quality of continuous emission monitoring data, including regular (*e.g.*, daily, weekly monthly) routine internal (and, as needed, external) maintenance and operation checks designed to maintain or improve data quality and minimize CEMS downtime. Internal checks include, but are not limited to, CEMS inspections, periodic calibrations, routine maintenance and measures to assess the quality of CEMS data (*i.e.*, accuracy and precision). External checks include, but are not limited to, independent third-party CEMS audits, third-party sampling and analysis for accuracy and precision, or other assessments to ensure continuous and accurate CEMS operations.

c. A CEMS repair program to ensure the timely repair of CEMS to address both routine maintenance and repair and non-routine maintenance and repair. BPP shall maintain a spare parts inventory adequate to meet the normal operating and CEMS preventative maintenance requirements. BPP shall establish procedures for acquisition of parts on an emergency basis (*e.g.*, vendor availability on a next-day basis). An individual at the Whiting Refinery shall be designated for overall responsibility for maintaining the adequacy of the spare parts inventory. The on-site spare parts inventory may be based on the vendor's recommendations and shall be modified on an as-needed basis.

47. EPA Review and Comment on CEMS Operation and Maintenance Plan. EPA may provide written comments on the CEMS Operation and Maintenance Plan submitted by BPP, in whole or in part, or EPA may decline to comment, as provided in this Paragraph.

a. If EPA provides written comments within sixty (60) days of receiving a CEMS O&M Plan, then within forty-five (45) days of receiving such comments BPP shall either: (a) modify and implement the Plan consistent with EPA's written comments, or (b) submit the matter for dispute resolution under Part XIV of the Consent Decree.

b. After sixty (60) Days from the date of BPP's submission of a CEMS O&M Plan, EPA may nonetheless provide written comments requiring changes to the Plan, which BPP shall thereafter implement unless implementation of

the written comments would (1) be unduly burdensome given the degree to which BPP has proceeded with implementing the CEMS O&M Plan or (2) would be otherwise unreasonable. If BPP determines that implementation of the written comments is unduly burdensome or otherwise unreasonable, it shall so notify EPA. Within sixty (60) days of receiving BPP's position EPA may either accept BPP's position or invoke dispute resolution pursuant to Part XIV of the Consent Decree.

c. Upon the expiration of sixty (60) days from the date of BPP's submission of a CEMS O&M Plan, or upon completion of any Dispute Resolution process under Part XIV of the Consent Decree regarding a submission, BPP shall implement the CEMS O&M Plan in accordance with the requirements and schedule within the Plan.

48. CEMS Root Cause Failure Analysis. For any CEMS having a downtime greater than 5% of the total time for each of two consecutive calendar quarters, BPP shall conduct a CEMS Root Cause Failure Analysis and develop a corrective action plan to promptly address the findings of the CEMS Root Cause Failure Analysis. The CEMS Root Cause Failure Analysis shall include the following elements, at a minimum:

- a. An identification and detailed analysis setting forth the root cause(s) of the CEMS downtime;
- b. The steps, if any, taken to limit the duration of the CEMS downtime;
- c. An analysis of the measures reasonably available to prevent the root cause(s) of the CEMS downtime from recurring. This analysis shall include an evaluation of possible design, operational, and maintenance measures. For any CEMS for which a Root Cause Failure Analysis is required twice within 12 consecutive calendar quarters, BPP shall retain an independent third party to evaluate BPP's assessment of CEMS downtime cause(s), which may include recommendations for additional corrective actions and/or modifications to BPP's CEMS O&M Plan.

The findings of the CEMS Root Cause Failure Analysis and corrective action plan, including a schedule for implementation, shall be submitted to EPA in a written report

included with the first semi-annual report required by Part VIII of the Consent Decree following completion of the Root Cause Failure Analysis.

49. Corrective Action. The corrective action plan shall require BPP to undertake as expeditiously as reasonably possible such reasonably available corrective actions as are necessary to correct the cause of the CEMS monitor downtime and to prevent a recurrence of the root cause(s) identified in the CEMS Root Cause Failure Analysis. The corrective action plan shall include a description of any corrective actions already completed or, if not complete, a schedule for their implementation including proposed commencement and completion dates.

a. After a review of a CEMS Root Cause Failure Analysis and corrective action plan, EPA may notify BPP in writing of (1) any deficiencies in the corrective actions listed in the findings; and/or (2) any objections to the schedules of implementation of the corrective actions and explain the basis for EPA's objections.

i. If BP has not yet commenced implementation of the corrective plan, BP will implement an alternative or revised corrective action or implementation schedule based on EPA's comments.

ii. If a corrective action that EPA has identified as deficient has already commenced or is already completed, then BP is not obligated to implement the corrective action identified by EPA. However, BP shall be on notice that EPA considers such corrective action deficient and not acceptable for remedying any subsequent, similar root cause(s) of any future CEMS monitor downtime.

b. If EPA and BP cannot agree on the appropriate corrective action(s) or implementation schedule(s), if any, to be taken in response to a CEMS Root Cause Failure Analysis, either party may invoke the Dispute Resolution provisions of Part XIV of the Consent Decree.

#### **J. Benzene Waste NESHP**

Summary: BPP shall undertake the following measures to minimize or eliminate fugitive benzene waste emissions at its Whiting Refinery. Unless otherwise stated, all compliance requirements shall commence on the Date of Entry of the Consent Decree. Nothing in

this Section shall relieve BPP of its independent obligation to comply with the requirements of the Benzene Waste Operations NESHAP.

50. Facility Compliance Status.

a. Compliance Option. BPP shall comply with the compliance option set forth at 40 C.F.R. § 61.342(e) (the “6 BQ Option” or “6 Mg Option”) of the Benzene Waste Operations NESHAP.

b. Changes to Compliance Option. BPP shall not change the compliance status of the Whiting Refinery from the 6 BQ Option to the 2 Mg compliance option. Any change in compliance strategy not expressly prohibited by this Section J must be accomplished in accordance with the requirements of the Benzene Waste Operations NESHAP.

c. Organic Benzene Wastes. BPP shall ensure that waste management units at the Whiting Refinery handling Organic Benzene Wastes are in compliance with all standards applicable to such waste management units under the Benzene Waste Operations NESHAP.

d. Aqueous Benzene Wastes. For purposes of complying with the 6 Mg Option, all waste management units at the Whiting Refinery handling Aqueous Benzene Wastes shall either: (1) meet the applicable control standards of the Benzene Waste Operations NESHAP, or (2) have their uncontrolled benzene quantity count toward the 6 Mg compliance limit. Nothing in this sub-paragraph shall be construed to limit the ability of BPP to treat and manage Aqueous Benzene Wastes in accordance with the requirements of 40 C.F.R. § 61.355(k)(4).

e. Annual TAB Report. Beginning on April 1, 2012 for the calendar year 2011 TAB report and continuing thereafter on or before each April 1st, BPP shall submit its annual TAB report for the preceding calendar year required pursuant to 40 C.F.R. § 61.357(d)(2).

51. Waste Stream and Wastewater System Compliance Audit. BPP certifies that it has completed and, on January 25, 2010, submitted to EPA a report on a comprehensive Waste Stream and Wastewater System Compliance Audit, conducted by an independent third-party, of the Whiting Refinery’s benzene waste stream inventory, TAB calculation, all waste management units, and entire wastewater treatment system in

order to assess compliance with all applicable Benzene Waste Operation NESHAP requirements. BPP further certifies that, as reported in the January 25, 2010 report, it has completed implementation of all corrective actions necessary to remedy the findings of the Waste Stream and Wastewater System Compliance Audit.

52. Carbon Canisters. At all locations within the Whiting Refinery where carbon canisters are currently installed and used as the control device for complying with the Benzene Waste Operations NESHAP, BPP shall implement and comply with the following:

a. Dual Carbon Canisters/Beds.

i. Except as provided for in sub-paragraph 52.b, by no later than 12 months after the Date of Entry of the Consent Decree, BPP shall install primary and secondary carbon canisters and operate them in series (the “dual-canister” option). BPP may comply with the requirements of the dual canister option required under this sub-paragraph by using a single canister with a “dual carbon bed” if the dual carbon bed configuration allows for breakthrough monitoring between the primary and secondary beds in accordance with this sub-paragraph.

ii. Breakthrough monitoring. BPP shall conduct breakthrough monitoring between the primary and secondary carbon canisters or beds when there is actual flow to the carbon canister. Such monitoring shall be conducted in accordance with the frequency specified in 40 C.F.R. § 61.354(d) using as the design basis the applicable breakthrough definition specified in sub-paragraph 52.a.iii. If a carbon canister or bed becomes unsafe to monitor because it is located within a temporary exclusion zone, BPP shall monitor the canister or bed as soon as is practicable after the exclusion zone is no longer in effect, but in no case later than the end of the normal monitoring interval for the canister or bed or within 3 days of the end of the exclusion period, whichever is sooner. BPP shall include in its semi-annual report a list of all canisters or beds which BPP has designated as unsafe to monitor during the reporting period.



iii. Breakthrough definition. BPP may use either 50 ppmv VOC or 1 ppmv benzene as the design value for the primary carbon canister or bed. BPP shall immediately replace the primary carbon canister or bed when the design value for the primary canister or bed is exceeded (as monitored between the primary and secondary carbon canister or carbon bed). Unless both the primary and secondary carbon canisters or beds are replaced with fresh ones, the original secondary carbon canister or bed shall become the new primary carbon canister or bed and a fresh secondary carbon canister or bed shall be installed. In all cases, any carbon canister or bed used as the primary unit shall have sufficient capacity to meet the breakthrough definition of this sub-paragraph. For purposes of this sub-paragraph 52.a, “immediately” means no later than within twenty-four (24) hours.

iv. BPP shall maintain a sufficient supply of fresh carbon canisters and carbon beds at the Whiting Refinery at all times.

v. For any new waste management unit(s) or refinery process unit(s) at the Whiting Refinery where carbon canisters will be installed and used as the control device for complying with the Benzene Waste Operations NESHAP, BPP shall comply with the dual-canister option, except as provided in sub-paragraph 52.b.

b. Single Carbon Canisters.

i. Permitted locations. After the Date of Entry, for any carbon canister at the Whiting Refinery subject to this Paragraph 52, BPP may use the “single canister” option described in this sub-paragraph at the following locations:

(1) If BPP demonstrates that it is technologically infeasible or unsafe to comply with the dual-canister option under sub-paragraph 52.a, BPP may use a single carbon canister at that specific location. BPP shall submit a written request to EPA to comply with the “single canister” option for each such canister. This request shall specifically identify each carbon canister for

which BPP claims that it is technologically infeasible or unsafe to comply with the dual-canister option and shall provide a detailed explanation of the specific technical and/or safety reasons for the request. This request shall be subject to EPA approval.

(2) BPP may use a single carbon canister at locations where breakthrough, as defined in this sub-paragraph 52.b, has been documented as occurring less than once per calendar year.

(3) BPP may use a single carbon canister on temporary waste management units (*e.g.*, FRAC or Baker tanks), provided that such temporary units are used for no more than 30 Days.

(4) Until December 31, 2015, BPP may use single carbon canisters at the DAF unit and API Separator that are subject to sub-paragraph 60.g. Within 12 months after the Date of Entry and continuing until December 31, 2015, BPP shall optimize the use of bio-filters or other control or treatment technologies to minimize breakthrough at the single carbon canisters at the DAF and API Separator.

ii. Breakthrough monitoring. By no later than the Date of Entry, BPP shall conduct breakthrough monitoring for each single carbon canister at the Whiting Refinery when there is actual flow to the canister. Such monitoring shall be conducted in accordance with all requirements specified in 40 C.F.R. § 61.354(d) using as the design basis the applicable breakthrough definition specified in sub-paragraph 52.b.iii, but in no case less frequently than on a monthly basis. If a carbon canister or bed becomes unsafe to monitor because it is located within a temporary exclusion zone, BPP shall monitor the canister or bed as soon as is practicable after the exclusion zone is no longer in effect, but in no case later than the end of the normal monitoring interval for the canister or bed or within 3 days of the end of the exclusion period, whichever is sooner. BPP shall include in its semi-annual report a list of all canisters or beds

which BPP has designated as unsafe to monitor during the reporting period.

iii. Breakthrough definition. Single carbon canisters will be replaced immediately when breakthrough is detected as follows:

(1) For canisters less than or equal to 55-gallon drum size, breakthrough is any reading of VOC or benzene above background.

(2) For canisters larger than 55 gallons, breakthrough is defined as either:

- a. 50 ppmv VOC; or
- b. 1 ppmv benzene. To use 1 ppmv benzene, canisters must be monitored for VOC. When a reading of 10 ppmv VOC is detected, monitoring for benzene must be conducted on the following schedule:
  - i. Daily if the representative historical replacement interval is two weeks or less, or
  - ii. Three times per week and not on consecutive days, if the representative historical replacement interval is greater than two weeks.

(3) For purposes of this sub-paragraph 52.b, the term “immediately” shall mean: within eight (8) hours for single canisters with representative historical replacement intervals of two weeks or less; or within twenty-four (24) hours for single canisters with a representative historical replacement interval of more than two weeks.

iv. Canister Replacement. Single carbon canisters may be replaced with a dual carbon canister or carbon bed system at any time provided EPA is notified and the monitoring requirements for single canisters are continued until the second canister or bed is installed. BPP shall comply with the monitoring requirements for dual-carbon canisters

or dual-carbon beds provided in sub-paragraph 52.a upon installation of such system, and BPP shall notify EPA of such replacement in its next quarterly report submitted pursuant to Part VIII of the Consent Decree.

c. Alternative Control/Treatment Devices. Nothing in Paragraph 52 of this Section of the Consent Decree is intended to preclude BPP from electing to use other control devices at the Whiting Refinery to comply with the Benzene Waste Operations NESHAP instead of or in addition to carbon adsorption, provided that such other control technology meets all applicable control and/or treatment requirements under the Benzene Waste Operations NESHAP and the compliance monitoring point is unaffected by the use of such other control devices. If BPP elects to use another control technology, BPP shall submit written notification to EPA in its next semi-annual report submitted pursuant to Part VIII of the Consent Decree providing both the location where such other control technology shall be used instead of or in addition to carbon adsorption and a description of the other technology to be used.

d. Records. Records regarding compliance with Paragraph 52 shall be maintained in accordance with 40 C.F.R. § 61.356(j)(10).

53. Annual Program. BPP shall continue to implement an annual program of reviewing process information for the Whiting Refinery, including but not limited to construction projects, to ensure that all new benzene waste streams are included in the Whiting Refinery's waste stream inventory and TAB Report, and to ensure that all new waste management units are properly accounted for and managed in accordance with the Benzene Waste Operations NESHAP.

54. Laboratory Audits. BPP shall conduct audits of all laboratories that perform analyses of samples used to determine compliance with the Benzene Waste Operations NESHAP at the Whiting Refinery. These audits shall review procedures and methods in order to ensure that proper analytical and quality assurance practices are followed. BPP shall conduct such audits at each laboratory at least every two (2) calendar years from the date of the last audit conducted by the Whiting Refinery pursuant to Paragraph 19.H of the 2001 Consent Decree or prior to using a new lab for analysis of benzene samples.

55. Benzene Spills. At least once per calendar year, BPP shall review all CERCLA reportable spills at the Whiting Refinery to determine if benzene waste was generated. BPP shall account for all benzene wastes generated through such spills in its annual TAB calculation and report. All benzene wastes generated through such spills that are not managed solely in controlled waste management units shall count toward the 6 Mg compliance limit.

56. Training. BPP shall:

- a. Develop and implement annual training for all employees at the Whiting Refinery with responsibility to sample benzene waste streams;
- b. Establish standard operating procedures for all control devices used to comply with the Benzene Waste Operations NESHAP and include training on such procedures as part of the annual training for employees assigned to operate these devices; and
- c. Ensure that third-party contractors hired to perform any requirement of this Section J of the Consent Decree have a proper training program to implement the provisions of this Paragraph.

57. Waste/Slop Oil Management. BPP shall maintain records of waste/slop oil movements for waste streams (organic or aqueous) that are not controlled, as identified in the slop oil plan prepared by the Whiting Refinery. EPA may review the plan and recommend revisions to add uncontrolled waste streams resulting from waste/slop oil movements, in accordance with the provisions of 40 C.F.R. Part 61, Subpart FF.

58. Sampling (6 Mg/yr). BPP shall conduct quarterly “end-of-line” (“EOL”) benzene determinations as follows:

- a. If no changes will be made to the sampling locations or methods for flow calculations currently used in the quarterly and annual benzene determinations for the Whiting Refinery, BPP shall comply with and continue sampling under the refinery’s existing EOL Sampling Plan;
- b. If BPP proposes to make any changes to the sampling locations or methods for flow calculations to be used in the quarterly benzene determinations for the Whiting Refinery, within 30 Days after the Date of Entry of the Consent

Decree, BPP shall submit a revised EOL Sampling Plan that shall contain any proposed changes. The revised EOL Sampling Plan shall be subject to EPA approval. BPP shall comply with and commence sampling under the revised EOL Sampling Plan by no later than the first full Calendar Quarter following submittal of the plan to EPA, regardless of whether the plan is approved at that time;

c. On an annual basis, BPP shall sample all uncontrolled waste streams that count toward the 6 Mg compliance limit and contain greater than 0.05 Mg/yr of benzene; and

d. If changes in processes, operations, or other factors lead BPP to conclude that the EOL Sampling Plan for the Whiting Refinery may no longer provide a representative basis for estimating the Whiting Refinery's annual or quarterly EOL benzene quantity, then by no later than ninety (90) Days after BPP makes this determination, BPP will submit to EPA a newly proposed revised EOL Sampling Plan. Upon receipt of EPA approval, BPP shall commence sampling consistent with the requirements and schedule contained in the newly approved EOL Sampling Plan.

59. Groundwater Conveyance Systems. BPP shall manage all groundwater conveyance systems located at the Whiting Refinery in accordance with, and to the extent required by, 40 C.F.R. § 61.342(a).

60. Miscellaneous Measures. By no later than the Date of Entry, BPP shall implement the measures identified in subparagraphs a.-f:

a. BPP shall conduct monthly visual inspections of all water traps within its individual drain systems that are subject to the Benzene Waste NESHAP;

b. BPP shall identify/mark all area drains that are segregated stormwater drains;

c. BPP shall include each controlled individual drain system subject to the Benzene Waste Operations NESHAP at the Whiting Refinery on all inspection schedules pertaining to Benzene Waste Operation NESHAP compliance, and shall conduct inspections of each such drain system in accordance with such schedules set forth in 40 C.F.R. Part 61, Subpart FF;

d. BPP shall monitor the flow indicators on all conservation vents on process sewers for detectable leaks on a weekly basis;

e. BPP shall conduct quarterly monitoring of oil/water separators in benzene service in accordance with 40 C.F.R. § 61.347; and

f. BPP shall account for and include in the annual TAB Report all slop oil recovered from its oil/water separators or sewer system until recycled or put into a feed tank, in accordance with 40 C.F.R. § 61.342(a). All tanks handling waste benzene shall meet the control standards specified in 40 C.F.R. § 61.343 or § 61.351, except that Tank P1 and Tank P2 at the Whiting Refinery shall meet the tank control standard at 40 C.F.R. § 61.343.

g. DAF Installation/API Separator Covers. By no later than December 31, 2015, BPP shall complete construction and installation of a new Dissolved Air Flotation (DAF) unit at the Whiting Refinery. By no later than December 31, 2015, BPP shall complete construction and installation of new covers for the API Separator at the Whiting Refinery. By no later than December 31, 2015, emissions from both the new DAF and API Separator shall be routed to control devices, such as carbon canisters, that meet all applicable control and/or treatment requirements under the Benzene Waste Operations NESHAP.

61. Heat Exchange Systems and Cooling Towers.

a. Applicability. In complying with the National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, 40 C.F.R. Part 63, Subpart CC, BPP may only claim that a heat exchange system is not in “organic HAP service” pursuant to 40 C.F.R. § 63.654(b)(2) if the heat exchange system only cools process fluids that contain less than 2.5% by weight of total HAPs (as listed in Table 1 to Subpart CC).

b. TAB Reporting. Beginning with the first TAB Report submitted for the refinery after October 29, 2012, and for each TAB report thereafter, BPP shall report as a separate line-item the entire benzene quantity identified by monitoring conducted pursuant to 40 C.F.R. § 63.654(c) at all heat exchange systems at the Whiting Refinery subject to 40 C.F.R. Part 63, Subpart CC and

those identified above in sub-paragraph 61.a. This line-item shall not be counted towards the uncontrolled benzene quantity under the 6 Mg Option.

62. Semi - Annual Benzene Waste NESHAP Report. By no later than February 15 and August 15 of each calendar year after the Date of Entry, BPP shall submit a semi-annual report to EPA that includes the following information for the Whiting Refinery regarding compliance with the Benzene Waste NESHAP requirements of this Section (the “Semi-Annual Benzene Waste NESHAP Report”). Each Semi-Annual Benzene Waste NESHAP Report shall include the following information for the two most recently completed Calendar Quarters (the “reporting period”):

a. EOL Report:

i. As part of each Semi-Annual Benzene Waste NESHAP Report, BPP shall submit to EPA the following information:

- (1) a list of all waste streams sampled at the Whiting Refinery pursuant to Paragraph 58;
- (2) the results of the quarterly and annual sampling conducted pursuant to Paragraph 58, including the results of the benzene analysis for each sample;
- (3) the computation of the EOL benzene quantity for each quarter; and
- (4) any other related information required under a revised EOL Sampling Plan if submitted pursuant to Paragraph 58.

ii. As part of the EOL Report, BPP shall use all sampling results and approved flow calculation methods pursuant to Paragraph 58 to calculate and report a quarterly and a calendar year uncontrolled benzene quantity for the Whiting Refinery against the 6 Mg Option.

iii. If the quarterly uncontrolled benzene quantity (for any Calendar Quarter during the reporting period) at the Whiting Refinery exceeds 1.5 Mg or the annual uncontrolled benzene quantity exceeds 6 Mg, then BPP shall, as specified below, conduct a Root Cause Failure Analysis and develop a corrective action plan (including a schedule for completing the corrective actions) to promptly address the findings of the



Root Cause Failure Analysis. The findings of the Root Cause Failure Analysis and corrective action plan shall be submitted to EPA in a written report within 30 Days following completion of the Root Cause Failure Analysis. This corrective action plan shall be subject to EPA approval. BPP shall begin to implement the corrective action plan by no later than 60 Days after submission to EPA, and shall complete the corrective action pursuant to the proposed schedule.

(1) Root Cause Failure Analysis. The Root Cause Failure Analysis required under this sub-paragraph shall include the following elements:

- a. If the root cause(s) of the quarterly or annual uncontrolled benzene exceedance is attributable to at least one discrete event, or to at least one discrete series of related events, resulting in 0.5 Mg or more of uncontrolled benzene, BPP shall include an estimate of the quantity of uncontrolled benzene emitted into the ambient air along with the calculations used to determine such emissions;
- b. The steps, if any, taken to limit the duration and/or quantity of uncontrolled benzene exceeding 1.5 Mg per quarter or the 6 Mg Option;
- c. A detailed analysis setting forth the root cause(s) for exceeding 1.5 Mg per quarter or the 6 Mg Option; and
- d. An analysis of the measures reasonably available to prevent the root cause(s) for the exceedance from recurring. This analysis shall include an evaluation of possible design, operational, and maintenance measures. This analysis shall also include a discussion of alternative measures that are reasonably available, their relative probable effectiveness, and their relative costs.

(2) Corrective Action Plan. The corrective action plan required under this sub-paragraph shall require BPP to undertake as expeditiously as possible any such interim and/or long-term corrective actions as are necessary and consistent with good air pollution control practices to prevent a recurrence of the root cause(s) identified in the Root Cause Failure Analysis. The corrective action plan shall include a description of any corrective actions already completed or, if not complete, a schedule for their implementation including proposed commencement and completion dates.

iv. BPP shall identify all labs used during the quarter to analyze benzene waste samples collected at the Whiting Refinery pursuant to this Section J, and BPP shall provide the date of the most recent audit of each lab.

b. Carbon Canister Report.

i. As part of the second Semi-Annual Benzene Waste NESHAP Report required by the Consent Decree, BPP shall submit a project completion report to EPA detailing the actions performed to comply with the requirements of Paragraph 52. BPP shall include a list of all locations within the refinery using the dual-canister option, the installation date of each such dual-canister, and the date that each dual-canister was put into operation.

ii. As part of each Semi-Annual Benzene Waste NESHAP Report, for all locations at which single carbon canisters are used, BPP shall identify each such location and provide the results of all breakthrough monitoring and carbon canister change-outs that occurred during the reporting period. For each single carbon canister, BPP shall also identify: i) the date(s) and approximate time when breakthrough was first detected; and ii) for each breakthrough event, the date and time when carbon canister change-out occurred. BPP shall also include in each semi-

annual report a list of all canisters or beds which BPP has designated as unsafe to monitor during the reporting period.

c. Audit Reporting: As part of each Semi-Annual Benzene Waste NESHAP Report, BPP shall identify all labs audited pursuant to the requirements of Paragraph 54 during the reporting period, and shall submit the results and the reports regarding any such audits. For each lab audited, BPP shall also provide a description of the methods used in the audit.

d. Training Reporting: As part of each Semi-Annual Benzene Waste NESHAP Report, BPP shall identify the employees who received training during the reporting period pursuant to the requirements of Paragraph 56, and shall describe the training these employees received. BPP shall also describe the training scheduled to be performed during the next reporting period.

e. BPP shall certify each Semi-Annual Benzene Waste NESHAP Report required in accordance with the certification statement required under Paragraph 102 of the Consent Decree.

**K. Leak Detection and Repair**

63. NSPS Applicability. Upon the Date of Entry, each “process unit” (as defined by 40 C.F.R. § 60.590a(e)) at the Whiting Refinery shall be an “affected facility” for purposes of 40 C.F.R. Part 60, Subpart GGGa, and shall be subject to and comply with the requirements of Subpart GGGa no later than one year from the Date of Entry, except as specifically provided in this Paragraph.

a. The requirements of 40 C.F.R. Part 60, Subpart GGGa, shall not apply to compressors at the Whiting Refinery.

b. Process units on which construction commenced prior to January 4, 1983, shall not be subject to the requirements in 40 C.F.R. § 60.482-7a(h)(2)(ii) regarding difficult-to-monitor valves.

c. Entry of this Consent Decree satisfies the following notification and testing requirements that are triggered by initial applicability of 40 C.F.R. Part 60, Subparts A and GGGa: 40 C.F.R 60.7, 60.8, 60.18 (but only with respect

to the following flares: FCU, Alky, 4UF, DDU, SRU and VRU), 60.482-1a(a) and 60.487a(e).

d. The two consecutive months of monitoring that BPP previously conducted for purposes of 40 C.F.R. Part 60, Subpart GGGa in 2011 satisfies the requirement to conduct monitoring of those components for two consecutive months following the initial applicability of 40 C.F.R. Part 60, Subpart GGGa for the following units of the Whiting Refinery: FCU 500, VRU 300, 4UF, Alky Analyzer, ARU, Indiana Tank Field, J&L Tank Field, Lake George Tank Field, Marketing Terminal, Oil Movements Diluent, Oil Movements North, South Tank Field and Stieglitz Park Tank Field.

Nothing in this Paragraph or in Appendix B to this Consent Decree shall relieve BPP of its independent obligation to comply with the requirements any other federal, state or local LDAR regulation that may be applicable to Equipment at the Whiting Refinery.

64. Enhanced Leak Detection and Repair. BPP shall implement and comply with the requirements of the Enhanced Leak Detection and Repair Program (“ELP”) set forth in Appendix B to this Consent Decree by the dates specified therein. The requirements of Appendix B are in addition to the applicable requirements under 40 C.F.R. Part 60, Subpart GGGa; Part 61, Subparts J and V; and Part 63, Subparts H and CC. The terms “in light liquid service” and “in gas/vapor service” shall have the definitions set forth in the applicable provisions of 40 C.F.R. Part 60, Subpart GGGa; and Part 63, Subpart CC.

#### **L. Sulfur Recovery Plant and Sulfur Pits**

Summary: BPP is required to accept NSPS Subpart Ja applicability for its Sulfur Recovery Plant (“SRP”), and to route all emissions from its sulfur pits and sealed sulfur collection drums such that all emissions are treated and included as SRP emissions subject to 40 C.F.R. Part 60, Subparts A and Ja.

65. Sulfur Recovery Plant and NSPS Applicability. The Whiting Refinery currently has a single SRP with three parallel Claus sulfur recovery units, with two Tail Gas Units (an SBS unit and a Beavon Stretford unit) serving as control devices. As a part of WRMP, two new Claus sulfur recovery units will be added to the SRP, and the SBS

and Beavon Stretford units will be shut down and replaced by two new Claus Offgas Treaters (COT1 and COT2), as provided in this Section. Upon completion of WRMP, the design of the SRP will allow tail gas from all five Claus sulfur recovery units to be routed to either or both of the two new COTs. By no later than the Date of Entry, the Whiting Refinery SRP shall be an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and Ja, for all pollutants applicable to SRPs, and shall be subject to and comply with all applicable requirements of 40 C.F.R. Part 60, Subparts A and Ja except as provided in this Paragraph 65.

a. Each of the two new Claus sulfur recovery units and Claus Offgas Treaters being installed as a part of WRMP shall achieve and thereafter maintain compliance with the emission limit in 40 C.F.R. § 60.102a(f)(1)(i) and the monitoring requirements in 40 C.F.R. § 60.106a(a)(1) by no later than 60 days after achieving the maximum production rate at which the unit will be operated, or 180 days after initial startup, whichever comes first.

b. The Beavon Stretford and SBS units at the Whiting Refinery SRP shall be shut down and permanently removed from service by no later than 180 days after the initial startup of the later of the two new Claus sulfur recovery units and associated Claus Offgas Treaters (COT1 or COT 2) being installed as a part of WRMP. Initial startup of the two new Claus sulfur recovery units and the Claus Offgas Treaters shall be by no later than the initial startup of the New Coker. Until the Beavon Stretford unit is shut down, BPP shall continue to monitor emissions from that unit and determine compliance with the emission limits in 40 C.F.R. § 60.102a(f)(1) in accordance with the monitoring procedure specified in Appendix C.

66. SRP Emission Limits. Beginning no later than the date by which the later of the two new Claus Sulfur Recovery Units and associated Claus Offgas Treaters being installed as a part of WRMP is required to achieve compliance under Paragraph 65.a of this Section, the Whiting Refinery SRP shall comply with the following requirements:

a. An SO<sub>2</sub> emission limit of 194.8 tons per each rolling 12-month period. Compliance with this limit shall be determined each month by adding the

total emissions for that month to the total emissions for the preceding 11 months. Total emissions for each month shall be determined with CEMS emission data converted by the following equation:

$$E = \left( \frac{F \times h \times C \times MW}{V_m \times 2000 \times 10^6} \right)$$

E = TGTU SO<sub>2</sub> Emissions in tons per month

F = Measured total TGTU incinerator stack flow rate, dscf at standard conditions (60° F), for the month

C = Average concentration of SO<sub>2</sub> in TGTU incinerator exhaust for the month, in ppmvd

MW = Molecular weight of SO<sub>2</sub> = 64.06

V<sub>m</sub> = 379.4 dscf of gas per lb-mol at standard conditions (60° F)

2000 = conversion factor for 2000 pound per ton

10<sup>6</sup> = conversion factor for ppmv to volume fraction

b. 40 C.F.R. § 60.102a (f)(1)(i) during all periods of operation of the SRP, other than periods of Startup, Shutdown or Malfunction of the SRP or malfunction of a Tail Gas Unit (TGU) to the extent provided under 40 C.F.R. § 60.8.

c. At all times, including, but not limited to, periods of Startup, Shutdown, Malfunction and maintenance, BPP shall, to the extent practicable, operate and maintain the SRP, including its TGU, its sulfur pits and sealed sulfur collection drums, any supplemental control devices on the SRP, and Pit 2400 and the molten sulfur storage tanks, in accordance with its obligation to minimize emissions through implementation of good air pollution control practices as required by 40 C.F.R. § 60.11(d).

67. SRP Operations and Maintenance.

a. By no later than 60 Days after the Date of Lodging, BPP shall submit to EPA an updated plan for operating and maintaining the SRP, including, but not limited to, the existing TGUs, sulfur pits A, B, C, and 2400, as well as

upstream process units, in accordance with good air pollution control practices for minimizing emissions.

b. By no later than December 31, 2012, BPP shall submit to EPA an updated plan ("SRP O&M Plan") for operating and maintaining the SRP, including, but not limited to, the two new Claus sulfur recovery units and Claus Offgas Treaters, the sealed sulfur collection drums, the molten sulfur storage tanks, as well as upstream process units, in accordance with good air pollution control practices for minimizing emissions.

c. BPP shall comply with the most recently submitted SRP O&M Plan at all times, including, but not limited to, periods of Startup, Shutdown, and Malfunction of the SRP. BPP may make reasonable modifications to the SRP O&M Plan submitted under this Paragraph, provided that BPP provides EPA with a copy of the modification in its next semi-annual report submitted pursuant to Part VIII of the Consent Decree.

68. Sulfuric Acid Mist Testing. By no later than 180 days after the commencement of operations of the two new COTs (COT1 and COT2), BPP shall conduct a one-time test at each COT stack under representative conditions to measure the sulfuric acid mist ("SAM") emission rate.

69. Sulfur Pit and/or Sulfur Collection Drum and Tank Emissions.

a. Sulfur Pit Emissions. By no later than the Date of Entry, BPP shall (i) comply with the requirements of 40 C.F.R. § 60.102a(f) as it applies to Sulfur Pits A, B and C and (ii) continue to operate and maintain the following control and monitoring equipment until Pits A, B, C and 2400 are decommissioned:

- i. Pit sweep system for Pits A, B, C and 2400;
- ii. Temperature indicators located at each eductor inlet at Pits A, B, C and 2400; and
- iii. Caustic scrubber to treat emissions from Pits A, B, C and 2400 in the event that pit sweep emissions are routed to the Beavon Stretford unit.

b. Sulfur Pit 2400 Degas System. By no later than the Date of Entry, BPP shall, to the extent practicable, maintain and operate the newly redesigned

degas system to minimize the entrainment of H<sub>2</sub>S vapor in the sulfur routed to Pit 2400 in a manner consistent with good air pollution control practice for minimizing emissions.

c. Emissions From Sealed Sulfur Collection Drums and Molten Sulfur Tanks.

i. By no later than 180 Days after initial startup of the New Coker, BPP shall replace Sulfur Pits A, B and C with sealed sulfur collection drums, and shall replace Pit 2400 with molten sulfur storage tanks. By no later than the date that BPP replaces Sulfur Pits A, B and C with sealed collection drums and Pit 2400 with storage tanks, BPP shall route all sulfur emissions from the sealed sulfur collection drums and the molten sulfur storage tanks such that they are treated, monitored, and included as part of the SRP's emissions subject to the NSPS Subpart Ja limit for SO<sub>2</sub>, 40 C.F.R. § 60.102a (f)(1)(i).

ii. For a period of one year commencing from the first use of each molten sulfur storage tank, BPP shall monitor on a continuous basis and report to EPA on a semi-annual basis the duration of all relief valve releases from each molten sulfur storage tank.

iii. Nothing in this subparagraph 69.c shall preclude BPP from undertaking maintenance on the sealed sulfur collection drums consistent with the provisions of 40 C.F.R. § 60.102a(f)(3), or the molten sulfur storage tanks consistent with subparagraph 72.b of Section M of this Consent Decree (Requirements for Certain Tanks).

**M. Requirements for Certain Tanks**

70. Stormwater Equalization Tank (TK-5052): BPP shall continue to operate and maintain an external floating roof on the stormwater equalization tank designated as Tank 5052 at the Whiting Refinery consistent with the requirements of 40 C.F.R. § 61.351(a)(2).

71. Brine Treatment Tanks (TK-101, TK-102, TK-103 and TK-104):



a. The Brine Treatment Tanks (TK-101, TK-102, TK-103 and TK-104) at the Whiting Refinery shall be equipped with fixed roofs and shall be vented to (i) an iron sponge control system followed by (ii) a carbon canister meeting the requirements of 40 C.F.R. § 61.349(a)(2) and Paragraph 52 of Section J of this Consent Decree (Benzene Waste NESHAP). Subject to EPA approval, BPP shall have the ability to utilize an alternative to the carbon canister authorized by 40 C.F.R. § 61.349(a)(2).

b. BPP shall monitor and record daily average H<sub>2</sub>S concentration on the outlet of the iron sponge system and daily total vapor flow to the iron sponge system. Process analyzers calibrated in accordance with manufacturer's recommendations may be used for these purposes.

72. Sulfur Storage Tanks (TK-315 and TK-316):

a. Each of the sulfur storage tanks designated as TK-315 and TK-316 at the Whiting Refinery shall be steam or nitrogen blanketed and equipped with a water eductor system that routes H<sub>2</sub>S emissions back to the sulfur recovery plant at all times except during periods when the tanks are vented to atmosphere to allow for maintenance on equipment associated with the tank (*i.e.*, valves and level transmitters).

b. Tanks TK-315 and TK-316 shall not be vented to atmosphere except during periods of maintenance on equipment associated with the tank, and during those periods for no more than 100 hours per rolling 12-month period.

73. Off-Spec Brine Tanks (TK-3559 and TK-3560):

a. BPP shall continue to operate and maintain an internal floating roof on each Off-Spec Brine Tank (TK-3559 and TK-3560) consistent with the requirements of 40 C.F.R. § 61.351(a)(1).

b. VOC emissions from the Off-Spec Brine Tanks shall not exceed a total of 2.1 tons per rolling 12-month period.

c. For each of the Off-Spec Brine Tanks, BPP shall:

i. monitor and record throughput on a monthly total basis;

and

ii. sample the material in the tank off the tank's floating

suction line and measure and record the Reid Vapor Pressure (“RVP”) of any oil layer once per month.

d. Using the throughput data collected under Paragraph 73.c.i, and the most recent RVP measurement collected under Paragraph 73.c.ii, BPP shall use USEPA’s “TANKS” model to determine and record, on a monthly basis, the monthly and rolling 12-month VOC emissions from the Off-Spec Brine Tanks.

e. Except for periods when a tank is out of service, BPP shall maintain in each Off-Spec Brine Tank a level sufficient to assure that the floating roof remains in contact with the liquid in the tank.

74. Coker Feed Tank (TK-6254):

a. The Coker Feed Tank (TK-6254) shall be equipped with a fixed roof, shall be nitrogen blanketed and shall be vented to an iron sponge control system except during periods when the iron sponge is offline for maintenance.

b. Emissions of H<sub>2</sub>S from the TK-6254 shall not exceed 2.84 tons per rolling 12-month period. Emissions during periods when the iron sponge is offline for maintenance shall be included in determining compliance with this emission limit.

c. BPP shall monitor and record the daily average H<sub>2</sub>S concentration at the outlet of the iron sponge system and shall determine the daily average vapor flow based on the nitrogen purge rate to TK-6254. The H<sub>2</sub>S concentration and nitrogen purge flow will be used to calculate the H<sub>2</sub>S emissions rate. Process analyzers calibrated in accordance with the manufacturer’s recommendations, may be used for this purpose.

d. Emissions of VOC from the TK-6254 shall not exceed 10.0 tons per rolling 12-month period. On a monthly basis, BPP shall (a) monitor the VOC concentration at the outlet of the iron sponge system in accordance with the methods used to comply with the requirements for breakthrough monitoring for carbon canisters in Paragraph 52.a.ii and Paragraph 52.b.ii of Section J of this Consent Decree, and (b) record the results of such monitoring.. BPP shall verify and record that flow is present when the VOC concentration is measured at the tank vent. BPP shall determine the monthly average vapor flow based on the

nitrogen purge rate to TK-6254. The VOC concentration and nitrogen purge flow will be used to calculate the VOC emissions rate.

75. FLIR Monitoring: Annually, BPP shall use an Optical Gas Imaging Camera to video image and record emissions from the tank roof and related vent systems on the Stormwater Equalization Tank (TK-5052), the brine treatment tanks (TK-101, TK-102, TK-103, TK-104), Off-Spec Brine Tanks (TK-3559, TK-3560), and the Coker Feed Tank (TK-6254). If imaging indicates emissions inconsistent with well maintained floating roof tanks, seals, fittings, or welds, BPP shall inspect and, if necessary, repair the leaks consistent with the underlying Federal, State or local regulations applicable to the tank(s). BPP will report the results of these inspections and any corrective actions required during the next semi-annual Part VIII report.

76. The provisions in this Section will take effect upon startup of each tank or the Date of Entry, whichever is later.

**N. VOC, PM, TRS, and H<sub>2</sub>S Emission Reductions from the Whiting Refinery New Coker**

Summary: BPP will limit VOC, PM, TRS and H<sub>2</sub>S emissions by depressuring the Coke Drum to no more than 2.0 psig prior to venting, by controlling the quality of the makeup water added to the Quench Water System, by requiring a minimum total Quench Water volume subject to a high level trip and a minimum Quench Water Soak Time and by designing the Coke Pit so as to minimize fugitive dust from the coke. The requirements in this Section to control particulate emissions at the Coke Pit are in addition to the coke handling requirements contained in the Whiting Refinery's permit, including an enclosed and wetted coke conveyance system, enclosed coke storage buildings, and other measures to control fugitive PM.

77. Control of VOC, PM<sub>TOTAL</sub>, PM<sub>10</sub>, TRS, and H<sub>2</sub>S Emissions from the Whiting New Coker. Upon initial startup of the New Coker, BPP shall not commence Coke Drum Venting until the Coke Drum Overhead Pressure is 2.0 psig or less.

78. New Coker Coke Drum Operating Parameter Limits. Upon initial startup of the New Coker, BPP shall comply with the following operating limits:

- a. Total Quench Water added to a coke drum shall be at least 260,000 gallons per cycle or until the water reaches the high level trip in the Coke drum, whichever is less; and

- b. Quench Water Soak Time shall be at least 45 minutes per cycle.

79. Control of VOC, TRS, and H<sub>2</sub>S Emissions from the Whiting New Coker Quench Water System. Commencing upon the initial startup of the New Coker, for all components and pieces of equipment within the Quench Water System other than the Coke Pit, the Maze (coke fines settling basin), clean water sump and Quench Water Tank, BPP shall maintain a hard-piped system that has no emissions points to the atmosphere.

80. Quench Water Operating Practices.

a. Commencing upon the initial startup of the New Coker, BPP shall use only the following for the New Coker Quench Water Make-Up:

- i. Water that is fresh (*i.e.*, water brought into the Whiting Refinery that has not been in contact with process water or process wastewater);
- ii. Non-contact cooling water blowdown;
- iii. Water that has been stripped in a sour water stripper;
- iv. Water from other refinery sources where the water has a TOC concentration of less than 745 ppm and a total sulfide concentration of less than 35 ppm; or
- v. Some combination of water from i-iv.

b. Commencing upon the initial startup of the New Coker, BPP shall not feed or dispose of any materials with a TOC concentration of 745 ppm or greater into any New Coker Coke Drum during the quench cycle.

81. Control of Particulate Emissions from the Coke Pit. By no later than the date of initial startup of the New Coker, BPP shall construct a Coke Pit with walls on all four sides that are at least forty feet (40') above the floor of the Coke Pit.

**O. Emission Reductions from Flares and Control of Flaring Events**

82. BPP shall implement and comply with the requirements to control and minimize emissions from the flaring devices at the Whiting Refinery set forth in Appendix D to this Consent Decree.

**P. Incorporation of Consent Decree Requirements into Federally Enforceable Permits**

83. Permits. Where any compliance obligation under the Consent Decree requires BPP to obtain a federal, state, or local permit or approval, including any preconstruction, construction, or operating permits, BPP shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

a. By no later than the Date of Lodging, BPP shall submit all necessary applications and information to IDEM for a permit modification to the WRMP Operating Permit to incorporate the emission limits and standards contained in Part V of this Consent Decree that address EPA's October 16, 2009 Title V Order.

b. BPP shall thereafter timely submit all necessary applications and information to IDEM for a CAA Title I source modification permit for the Whiting Refinery. The application(s) shall seek to obtain all required, federally enforceable permits for the construction of the pollution control technology and/or the installation of equipment necessary to implement the requirements of this Consent Decree. The application(s) shall also seek to incorporate all emissions limits and standards required by the following requirements of this Consent Decree that will survive termination of the Consent Decree:

i. Paragraphs 11, 12.b.i-ii and 13 in Part V, Section A (*FCCU NO<sub>x</sub> limits*);

ii. Paragraphs 14, 15.b.i-ii and 16 in Part V, Section B (*FCCU SO<sub>2</sub> limits*);

iii. Paragraphs 17, 18, 19, 20 and 21 in Part V, Section C (*FCCU PM limits*);

iv. Paragraphs 23, 24, 25, 26 and 27 in Part V, Section D (*FCCU CO limits*);

- v. Paragraphs 28, 29 and 30 in Part V, Section E (*FCCU VOC limits*);
- vi. Paragraphs 31.b, 32, 33.a-b, 34, 35 and 36 in Part V, Section F (*NOx Heater and Boiler limits*);
- vii. Paragraphs 39.a and 40 in Part V, Section G (*SO<sub>2</sub> Heater and Boiler limits*);
- viii. Paragraph 41 in Part V, Section H (*Fuel Gas Sulfur limits*);
- ix. Paragraphs 65, 66 and 69 in Part V, Section L (*Sulfur Recovery Plant and Sulfur Pit*);
- x. Paragraphs 71, 72, 73 and 74 in Part V, Section M (*Requirements for Certain Tanks*);
- xi. Paragraphs 77, 78, 79, 80 and 81 in Part V, Section N (*Whiting Refinery New Coker*);
- xii. Paragraphs 6-13, 15-17, 25-32, 33.b, 34-37, 41-42, 44-46, 48.d-e, 51, 67.c-d, and 69-70 of Appendix D (*Flares and Control of Flaring Events*); and
- xiii. All of Part VI (*Emission Credit Generation*).

c. The Parties agree that the incorporation of emission limits and standards into the Title V operating permit for the Whiting Refinery as required by Paragraphs 83.a and 83.b shall be in accordance with the applicable rules for Indiana's consolidated Title V construction and operating permit program.

d. BPP may seek relief under the provisions of Part IX of this Consent Decree ("Force Majeure") for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if BPP has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

## **VI. EMISSION CREDIT GENERATION**

Summary: This Part addresses the use of certain emissions required by the 2001 Consent Decree and all emissions reductions required by this Consent Decree for the purpose of

emissions netting or emissions offsets in any permitting action at the Whiting Refinery initiated after the Date of Entry.

84. Prohibitions on Emission Credits.

a. General Prohibition. BPP shall not generate or use any NO<sub>x</sub>, SO<sub>2</sub>, H<sub>2</sub>S, TRS, reduced sulfur compounds, PM, PM<sub>2.5</sub>, PM<sub>10</sub>, PM<sub>TOTAL</sub>, VOC, or CO emissions reductions (“CD Emission Reductions”), or apply for and obtain any emission reduction credits, that result from any projects conducted or controls utilized pursuant to this Consent Decree as netting reductions or emissions offsets in any PSD, major non-attainment, and/or minor New Source Review permit or permit proceeding.

b. Specific Prohibition on Reductions under 2001 Consent Decree. BPP shall not generate or use any NO<sub>x</sub> emission reductions, or apply for and obtain any NO<sub>x</sub> emission reduction credits, that are achieved as a result of the following projects required by the 2001 Consent Decree as netting reductions or emissions offsets in any PSD, major nonattainment, and/or minor New Source Review permit or permit proceeding:

3 Stanolind Power Station Boilers 31, 32, 33, 34 and 36	Installation of SCRs	Completed December 31, 2010
1 Stanolind Power Station Boilers 13, 14, 16 and 17	Shutdown	Completed April 1, 2010

85. Exception to Prohibitions on Emission Credits. Notwithstanding the prohibitions set forth in Paragraph 84, BPP may use 8 tons per year (tpy) of VOC, 26 tpy of NO<sub>x</sub>, 6 tpy of PM<sub>10</sub>, and 18 tpy of CO from emissions reductions required by this Consent Decree or the 2001 Consent Decree 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 at the Whiting Refinery; provided that the new, modified or affected emissions units for which credits are being used: (1) is being constructed, modified or affected for purposes of compliance with Tier III Vehicle Emission and Fuel Standards; and (2) has a federally enforceable, non-Title V Permit (*i.e.*, a permit issued pursuant to the State of Indiana’s consolidated Title V construction and operating permit

program) that reflects the following requirements that are applicable to the pollutants for which credits are being used:

- a. For heaters and boilers, a limit of 0.027 lbs. NO<sub>x</sub> per million BTU on a 3-hour rolling average basis;
- b. For heaters and boilers, a limit of 0.10 grains of H<sub>2</sub>S per dry standard cubic foot of fuel gas or 20 ppmvd SO<sub>2</sub> corrected to 0% O<sub>2</sub> both on a 3-hour rolling average basis;
- c. For heaters and boilers, no liquid or solid fuel firing authorization;
- d. For FCCUs, a limit of 20 ppmvd NO<sub>x</sub> corrected to 0% O<sub>2</sub> on a 365-day rolling average basis;
- e. For FCCUs, a limit of 25 ppmvd SO<sub>2</sub> corrected to 0% O<sub>2</sub> on a 365-day rolling average basis;
- f. For FCCUs, a limit of 0.5 pounds of PM per 1,000 pounds of coke burned on a 3-hour average basis; and
- g. For SRPs, a limit of 100 ppmvd SO<sub>2</sub> at 0% O<sub>2</sub> on a 24-hour rolling average basis.

86. Conditions Precedent to Utilizing Exception to General Prohibition.  
Utilization of the exception set forth in Paragraph 85 to the general prohibition against the generation or utilization of CD Emissions Reductions set forth in Paragraph 84 is subject to the following conditions:

- a. Under no circumstances shall BPP use CD Emissions Reductions for netting and/or offsets prior to the time that actual CD Emissions Reductions have occurred;
- b. CD Emissions Reductions may be used only at the Whiting Refinery;
- c. The CD Emissions Reductions provisions of this Consent Decree are for purposes of this Consent Decree only and neither BPP nor any other entity may use CD Emissions Reductions for any purpose, including in any subsequent permitting or enforcement proceeding, except as provided herein; and



d. BPP still shall be subject to all federal, state and local regulations applicable to the PSD, major non-attainment and/or minor NSR permitting process.

87. Outside the Scope of the General Prohibition. Nothing in this Part is intended to prohibit BPP from seeking to, or IDEM from denying BPP's request to:

a. Utilize or generate emissions credits from refinery units that are covered by this Consent Decree to the extent that the proposed credits or reductions represent the difference between the emissions limitations set forth in or required by this Consent Decree for these refinery units and the more stringent emissions limitations that BPP may elect to accept for these refinery units in a permitting process; or

b. Utilize or generate emissions credits or reductions on refinery units that are not subject to an emission limitation pursuant to this Consent Decree; or

c. Utilize emissions reductions pursuant to this Consent Decree for the Whiting Refinery's compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and Non-Attainment New Source Review Rules, but including, for example, RACT rules) that apply to the Whiting Refinery. Notwithstanding the preceding sentence, BPP will not trade or sell any emissions reductions that result from any projects conducted or controls utilized pursuant to this Consent Decree.

## **VII. SUPPLEMENTAL ENVIRONMENTAL PROJECT AND ADDITIONAL INJUNCTIVE RELIEF**

### **A. Supplemental Environmental Project**

88. BPP shall implement as a Supplemental Environmental Project ("SEP") a project to install monitors at the fenceline or perimeter of the Whiting Refinery to monitor certain emissions and make the data publicly available ("Fenceline Monitoring SEP"), as provided in Appendix E of this Consent Decree. BPP shall spend not less than \$2 million to implement the Fenceline Monitoring SEP, the installation and

commencement of operation of which shall be completed by no later than 18 months after the Date of Entry.

89. BPP is responsible for the satisfactory completion of the Fenceline Monitoring SEP as provided in this Consent Decree. BPP may use contractors or consultants in planning and implementing the SEP.

a. If BPP does not expend the entire amount specified in Paragraph 88, BPP shall pay a stipulated penalty equal to the difference between the amount expended as demonstrated in the certified cost report and the amount specified in Paragraph 88. The stipulated penalty shall be paid as provided in Part X (“Stipulated Penalties”) of this Consent Decree.

b. As an alternative to payment of such stipulated penalty, BPP may request approval from EPA to use unexpended SEP funds for an alternative SEP.

90. With regard to the Fenceline Monitoring SEP, BPP certifies the truth and accuracy of each of the following:

a. that all cost information provided to EPA in connection with the Fenceline Monitoring SEP is complete and accurate;

b. that, as of the date of executing this Consent Decree, BPP is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;

c. that the SEP is not a project that BPP was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Consent Decree;

d. that BPP has not received and will not receive credit for the SEP in any other enforcement action;

e. that BPP will not receive any reimbursement for any portion of the SEP from any other person;

f. that BPP is not a party to any Open Federal Financial Assistance Transaction that is or could be used to fund the same activity as the SEP described in Appendix E; and

g. that based upon a reasonable inquiry:

i. the activity covered by this SEP has not been described in an unsuccessful Federal Financial Assistance Transaction proposal submitted by BPP to EPA within two years of the date of executing this Consent Decree (unless the project was barred from funding as statutorily ineligible); and

ii. BPP is not aware of any open Federal Financial Assistance Transaction that is funding or could fund the same activity as the SEP described in Appendix E.

91. BPP shall include in each report required by Paragraph 98.c of Part VIII (“Reporting and Recordkeeping”) a description of its progress toward implementing the SEP required by this Section. In addition, the report required by Paragraph 98.c. for the period in which the SEP is completed shall contain the following information with respect to the SEP (“SEP Completion Report”):

- a. a detailed description of the SEP as implemented;
- b. a description of any problems encountered in completing the SEP and the solutions thereto;
- c. an itemized list of all eligible SEP costs expended;
- d. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and
- e. a description of the environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).

EPA may require information in addition to that described in this Paragraph, in order to evaluate BPP’s SEP Completion Report.

92. Disputes concerning the satisfactory performance of this SEP and the amount of eligible SEP costs may be resolved under Part XIV of this Decree (“Dispute Resolution”). No other disputes arising under this Section shall be subject to Dispute Resolution.

93. BPP agrees that it must clearly indicate that the Fenceline Monitoring SEP is being or has been undertaken as part of the settlement of an action to enforce the Clean Air Act and corollary state statutes in any public statements regarding the project.

94. For federal income tax purposes, BPP agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP.

**B. Additional Injunctive Relief**

95. Energy Efficiency and Greenhouse Gas (“GHG”) Improvements.

a. Study: BPP certifies that it has retained KBC Advanced Technologies, Inc. (“KBC”) to conduct an energy study for the Whiting Refinery consistent with the “KBC Whiting Energy Study Scope” description provided to Citizen-Intervenors on June 10, 2010. By no later than three (3) months after the Date of Entry of the Consent Decree, BPP shall provide Citizen-Intervenors a report on the results of that study. This report shall include:

- i. A facility-wide assessment of fuel, steam, power, and other utility consumption;
- ii. A comprehensive evaluation of potential opportunities to reduce fossil fuel usage, including solar-assisted boilers, flameless oxidation heater and boiler technology and other energy efficiency technologies and practices as may be identified by BPP or KBC;
- iii. An estimate of GHG emissions from all units identified in the KBC Whiting Energy Study Scope, including all associated heaters, boilers, and flares; and
- iv. A complete list of the potential GHG reduction projects identified by the KBC Whiting Energy Study Scope including:
  - (1) A tabulation of the estimated cost of each project;
  - (2) Potential savings in fuel, steam, power, and other utilities;
  - (3) Estimated GHG reductions of each project; and
  - (4) Estimated payback (if any).

b. Confidential Business Information (“CBI”). CBI may be redacted from the report. The following classes of information shall not be defined as CBI:

- i. The data and the calculation methodologies used to estimate GHG emissions and potential reductions;
- ii. The costs and payback period of potential GHG projects and the underlying assumptions used to determine costs and benefits;
- iii. The estimated savings in fuel, steam, power, or other utilities of potential GHG projects; and
- iv. The projects selected by BPP to satisfy its commitments under this Section.

c. Project Selection Report. By no later than six (6) months after the Date of Entry of the Consent Decree, BPP shall submit a report to Citizen-Intervenors identifying each of the GHG projects that BPP plans to undertake and the anticipated timeline for completion of each project. The projects BPP identifies shall have an estimated cost of at least \$9.5 million, and shall not include expenditures on audits, studies, or recommendations required under Paragraph 95.a. BPP will use good faith efforts to select projects that maximize the potential for GHG reductions, taking into account cost effectiveness, safety, operability and relevant permitting requirements.

d. Limitations. No improvements otherwise required by this Consent Decree, state, or federal regulation shall constitute a qualifying energy efficiency or GHG improvement for the purposes of this Paragraph.

e. Timeline. By no later than five (5) years after the Date of Entry of the Consent Decree, BPP shall:

- i. Spend no less than \$9.5 million to complete the GHG reduction projects identified in subparagraph b of this Paragraph; and
- ii. Provide Citizen-Intervenors with a report documenting:
  - (1) The GHG projects chosen;
  - (2) The cost of the projects chosen;
  - (3) Reductions in GHG emissions achieved by each project; and
  - (4) The savings in fuel, steam, power, or utilities related to the GHG reduction projects.

f. Permits. BPP shall comply with all applicable Federal, state, and local permitting requirements for such projects.

96. BPP shall provide copies of any reports or other submissions required by Paragraph 95 to EPA.

### **VIII. REPORTING AND RECORDKEEPING**

97. BPP shall retain all records required to be maintained in accordance with this Consent Decree for a period of five (5) years or until Termination, whichever is longer, unless applicable regulations require the records to be maintained longer.

98. On or before February 15 and August 15 each year, BPP shall submit to EPA and IDEM a semi-annual report as provided in this Part. Each semi-annual report shall contain the following information for the previous six month period (*i.e.*, January to June to be addressed in the report to be submitted by August 15, and July to December to be addressed in the report submitted by February 15):

a. For the period covered by the report, a summary of the emissions data for the Whiting Refinery that is specifically required by the reporting requirements of the Consent Decree for the period covered by the report;

b. A description of any problems that have occurred or are anticipated with respect to meeting the requirements of this Consent Decree at the Whiting Refinery;

c. A description of the Supplemental Environmental Project and implementation activity in accordance with this Consent Decree;

d. The information specified in Paragraph 72 of Appendix D (“Monitoring Instrument/Equipment Downtime; Override of ACS; and Emissions Exceedances”);

e. Any additional matters as BPP believes should be brought to the attention of EPA and IDEM; and

f. Any additional items required by any other Paragraph of this Consent Decree to be submitted with a semi-annual report.

99. Emissions Data. In the semi-annual report required by this Part VIII of the Consent Decree to be submitted by August 15 of each calendar year, BPP shall

provide a summary of annual emissions data for the Whiting Refinery for the prior calendar year, to include:

- a. NO<sub>x</sub> emissions in tons per year for each heater and boiler greater than 40 mmBTU/hr maximum fired duty;
- b. NO<sub>x</sub> emissions in tons per year as a sum for all heaters and boilers less than 40 mmBTU/hr maximum fired duty;
- c. SO<sub>2</sub>, CO and PM emissions in tons per year as a sum for all heaters and boilers;
- d. SO<sub>2</sub> emissions from the Sulfur Recovery Plant in tons per year;
- e. SO<sub>2</sub> emissions from all Acid Gas Flaring and Tail Gas Incidents by flare in tons per year;
- f. NO<sub>x</sub>, SO<sub>2</sub>, PM and CO emissions in tons per year as a sum for all other emissions units for which emissions information is required to be included in the facilities' annual emissions summaries and that are not identified above; and
- g. NO<sub>x</sub>, SO<sub>2</sub>, CO and PM emissions in tons per year for each FCCU; and
- h. Emissions from Covered Flares and the LPG Flare as specified in Paragraph 73 of Appendix D.
- i. For each of the estimates or calculations in Subparagraphs 99.a through 99.h above, the basis for the emissions estimate or calculation (*i.e.*, stack tests, CEMS, emission factor, etc.).

To the extent that the required emissions summary data are available in other reports generated by BPP, such other reports can be attached or the appropriate information can be extracted from such other reports and attached to the report to satisfy the requirement.

100. Exceedances of Emission Limits and CEMS Downtime: In each semi-annual report required by Part VIII of the Consent Decree, BPP will provide a summary of all exceedances of emission limits required or established by this Consent Decree, which will include the following:

- a. For operating unit emissions limits that are required by this Consent Decree and monitored with CEMS, for each CEMS:

i. Total period when the emissions limit was exceeded, if applicable, expressed as a percentage of operating time for each calendar quarter;

ii. Where the operating unit has exceeded the emissions limit more than 1% of the total time of the calendar quarter, identification of each averaging period that exceeded the limit by time and date, the actual emissions of that averaging period (in the units of the limit), and any identified cause for the exceedance (including Startup, Shutdown, maintenance or Malfunction), and, if it was a malfunction, an explanation and any corrective actions taken;

iii. Total downtime of the CEMS, if applicable, expressed as a percentage of operating time for the calendar quarter;

iv. Where the CEMS downtime is greater than 5% of the total time in a calendar quarter for a unit, identify the periods of downtime by time and date, any cause of the downtime (including maintenance or malfunction), and, if it was a malfunction, an explanation and any corrective action taken.

v. If a report filed pursuant to another applicable legal requirement contains all of the information required by Paragraph 100.a.i-iv above in similar or the same format, the requirements of Paragraph 100.a.i-iv above may be satisfied by attaching a copy of such report.

b. For any exceedance of an emissions limit required by this Consent Decree from an operating unit monitored through stack testing:

i. A summary of the results of the stack test in which the exceedance occurred; and

ii. A copy of the full stack test report in which the exceedance occurred.

iii. To the extent that a refinery has already submitted the stack test results to the EPA and IDEM, BPP need not resubmit them, but may instead reference the submission in the report (*e.g.*, date, addressee, reason for submission).



101. FCCU Reporting and Recordkeeping Requirements.

a. BPP shall include in each semi-annual report required by this Part VIII the results of all testing of FCU 500 and FCU 600 required by Paragraph 21 (“FCCU Performance Testing”). The performance test reports shall include all relevant testing data and information, including, but not limited to the following: PM, PM<sub>10</sub>, PM<sub>TOTAL</sub>, SO<sub>2</sub> concentration, NO<sub>x</sub> concentration, catalyst additive rates, ammonia addition prior to ESP, ammonia addition at the SCR, ammonia slip, the average total power and secondary current to the entire ESP system, the coke burn-off rate, regenerator overhead temperature, and the FCCU feed rate.

b. BPP shall include in each semi-annual report copies of all applicable reports required by 40 C.F.R. § 60.108a for the previous 6-month period.

c. Concurrent with submission to EPA, BPP shall submit copies to Citizen-Intervenors of all reports of emissions testing required by this Paragraph. BPP may redact from the reports submitted to Citizen-Intervenors any information meeting the requirements for Confidential Business Information (“CBI”) pursuant to 40 C.F.R. Part 2, Subpart B, except that the data (including the operating parameters identified in Paragraph 21.a) and the calculation methodologies used to estimate emissions shall not be redacted as CBI.

102. Each report will be certified for BPP by an officer of BPP responsible for overseeing implementation of this Consent Decree, as follows:

“I certify under penalty of law that this information was prepared under my direction or supervision by personnel qualified to properly gather and evaluate the information submitted. Based on my directions and after reasonable inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.”

**IX. CIVIL PENALTY**

103. Within 30 Days after the Date of Entry of this Consent Decree, BPP shall pay the sum of \$7,200,000 as a civil penalty to the United States and the sum of \$800,000 as a civil penalty to the State of Indiana in accordance with the following:

a. Payment to the United States. BPP shall pay the civil penalty due by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice in accordance with written instructions to be provided to Defendant, following entry of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the Northern District of Indiana, 5400 Federal Plaza, Suite 1500, Hammond, In. 46320. At the time of payment, BPP shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States, et al. v. BP Products North America Inc.*, and shall reference the civil action number and DOJ case number 90-5-2-1-09244, to the United States in accordance with Part XIV of this Decree (“Notices”); by email to \_\_\_\_\_; and by mail to:

EPA Cincinnati Finance Office  
26 Martin Luther King Drive  
Cincinnati, Ohio 45268

b. Payment to the State of Indiana. Payment to Indiana shall be made by certified check or checks or cashier’s checks made payable to ““Environmental Management Special Fund” referencing the name and address of the party making payment, and the civil action number. BPP shall send the check(s) to:

Indiana Department of Environmental Management  
Cashier - MC 50-10C  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

104. The civil penalty set forth herein, as well as any stipulated penalty incurred pursuant to Part X (“Stipulated Penalties”), is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and, therefore, BPP will not treat such penalty payment as tax deductible for purposes of federal or state law.

105. Upon the Date of Entry, this Consent Decree will constitute an enforceable judgment for purposes of post-judgment collection in accordance with Rule 69 of the Federal Rules of Civil Procedure, the Federal Debt Collection Procedures Act, 28 U.S.C. § 3001, *et seq.*, and other applicable federal authority. The United States will

be deemed a judgment creditor for purposes of collecting any unpaid amounts of the penalty and interest pursuant to this Part, or any stipulated penalty owed pursuant to Part X (“Stipulated Penalties”).

## **X. STIPULATED PENALTIES**

106. Stipulated penalties shall be paid to the United States and to Indiana as provided herein for each failure by BPP to comply with the terms of this Consent Decree. In no event shall any stipulated penalty assessed exceed \$37,500 per day for any individual violation of this Consent Decree. Stipulated penalties shall be calculated in the amounts specified in this Part X. For those provisions where a stipulated penalty of either a fixed amount or 1.2 times the economic benefit of delayed compliance is available, the decision of which alternative to seek shall rest exclusively within the discretion of the United States.

### **A. Requirements for NO<sub>x</sub> Emissions Reductions from FCCUs**

107. For failure to meet any emissions limit for NO<sub>x</sub> set forth in Paragraph 12, per day, per unit: \$2500 for each calendar day on which the specified 7-day or 365-day rolling average exceeds the applicable limit.

108. For failure to install, certify, calibrate, maintain, and/or operate a NO<sub>x</sub> CEMS as required by Paragraph 13, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

### **B. Requirements for SO<sub>2</sub> Emissions Reductions from FCCUs.**

109. For each failure to meet any SO<sub>2</sub> emission limit set forth in Paragraph 15, per unit, per day: \$3000 for each calendar day on which the specified 7-day or 365-day average exceeds the applicable limit.

110. For failure to install, certify, calibrate, maintain, and/or operate a SO<sub>2</sub> CEMS as required by Paragraph 16, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

C. Requirements for Particulate Matter Emissions Reductions from FCCUs

111. For failure to conduct PM testing, as required by Paragraphs 17 and 21, per day, per test, per FCCU:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500
Beyond 60 <sup>th</sup> day after deadline	\$1000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

112. For each failure to meet any applicable PM emission limit for FCCUs as set forth in Paragraph 18, per day, per unit: \$750 for each calendar day on which the emission limit is exceeded.

113. For each failure to monitor and/or record any supplemental monitoring as set forth in Paragraph 19: \$250 per day.

D. Requirements for CO Emissions Reductions from FCCUs

114. For each failure to meet the applicable CO emission limits for FCCUs as set forth in Paragraphs 24-25: \$2500 for each calendar day on which the specified 1-hour rolling average exceeds the applicable limit.

115. For failure to install, certify, calibrate, maintain, and/or operate a CO CEMS as required by Paragraph 27, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

E. Requirements for VOC Emissions Reductions from FCCUs

116. For each failure to meet the applicable VOC emission limits for FCCUs as set forth in Paragraphs 28-29: \$750 for each calendar day on which the applicable limit is exceeded.

117. For failure to conduct VOC stack testing, as required by Paragraph 30, per day, per test, per FCCU:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500
Beyond 60 <sup>th</sup> day after deadline	\$1000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

F. Requirements for NOx Emissions Reductions from Heaters and Boilers

118. For failure to install required control technologies by the dates specified in Paragraph 31.b and 34.a:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2000
Beyond 60 <sup>th</sup> day after deadline	\$3000

119. For failure to install, certify, calibrate, maintain, and/or operate a NO<sub>x</sub> CEMS as required by Paragraphs 32, 35.b and 36, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

120. For failure to comply with an applicable emission limit at a heater or boiler listed in Paragraphs 31.b and 34.a, or failure to comply with the NSPS Subparts A and Ja emission limits at a heater or boiler as specified in Paragraph 33, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

121. For failure to conduct NO<sub>x</sub> testing, as required by Paragraph 35.a, per day, per test, per unit:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500
Beyond 60 <sup>th</sup> day after deadline	\$1000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

G. Requirements for SO<sub>2</sub> Emissions Reductions from Heaters and Boilers

122. For failure to comply with an applicable emission limit or monitoring requirement of NSPS Subparts A and Ja at a heater or boiler as specified in Paragraph 39, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

123. For burning Fuel Oil in a manner inconsistent with the requirements of Paragraph 40, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1750
Beyond 30 <sup>th</sup> day after deadline	\$5000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

H. Requirements for Fuel Gas Sulfur Content

124. For failure to install, certify, calibrate, maintain, and/or operate a Total Sulfur Continuous Analyzer as required by Paragraph 41, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

125. For failure to comply with total sulfur emission limit as specified in Paragraph 41, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

I. Requirements for CEM Downtime Minimization, O&M and Corrective Action

126. For failure to develop and/or submit the CEMS O&M Plan required by Paragraph 43, and for failure to include CEMS Testing and Calibration requirements in the CEMS O&M Plan as required by Paragraph 45:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500
Beyond 60 <sup>th</sup> day after deadline	\$1000

127. For failure to develop or implement the CEMS O&M training programs specified in Paragraph 44: \$10,000.

128. For failure to develop or implement a Preventive Maintenance and Repair, and QA/QC program as specified in Paragraph 46:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1500
Beyond 60 <sup>th</sup> day after deadline	\$2000

129. For failure to conduct a CEMS Root Cause Failure Analysis required by Paragraph 48: \$5,000 per month, per analysis.



130. For failure to implement any actions necessary to correct non-compliance as required by Paragraph 49:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1250
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$3000
Beyond 60 <sup>th</sup> day after deadline	\$5000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

J. Requirements for Benzene Waste NESHP

131. For failure to comply with the 6 BQ Option required by Paragraph 50.a and 50.b: \$30,000 for each 0.6 Mg (10%) increment by which the 6 BQ Option uncontrolled benzene limit is exceeded, up to \$1.5 million per year that the limit is exceeded.

132. For failure to comply with the Organic Benzene Waste control requirements of Paragraph 50.c: \$12,500 per month per uncontrolled waste management unit.

133. For failure to install and/or operate carbon canisters as required by Paragraph 52: \$1,000 per day, per carbon canister.

134. For failure to establish an annual review program to identify new benzene waste streams as required by Paragraph 53: \$2,500 per month.

135. For failure to perform laboratory audits as required by Paragraph 54: \$5,000 per month, per audit.

136. For failure to implement the training requirements as set forth in Paragraph 56: \$10,000 per quarter.

137. For failure to maintain or submit any plan, report or other deliverable required by Paragraphs 57, 58, 61 or 62: \$5,000 per month.

138. For failure to conduct monthly visual inspections of all water traps as required by Paragraph 60.a, and for failure to inspect each drain system as required by Paragraph 60.c: \$500 per drain or drain system not inspected.

139. For failure to identify/mark segregated storm water drains as required in Paragraph 60.b: \$1,000 per week, per drain.

140. For failure to monitor conservation vents as required by Paragraph 60.d: \$500 per vent not monitored.

141. If it is determined through federal, state, or local investigation that BPP has failed to include all benzene waste streams in its TAB calculation submitted pursuant to Section J., BPP shall pay the following, per waste stream:

<u>Waste Stream</u>	<u>Penalty</u>
For waste streams < 0.03 Mg/yr	\$250
For waste streams between 0.03 and 0.1 Mg/yr	\$1000
For waste streams between 0.1 and 0.5 Mg/yr	\$5000
For waste streams > 0.5 Mg/yr	\$10,000

142. For failure to complete construction of a new DAF unit by the date specified in Paragraph 60.g, or to route emissions from the DAF unit and API Separator as required by Paragraph 60.g:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1250
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$3000
Beyond 60 <sup>th</sup> day after deadline	\$5000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

143. For failure to perform any requirement of a Root Cause Failure Analysis or Corrective Action required by Paragraph 62.a.iii: \$2,500 per week, per requirement.

K. Requirements for Leak Detection and Repair Program Enhancements

144. The following stipulated penalties shall accrue per violation per day unless otherwise specified below, for each violation of a requirement of the ELP as set

forth in Part V, Section K of this Consent Decree (“Leak Detection and Repair”) and Appendix B (“Enhanced LDAR Program”) as specified below:

a. Failure to timely develop and complete a written facility-wide LDAR Program Plan, or to timely update the LDAR Program Plan, as required by Paragraph 3:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day after deadline	\$300
16 <sup>th</sup> through 30 <sup>th</sup> day after deadline	\$400
Beyond 30 <sup>th</sup> day after deadline	\$500

b. Failure to timely perform monitoring at the frequencies set forth in Paragraph 4 or 5: \$100 per component per day, but no more than \$25,000 per month.

c. Failure to comply with Method 21 (or the AWP, as applicable) in performing LDAR monitoring, as indicated by the leak percentage ratio calculated under Paragraph 29.c. of the ELP (Appendix B), but only if the auditor identifies a leak rate of at least 0.5% per component type in the process unit:

<u>Comparative Monitoring Leak Ratio As Determined Under ¶29.c. of the ELP</u>	<u>Penalty per Process Unit</u>
3.0 or greater but less than 4.0	\$15,000
4.0 or greater but less than 5.0	\$30,000
5.0 or greater but less than 6.0	\$45,000
6.0 or greater	\$60,000

d. Failure to use a monitoring device that is attached to a data logger; failure, during each monitoring event, to directly electronically record the Screening Value, date, time, identification number of the monitoring equipment, or the identification of the technician, as required by Paragraph 6: \$100 per failure per piece of Covered Equipment, but not greater than \$5,000 per unit per month.

e. Failure to transfer monitoring data to an electronic database on at least a weekly basis, as required by Paragraph 6: \$150 per day for each day that the transfer is late.

f. Failure to timely perform a first attempt at repair, as required by Paragraph 11 or 12. For purposes of this subparagraph, the term “repair” includes the required repair verification monitoring in Paragraph 13 after the first repair attempt (in which case the stipulated penalties of Paragraph 144.h do not apply): \$150 per day for each day after deadline, not to exceed \$1500 per leak.

g. Failure to timely perform a final attempt at repair, as required by Paragraph 12. For purposes of this subparagraph, the term “repair” includes the required repair verification monitoring in Paragraph 13 after the first repair attempt (in which case the stipulated penalties of Paragraph 144.h do not apply):

<u>Equipment Type</u>	<u>Penalty per Day, Per Component</u>	<u>Not to Exceed</u>
Valves, connectors	\$300	\$37,500
Pumps, agitators	\$1200	\$150,000

h. Failure to timely perform Repair Verification Monitoring, as required by Paragraph 13, where the first attempt to repair was made to within 5 days and the final attempt to repair was made within 15 days:

<u>Equipment Type</u>	<u>Penalty per Day, Per Component</u>	<u>Not to Exceed</u>
Valves, connectors	\$150	\$18,750
Pumps, agitators	\$600	\$75,000

i. Failure to undertake drill-and-tap repairs, as required by Paragraph 14:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day after deadline	\$200
16 <sup>th</sup> through 30 <sup>th</sup> day after deadline	\$350
Beyond 30 <sup>th</sup> day after deadline	\$500, not to exceed \$37,500

j. Failure to record the information required by Paragraph 15: \$100 per component, per item of missed information.

k. Improperly placing a piece of Covered Equipment on the DOR list (*i.e.*, placing a piece of Covered Equipment on the DOR list even though it is feasible to repair without a process unit shutdown), as required by Paragraph 17:

<u>Equipment Type</u>	<u>Penalty per Day, Per Component</u>	<u>Not to Exceed</u>
Valves, connectors	\$300	\$75,000
Pumps, agitators	\$1200	\$300,000

l. Failure of the relevant manager or official to sign-off on placing a piece of Covered Equipment on the DOR list, as required by Paragraph 17.a: \$250 per piece of Covered Equipment.

m. Failure to comply with the 0.10% limit on valves that may be placed on the DOR list, as required by Paragraph 17.c: \$5,000 per valve.

n. Failure to install a Certified Low-Leaking Valve or to fit a valve with Certified Low-Leaking Valve Packing, as required by Paragraph 19: \$1000 per valve required by Paragraph 19.c and \$5,000 per valve required by Paragraph 19.d.

o. Failure to add a piece of Covered Equipment to the LDAR program, as required by Paragraph 23: \$300 per piece of Covered Equipment (plus an amount, if any, due under Paragraph 144.b for any missed monitoring for a component that should have been added to the LDAR program).

p. Failure to remove a piece of Covered Equipment from the LDAR program, as required by Paragraph 23: \$150 per piece of Covered Equipment.

q. Failure to timely develop a training protocol, as required by Paragraph 24: \$50 per day of noncompliance.

r. Failure to perform initial, refresher, or new personnel training, as required by Paragraph 24: \$1000 per person, per month of noncompliance.

s. Failure of a monitoring technician to complete the certification required by Paragraph 25: \$100 per failure, per technician.

t. Failure to perform any of the requirements of Paragraph 26: \$1000 per missed requirement, per year.

u. Failure to conduct an LDAR audit in accordance with the schedule set forth in Paragraph 28:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day after deadline	\$300
16 <sup>th</sup> through 30 <sup>th</sup> day after deadline	\$400
Beyond 30 <sup>th</sup> day after deadline	\$500, not to exceed \$100,000 per audit

v. Failure to use a third-party auditor, or to use a third-party auditor that is not experienced in LDAR audits, as required by Paragraph 28: \$25,000 per audit.

w. Failure to comply with the requirements in Paragraph 29 except for Paragraphs 29.a-c: \$10,000 per missed requirement, not to exceed \$100,000 per audit.

x. Failure to comply with the requirements of Paragraphs 29.a-c: \$50,000 per audit.

y. Failure to timely develop and/or submit a Corrective Action Plan, as required by Paragraph 31:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day after deadline	\$100
16 <sup>th</sup> through 30 <sup>th</sup> day after deadline	\$250
Beyond 30 <sup>th</sup> day after deadline	\$500, not to exceed \$100,000 per audit

z. Failure to implement corrective action within 90 days after the LDAR Audit Completion Date, or pursuant to the approved schedule, as required by Paragraph 31:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day after deadline	\$500
16 <sup>th</sup> through 30 <sup>th</sup> day after deadline	\$750
Beyond 30 <sup>th</sup> day after deadline	\$1000, not to exceed \$200,000 per audit

aa. Failure to timely submit a Certification of Compliance, as required by Paragraph 32:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day after deadline	\$100
16 <sup>th</sup> through 30 <sup>th</sup> day after deadline	\$250
Beyond 30 <sup>th</sup> day after deadline	\$500, not to exceed \$100,000 per audit

bb. Failure to secure and retain documentation required pursuant to Paragraph 21: \$1000 per valve or packing type.

L. Requirements for Sulfur Recovery Plant and Sulfur Pits

145. For failure to comply with the NSPS Subparts A and Ja emission limits for SRPs (as required by Paragraph 65) or sulfur pits (as required by Paragraph 69.a), or with the SRP emission limit (as required by Paragraph 66), or to control emissions from drums and tanks (as required by Paragraph 69.b), per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2000
Beyond 60 <sup>th</sup> day after deadline	\$3000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

146. For failure to operate and maintain control and monitoring equipment as required by Paragraph 69.a, per unit, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2000
Beyond 60 <sup>th</sup> day after deadline	\$3000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

147. For failure to route all sulfur pit emissions in accordance with the requirements of Paragraph 69.c.i:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$2000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$3500
Beyond 60 <sup>th</sup> day after deadline	\$5000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

M. Requirements for Certain Tanks

148. a. For failure to install or operate the control equipment in accordance with the requirements of Paragraphs 70 through 74, or to timely repair leaks identified through the Optical Gas Imaging Camera Monitoring as required by Paragraph 75, per day, per unit:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1500
Beyond 60 <sup>th</sup> day after deadline	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

b. For failure to conduct sampling or monitoring as required by Paragraphs 70 through 75:

Daily sampling or monitoring:	\$500 per missed sampling or monitoring event
Monthly and Annual monitoring or sampling:	\$1000 per missed sampling or monitoring event, plus \$500 for each additional day after deadline up until the next required monitoring event

c. For failure to keep records as required by Paragraphs 70 through 75: \$500 per missing daily sampling or monitoring record; \$1000 per missing monthly or annual sampling or monitoring record.



d. For failure to meet emission limits set forth in Paragraphs 73 and 74: \$5000 per month of violation.

N. Requirements for VOC, PM, TRS, and H<sub>2</sub>S Emissions Reductions from the Whiting Refinery New Coker

149. For failure to comply with the depressurization level for the coker (as specified by Paragraph 77), the coke drum parameters (as specified by Paragraph 78), the Quench Water System or Operating Practices (as specified by Paragraphs 79 and 80), or the coke pit requirements (as specified by Paragraph 81), per requirement, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2000
Beyond 60 <sup>th</sup> day after deadline	\$3000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

O. Requirements for Flaring Devices

150. The following stipulated penalties shall apply to violations of requirements set forth in Appendix D “(Emission Reductions From Flares and Flaring Devices”) as specified below:

a. Violation of Paragraph 1.a or 1.b. Failure to timely install a system that complies with the requirements of Paragraph 1.a or failure to timely complete operator and supervisor training that conforms to the requirements of Paragraph 1.b:

<u>Period of Delay or Non-Compliance (per Flare, for Paragraph 1.a)</u>	<u>Penalty per Day</u>
Days 1-30	\$500
Days 31-60	\$1500
Days 61 and later	\$2500

b. Violation of Paragraph 1.c. For the time period between 90 days after Date of Entry and the compliance date in Paragraph 34.a, failure to minimize

the S/VG ratio to the extent practical with the existing monitoring and instrumentation: Penalty per Flare per day or fraction thereof: \$1500.

c. Violation of Paragraph 2 or 3. Failure to timely upgrade or replace, as necessary, Sweep and Purge Gas flow meters that conform to the requirements of Paragraph 2 or failure to timely implement the measures necessary to minimize Sweep and Purge Gas flow:

<u>Period of Delay or Non-Compliance (per meter, for Paragraph 2)</u>	<u>Penalty per Day</u>
Days 1-30	\$250
Days 31-60	\$500
Days 61 and later	\$1250

d. Violation of Survey Requirements of Paragraph 4. Failure to timely complete the Initial PRV Leak Survey required in Paragraph 4:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
Days 1-30	\$250
Days 31-60	\$500
Days 61 and later	\$1250

e. Violation of Repair Requirements of Paragraph 4. Failure to timely repair each leaking PRV:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
Days 1-30	\$500
Days 31-60	\$700
Days 61 and later	\$1000

f. (i) Violation of Paragraph 5. Failure to timely submit a report as required by Paragraph 5:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
Days 1-30	\$300
Days 31-60	\$400
Days 61 and later	\$500

(ii) Violation of Paragraph 5. Failure to submit a report that conforms to the requirements of Paragraph 5: \$50,000 per report.

g. (i) Violation of Paragraphs 18, 19, or 20. Failure to timely submit a plan as required by those Paragraphs:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
Days 1-30	\$500
Days 31-60	\$750
Days 61 and later	\$1000

(ii) Violation of Paragraphs 18, 19, or 20. Failure to submit a plan that conforms to the requirements of those Paragraphs: Paragraph 18: \$100,000 per plan; Paragraphs 19 and 20: \$50,000 per plan.

h. Violation of Paragraph 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, or 42.

Failure to timely install the equipment and monitoring systems required by Paragraphs 7-13 and 42 in accordance with the respective, applicable technical specifications in those Paragraphs, Paragraph 16, and Appendix FLR-11 (except for the requirements of Appendix FLR-11 found in Subparagraphs I.g, III.e, IV, V.B, and VI.a; those are QA/QC requirements covered in Subparagraph 150.i below):

<u>Period of Delay or Non-Compliance, per monitoring system</u>	<u>Penalty per Day per monitoring system</u>
Days 1-30	\$750
Days 31-60	\$1250
Days 61 and later	\$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

i. Violation of the QA/QC requirements in Appendix FLR-11.

Failure to comply with the QA/QC requirements in Appendix FLR-11 at Paragraphs I.g, III.e, IV, V.B, or VI.a:

<u>Violation of a:</u>	<u>Penalty</u>
Daily requirement	\$100
Quarterly requirement	\$200 per day late
Annual requirement	\$500 per day late

j. Violation of Paragraph 17. Except for 110 hours per calendar quarter, failure to operate the monitoring instrument in Paragraphs 7-9, 11-13, 42.a. or 42.b:

<u>Per monitoring instrument, Number of Hours per Calendar Quarter of Downtime over 110</u>	<u>Penalty per Hour per monitoring instrument</u>
0.25-50.0	\$250
50.25-100.0	\$500
Over 100.0	\$1000

k. Violation of Paragraph 23, 24, or 25.a. Failure to timely install, in accordance with Paragraph 23, a Flare Gas Recovery System that conforms to the requirements of Paragraph 24, or failure to timely equip, in accordance with Paragraph 25.a, automatic startup capability on each FGRS:

<u>Period of Delay or noncompliance, per FGRS</u>	<u>Penalty per Day per FGRS</u>
Days 1-30	\$1250
Days 31-60	\$3000
Days 61 and later	\$5000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

l. Violation of Paragraph 25.b. Failure to have the required number of compressors at each FGRS available for operation at least 95% of the time in a rolling 8760-hour rolling average period:

Per FGRS, the number of hours or fraction thereof – over 438 – in a rolling 8760-hour period that a compressor required to be available for operation is not: \$750

m. Violation of Paragraph 25.c. Failure to comply with the requirements of Paragraphs 25.c.i or 25.c.ii: Per FGRS, per hour or fraction thereof of noncompliance: \$750

n. Violation of Subparagraph 26.a (or any subsequent 30-day limit set pursuant to Paragraph 27.a.i). Failure to comply with the refinery-wide, 30-day rolling average limit on waste gas flaring

<u>Magnitude of Exceedance</u>	<u>Penalty per Day</u>
≤ 10%	\$6250
>10% to ≤ 20%	\$12,500
>20%	\$18,750

o. Violation of Subparagraph 26.b (or any subsequent 365-day limit set pursuant to Paragraph 27.a.ii). Failure to comply with the refinery-wide 365-day rolling average limit on waste gas flaring:

<u>Magnitude of Exceedance</u>	<u>Penalty per Day</u>
≤ 10%	\$12,500
>10% to ≤ 20%	\$18,750
>20%	\$37,500

p. Violation of Paragraph 30 or 42.c. Failure to timely comply with the requirements of Paragraph 30 (for the Covered Flares) or Paragraph 42.c (for the LPG Flare): Penalty per Flare per day: \$500.

q. Violation of Paragraph 33.b – Covered Flares except DDU Flare. For each Covered Flare except the DDU Flare, failure to comply with the Net Heating Value in the Combustion Zone Gas (NHV<sub>cz</sub>) standard in Paragraph 33.b:

<u>On a per Covered Flare basis, Hours per Calendar Quarter in Noncompliance</u>	<u>Penalty per Hour or fraction thereof per Covered Flare</u>
Hours 0.25-50.0	\$150
Hours 50.25-100.0	\$350
Hours over 100	\$500

For purposes of calculating the number of hours of noncompliance with the NHV standard, all 15-minute periods of violation shall be added together to determine the total.

r. Violation of Paragraph 33.b – DDU Flare. For the DDU Flare, failure to comply with the Net Heating Value in the Combustion Zone Gas ( $NHV_{cz}$ ) standard in Paragraph 33.b:

<u>Hours per calendar basis, Hours per Calendar Quarter in Noncompliance</u>	<u>Penalty per Hour or fraction thereof per Covered Flare</u>
Hours 0.25-50.0	\$25
Hours 50.25-100.0	\$75
Hours over 100.0	\$150

s. Violations of Paragraphs 45, 48.d, or 49.b. For the LPG Flare, failure to comply with the  $\dot{m}_{air-asst}/\dot{m}_{air-stoich-vg}$  standard in Paragraph 45, 48.d, or 49.b, as applicable:

<u>Hours per calendar basis, Hours per Calendar Quarter in Noncompliance</u>	<u>Penalty per Hour or fraction thereof per Covered Flare</u>
Hours 0.25-50.0	\$100
Hours 50.25-100.0	\$200
Hours over 100.0	\$300

For purposes of calculating the number of hours of noncompliance with the  $\dot{m}_{air-asst}/\dot{m}_{air-stoich-vg}$  standard, all five minute periods of violation shall be added together to determine the total.

t. Violation of Subparagraph 35.b. Failure to comply with the prohibition on Discontinuous Wake Dominated Flow:

<u>Flare Tip Size (inches)</u>	<u>Penalty per Hour or fraction thereof</u>
1.0-24.0	\$150
24.1-48.0	\$225
Over 48.0	\$525

u. Violation of Subparagraph 35.c. Failure to comply with the applicable MFR standard:

<u>Flare Tip Size (inches)</u>	<u>Penalty per Hour or fraction thereof</u>
1.0-24.0	\$50
24.1-48.0	\$75
Over 48.0	\$175

For purposes of calculating the number of hours of noncompliance with the MFR limit, all 5-minute periods of violation shall be added together to determine the total.

v. Violation of Paragraph 38 or 48.a. Failure to timely conduct the testing set forth in Paragraph 38 or 48.a (if required) in accordance with the protocol:

<u>For each flare test, Period of Delay or Noncompliance</u>	<u>Penalty per Day</u>
Days 1-30	\$250
Days 31-60	\$500
Days 61 and later	\$1000

w. (i) Violation of Paragraph 38, 39, or 48.b. Failure to timely submit a test protocol as required by Paragraph 38 or failure to timely submit a test report as required by Paragraph 39 or 48.b:

<u>For each flare test, Period of Delay or Noncompliance</u>	<u>Penalty per Day</u>
Days 1-30	\$200
Days 31-60	\$300
Days 61 and later	\$400

(ii) Violation of Paragraph 38, 39, or 48.b. Failure to submit a test protocol that conforms to the requirements of Paragraph 38, or failure to submit a test report that conforms to the requirements of Paragraph 30 or 48.b: \$50,000 per protocol or report.

x. Violation of Paragraph 41. Failure to record any information required to be recorded pursuant to Paragraphs 41.a, b, c, or d: \$100 per day.

y. Violation of Paragraph 54. Failure to timely develop a report that conforms to the requirements in Paragraph 54 or failure to keep it as an internal record:

<u>Period of Delay or Noncompliance</u>	<u>Penalty per Day</u>
Days 1-30	\$800
Days 31-60	\$1600
Days 61 and later	\$3000

z. Violation of Paragraph 55. For those corrective action(s) which BPP: (i) agrees to undertake following receipt of an objection by EPA pursuant to Paragraph 55.c; or (ii) is required to undertake following dispute resolution, then, from the date that either: (i) a final agreement is reached between EPA and BPP regarding the corrective action; or (ii) a court order regarding the corrective action is entered, BPP shall be liable for stipulated penalties:

<u>Period of Delay or Noncompliance</u>	<u>Penalty per Day</u>
Days 1-120	\$50
Days 121-180	\$100
Days 181-365	\$300
Days over 365	\$3000 or 1.2 times the economic benefit resulting from BPP's failure to implement the corrective action(s).

The decision of whether to demand as a stipulated penalty the "per day" amounts or the economic benefit amount shall rest exclusively within the discretion of the United States.

aa. Violation of Paragraph 55. Failure to complete any corrective action under Paragraph 55.a in accordance with the schedule for corrective action agreed to by BPP (with any such extensions thereto as to which EPA and BPP may agree in writing):



<u>Period of Delay or Noncompliance</u>	<u>Penalty per Day</u>
Days 1-30	\$1000
Days 31-60	\$2000
Days 61 and later	\$5000

bb. Violation of Subparagraph 67.d. Failure to ensure that a Temporary-Use Flare that falls under the conditions of Paragraph 67.d.i or Paragraph 67.d.ii complies with the requirements of those Subparagraphs:

<u>Number of Days Temporary-Use Flare did not comply</u>	<u>Penalty per Day</u>
Days 1-7	\$1000
Days 8-15	\$2000
Days 16 and later	\$5000

cc. Violation of Paragraph 69 or 70. Failure to comply with the H<sub>2</sub>S emission limit at a Covered Flare or the LPG Flare after that Covered Flare or the LPG Flare becomes subject to Subpart J of the NSPS or Subpart Ja of the NSPS:

<u>On a per Covered Flare basis, Hours per calendar quarter in noncompliance</u>	<u>Penalty per Hour per Covered Flare</u>
Hours 1-50.0	\$ 50
Hours 51-100.0	\$100
Hours over 100.0	\$200

For purposes of calculating the number of hours of noncompliance with the H<sub>2</sub>S limit, all one-hour periods of violation shall be added together to determine the total.

dd. Violation of Paragraph 71. Failure to timely decommission the SRU Flare in conformance with the requirements of Paragraph 71:

<u>Period of Delay or Noncompliance</u>	<u>Penalty per Day</u>
Days 1-30	\$1000
Days 31-60	\$2500
Days 61 and later	\$5000

P. Requirements for Incorporation of Consent Decree Requirements into Federally Enforceable Permits

151. For each failure to submit an application to incorporate Consent Decree requirements into relevant local, state and/or federal permits as required by Paragraph 83:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1500
Beyond 60 <sup>th</sup> day after deadline	\$3000

Q. Requirements for SEP Implementation

152. For failure to comply with any requirement of Paragraphs 88-94 and Appendix E:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1500
Beyond 60 <sup>th</sup> day after deadline	\$3000

R. Requirements for Reporting and Record Keeping

153. For each failure to submit reports as required by Part VIII, per report, per day:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per Day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$300
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1000
Beyond 60 <sup>th</sup> day after deadline	\$2000

154. Reserved.

155. Reserved.

156. Reserved.

S. Requirements for Payment of Civil Penalties

157. For the failure to pay the civil penalties as specified in Part IX of this Consent Decree, BPP will be liable for \$15,000 per day plus interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a).

T. General Provisions Related to Stipulated Penalties

158. Demand for Stipulated Penalties. BPP will pay stipulated penalties upon written demand by the United States by no later than sixty (60) days after BPP receives such demand. A demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount that the United States is demanding for each violation (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based. The United States may, in its unreviewable discretion, waive payment of all or any portion of stipulated penalties that may accrue under this Consent Decree.

159. Payment of Stipulated Penalties. Stipulated penalties shall be apportioned as follows: 70% to the United States and 30% to Indiana. Stipulated penalties owing to the United States of under \$10,000 will be paid by check and made payable to “U.S. Department of Justice,” referencing DOJ Number 90-5-2-09244, and delivered to the U.S. Attorney’s Office in the Northern District of Indiana. Stipulated penalties owing to the United States of \$10,000 or more and stipulated penalties owing to Indiana will be paid in the manner set forth in Part X (“Civil Penalty”).

160. Stipulated Penalties Dispute. Stipulated penalties will begin to accrue on the day after performance is due or the day a violation occurs, whichever is applicable, and will continue to accrue until performance is satisfactorily completed or until the violation ceases. However, in the event of a dispute over stipulated penalties, stipulated penalties will not accrue commencing upon the date BPP files a petition with the Court under Part XIV (“Retention of Jurisdiction/Dispute Resolution”) if BPP has placed the disputed amount demanded in a commercial escrow account with interest. If the dispute thereafter is resolved in BPP’s favor, the escrowed amount plus accrued interest will be returned to BPP; otherwise, the United States and Indiana (as applicable) will be entitled

to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount.

161. The United States and Indiana reserve the right to pursue any other nonmonetary remedies to which they are legally entitled, including but not limited to, injunctive relief, for BPP's violations of this Consent Decree. Where a violation of this Consent Decree is also a violation of the Clean Air Act, its regulations, or a federally-enforceable state law, regulation, or permit, the United States will not seek civil penalties where it already has demanded and secured stipulated penalties from BPP for the same violations nor will the United States demand stipulated penalties from BPP for a Consent Decree violation if the United States has commenced litigation under the Clean Air Act for the same violations. Where a violation of this Consent Decree is also a violation of state law, regulation or a permit, Indiana will not seek civil penalties where the United States already has demanded and/or secured stipulated penalties from BPP for the same violations.

## **XI. INTEREST**

162. BPP will be liable for interest on the unpaid balance of the civil penalty specified in Part IX, and for interest on any unpaid balance of stipulated penalties to be paid in accordance with Part X. All such interest will accrue at the rate established pursuant to 28 U.S.C. § 1961(a) – *i.e.*, a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of the Consent Decree. Interest will be computed daily and compounded annually. Interest will be calculated from the date payment is due under the Consent Decree through the date of actual payment. For the purposes of this Paragraph, interest pursuant to this Paragraph will cease to accrue on the amount of any stipulated penalty payment made into an interest bearing escrow account as contemplated by Paragraph 160 of this Consent Decree. Monies timely paid into escrow will not be considered to be an unpaid balance under this Part.

## **XII. RIGHT OF ENTRY**

163. Any authorized representative of EPA or the State of Indiana, upon presentation of credentials, will have a right of entry upon the premises of the Whiting Refinery at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment and systems, and inspecting all records maintained by the Whiting Refinery required by this Consent Decree or deemed necessary by EPA or IDEM to verify compliance with this Consent Decree. Except where other time periods specifically are noted, the Whiting Refinery will retain such records for the period of the Consent Decree. Nothing in this Consent Decree will limit the authority of EPA or IDEM to conduct tests, inspections, or other activities under any statutory or regulatory provision.

## **XIII. FORCE MAJEURE**

164. “*Force majeure*,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of BPP, of any entity controlled by BPP, or of BPP’s contractors, which delays or prevents the performance of any obligation under this Consent Decree or causes a violation of any provision of this Consent Decree despite BPP’s best efforts to fulfill the obligation. The requirement that BPP exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential *force majeure* event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. “*Force Majeure*” does not include BPP’s financial inability to perform any obligation under this Consent Decree.

165. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, as to which BPP intends to assert a claim of Force Majeure, BPP shall notify EPA and IDEM in writing as soon as practicable, but in no event later than fifteen (15) calendar days following the date BPP first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay. The notice shall include an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent

or mitigate the delay or the effect of the delay; and BPP's rationale for attributing such delay to a *force majeure* event. BPP shall include with any notice all available documentation supporting the claim that the delay was attributable to a *force majeure*. Failure to comply with the above requirements shall preclude BPP from asserting any claim of *force majeure* for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. BPP shall be deemed to know of any circumstance of which BPP, any entity controlled by BPP, or BPP's contractors knew or should have known.

166. If EPA, after a reasonable opportunity for review and comment by IDEM, agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Consent Decree that are affected by the *force majeure* event will be extended by EPA, after a reasonable opportunity for review and comment by IDEM, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. EPA will notify BPP in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

167. If EPA, after a reasonable opportunity for review and comment by IDEM, does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify BPP in writing of its decision.

168. If BPP elects to invoke the dispute resolution procedures set forth in Part XIV ("Dispute Resolution"), it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, BPP shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a *force majeure* event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that BPP complied with the requirements of Paragraphs 164 and 165, above. If BPP carries this burden, the delay at issue shall be deemed not to be a violation by BPP of the affected obligation of this Consent Decree identified to EPA and the Court.

**XIV. RETENTION OF JURISDICTION/DISPUTE RESOLUTION**

169. This Court will retain jurisdiction of this matter for the purposes of implementing and enforcing the terms of the Consent Decree and for the purpose of adjudicating all disputes of the Consent Decree between the United States and BPP that may arise under the provisions of this Consent Decree, until the Consent Decree terminates in accordance with Part XVII of this Consent Decree.

170. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Part shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. BPP's failure to seek resolution of a dispute under this Part shall preclude BPP from raising any such issue as a defense to an action by the United States to enforce any obligation of BPP arising under this Decree.

171. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when BPP sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 60 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after the United States has notified BPP of the conclusion of the informal negotiation period, BPP invokes formal dispute resolution procedures as set forth below.

172. Formal Dispute Resolution. BPP shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting BPP's position and any supporting documentation relied upon by BPP.

173. The United States shall serve its Statement of Position within 45 Days of receipt of BPP's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that

position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on BPP, unless BPP files a motion for judicial resolution of the dispute in accordance with the following Paragraph.

174. BPP may seek judicial resolution of the dispute by filing with the Court and serving on the United States, in accordance with Paragraph 210 of this Consent Decree ("Notice"), a motion requesting judicial resolution of the dispute. The motion must be filed within 20 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of BPP's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

175. The United States shall respond to BPP's motion within the time period allowed by the Local Rules of this Court. BPP may file a reply memorandum, to the extent permitted by the Local Rules.

176. Standard of Review. In all disputes arising under the Consent Decree, BPP shall bear the burden of demonstrating that its position complies with this Consent Decree and the CAA and that BPP is entitled to relief. The United States reserves the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law, and BPP reserves the right to argue to the contrary.

177. The invocation of dispute resolution procedures under this Part shall not, by itself, extend, postpone, or affect in any way any obligation of BPP under this Consent Decree unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 162. If BPP does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Part X ("Stipulated Penalties"). As part of the resolution of any dispute under this Part, the Parties, by agreement, or the Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in work that



occurred as a result of the dispute resolution process. BPP shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extension or modified schedule.

## **XV. EFFECT OF SETTLEMENT**

178. Definitions. For purposes of this Part XV (Effect of Settlement), the following definitions apply:

- a. “Hazardous Air Pollutants” or “HAPs” shall have the meaning set forth in 42 U.S.C. § 7412(b)(1);
- b. “Whiting Refinery Modernization Project” or “WRMP” shall mean: 1) the projects authorized to be constructed and operated at the Whiting Refinery pursuant to Significant Source Modification 089-25484-00453 issued by IDEM on May 1, 2008 and Part 70 Permit T089-6741-00453 as modified by Significant Permit Modification 089-25488-00453 issued by IDEM on June 16, 2008, and 2) any other contemporaneous project included for emissions netting purposes and identified in the same permits. This project originally was named the “CXHO Project,” was subsequently re-named the “Operation Canadian Crude Project,” and later was re-named the “Whiting Refinery Modernization Project;”
- c. “Post-Lodging Compliance Dates” shall mean any dates in this Part XV (“Effect of Settlement”) after the Date of Lodging;
- d. “PSD/NNSR Requirements” shall mean the Prevention of Significant Deterioration and Non-Attainment New Source Review requirements found in the following: 42 U.S.C. § 7475; 40 C.F.R. §§ 52.21(a)(2)(iii) and 52.21(j) - 52.21(r)(5); 42 U.S.C. §§ 7502(c)(5), 7503(a)-(c); 40 C.F.R. Part 51, Appendix S, Part IV, Conditions 1-4; any applicable, federally approved and federally enforceable state or local regulation that implements, adopts, or incorporates the federal provisions cited in this Paragraph; any Title V permit requirement that implements, adopts, or incorporates the federal, or federally approved state, provisions cited in this Paragraph; and any applicable state or local regulation enforceable by the State of Indiana that implements, adopts, or incorporates the federal provisions cited in this Paragraph;

e. “Stayed Subpart Ja Requirements” shall mean the following requirements of 40 C.F.R. Part 60, Subpart Ja, that are currently stayed pursuant to 73 *Fed. Reg.* 78,549 (Dec. 22, 2008);

i. SO<sub>2</sub> and H<sub>2</sub>S emissions limits applicable to flares (set forth in 40 C.F.R. § 60.102a(g)(1) (2010));

ii. SO<sub>2</sub> emissions limits applicable to heaters (set forth in 40 C.F.R. § 60.102a(g)(1) (2010));

iii. NO<sub>x</sub> emission limits applicable to heaters (set forth in 40 C.F.R. § 60.102a(g)(2) (2010));

iv. Sulfur monitoring for flares (set forth in 40 C.F.R. § 60.107a(d) (2010)); and

v. Flow monitoring for flares (set forth in 40 C.F.R. § 60.107a(e) (2010)).

If a final rule encompassing these Stayed Subpart Ja Requirements places them in different locations in Subpart Ja with different citations, the definition herein refers to the subject of the regulation (*e.g.*, “SO<sub>2</sub> emission limits applicable to flares”) and not to the citation.

179. Entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana for the violations that occurred through the Date of Lodging of the Consent Decree as alleged in the Complaints (filed by the United States and the State concurrently with the lodging of this Consent Decree).

180. Resolution of Claims Alleged in Notices of Violation (“NOVs”) and Findings of Violations (“FOVs”). Entry of this Consent Decree shall resolve the civil claims of the United States for the violations that occurred through the Date of Lodging of the Consent Decree as alleged in the following NOVs and FOVs:

a. FOV – EPA-5-07-IN-03 (Jan. 25, 2007);

b. NOV/FOV – EPA-5-08-IN-01 (Nov. 29, 2007);

c. Amendment to NOV/FOV – EPA-5-08-IN-01 (Oct. 1, 2008) at the process units identified by unit name and number;

d. NOV – EPA-5-09-IN-13 (May 18, 2009); and

e. FOV – EPA-5-10-04-IN (Feb. 11, 2010).

These NOV's and FOV's are attached hereto in Appendix F.

181. Resolution of Claims for Violating PSD/NNSR Requirements at the Covered, LPG, and SRU Flares. With respect to emissions of SO<sub>2</sub>, VOCs, CO and H<sub>2</sub>S from the following flares, entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of the PSD/NNSR Requirements resulting from construction or modification that occurred during the WRMP from the date those claims accrued through the following dates:

- |    |                                  |                   |
|----|----------------------------------|-------------------|
| a. | SRU, DDU, GOHT, and South flares | Date of Lodging   |
| b. | LPG flare                        | December 31, 2012 |
| c. | FCU, VRU, and Alky flares        | December 31, 2015 |
| d. | 4UF flare                        | December 31, 2016 |
| e. | UIU flare                        | December 31, 2017 |

182. Resolution of Claims for Violating PSD/NNSR Requirements at Other Process Units. With respect to emissions of the following pollutants from the following process units, entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of the PSD/NNSR Requirements resulting from construction or modification that occurred during the WRMP from the date those claims accrued through the Date of Lodging:

- a. At FCU 500 and 600 with respect to SO<sub>2</sub> and NO<sub>x</sub>;
- b. At the Whiting New Coker (also referred to as the #2 Coker) with respect to VOCs, H<sub>2</sub>S, PM<sub>TOTAL</sub>, and PM<sub>10</sub>; and
- c. At the following heaters and units:
  - i. With respect to NO<sub>x</sub>: the #2 Coker heaters (F-201, F-202, and F-203); and
  - ii. With respect to SO<sub>2</sub>:
    - A. 11 A Pipestill heaters (H-1X, H-2, and H-3);
    - B. 11 C Pipestill heaters (H-200 and H-300);

- C. 12 Pipestill heaters (H-101A, H-101B, and H-102);
- D. #2 Coker heaters (F-201, F-202, and F-203);
- E. GOHT heaters (F-901A and F-901B);
- F. BOU F-401 furnace;
- G. ISOM H-1 heater;
- H. New Hydrogen Unit heaters (HU-1 and HU-2);
- I. HU B-501;
- J. CFHU heaters (F-801A, F-801B, and F-801C);
- K. DDU heaters (WB-301 and WB-302);
- L. 4UF heaters (F-1, F-2, F-3, F-4, F-5, F-6, F- 7, F-8A, and F-8B);
- M. ARU heaters (F-200A and F-200B);
- N. CRU heaters (F-101 and F-102A);
- O. 3SPS boilers (#1, #2, #3, #4, and #6);
- P. 3SPS Duct Burners; and
- Q. New Boiler 1.

183. Resolution of Pre-Lodging Claims Under Listed Regulations at the Covered Flares, LPG Flare, and Other Process Units. With respect to emissions of the following pollutants at the following flares and process units, entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of the listed regulations and any applicable state regulations that implement, adopt, or incorporate any of the listed regulations that occurred from December 1, 2002 through the Date of Lodging:, except that the violations of 40 C.F.R. § 60.102a(f)(1)(ii) shall be resolved from September 26, 2008 through the Date of Lodging:

<b><u>Flare(s)/ Process Unit(s)</u></b>	<b><u>Pollutant(s)</u></b>	<b><u>Regulation(s)</u></b>
Covered Flares and LPG Flare	VOCs and HAPs	<p>40 C.F.R. § 60.11(d);</p> <p>40 C.F.R. §§ 60.18(c)(1)-(2), (c)(3)(ii), (c)(4)-(5), (d), (e) and (f);</p> <p>40 C.F.R. § 63.6(e)(1)(i);</p> <p>40 C.F.R. §§ 63.11(b)(1), (3)-(5), (6)(ii), and (7)-(8);</p> <p>40 C.F.R. § 60.482-10(d), but only to the extent that this provision requires compliance with 40 C.F.R. §§ 60.18(c)(3)(ii) and (d);</p> <p>40 C.F.R. § 60.482-10(e), but only to the extent that this provision relates to flares;</p> <p>40 C.F.R. § 60.592(a), but only to the extent that this provision: (a) relates to flares, and (b) requires compliance with 40 C.F.R. §§ 60.18(c)(3)(ii) and (d);</p> <p>40 C.F.R. §§ 63.643(a)(1), 63.648(a), and Table 6 of Part 63, Subpart CC, but only to the extent that these provisions: (a) relate to flares, and (b) require compliance with 40 C.F.R. §§ 60.18(c)(3)(ii) and (d), 63.6(e)(1)(i), and 63.11(b)(1) and (b)(6)(ii); and</p> <p>40 C.F.R. § 63.1566(a)(1)(i) and Tables 15 and 44 of Part 63, Subpart UUU, but only to the extent that these provisions: (a) relate to flares, and (b) require compliance with 40 C.F.R. §§ 63.11(b)(1), (b)(6)(ii) and (e)(1).</p>
Covered Flares and LPG Flare	SO <sub>2</sub> and H <sub>2</sub> S	40 C.F.R. Part 60, Subparts A and J
FCU 500 and FCU 600	SO <sub>2</sub> , CO, NO <sub>x</sub> and PM	40 C.F.R. Part 60, Subparts A, J, and Ja
Heaters, boilers, and other units listed in Subparagraph 8.b	SO <sub>2</sub>	40 C.F.R. Part 60, Subparts A and J.

<b><u>Flare(s)/ Process Unit(s)</u></b>	<b><u>Pollutant(s)</u></b>	<b><u>Regulation(s)</u></b>
Sulfur Pits A, B, C, and 2400	H <sub>2</sub> S and reduced sulfur compounds	40 C.F.R. §§ 60.102a(f)(1)(ii), 60.106a(a)(2), and 40 C.F.R. Part 60, Subparts A and J

184. Resolution of Claims Continuing Post-Lodging Under Listed Regulations at the Covered Flares and the LPG Flare.

- a. Resolution of Claims for Failure to Comply with Requirements Related to Monitoring, Operation, and Maintenance According to Flare Design. With respect to emissions of VOCs and HAPs at the following flares, entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of the listed regulations from the Date of Lodging through the following dates, but only to the extent that these claims are based upon BPP's use of too much steam in relation to vent gas flow:

<b><u>Flare(s)</u></b>	<b><u>Date</u></b>	<b><u>Regulation(s)</u></b>
LPG Flare	1 year after Date of Entry	40 C.F.R. §§ 60.18(d);
Covered Flares	December 31, 2014	<p>40 C.F.R. §§ 63.11(b)(1);</p> <p>40 C.F.R. § 60.482-10(d), but only to the extent that this provision requires compliance with 40 C.F.R. § 60.18(d);</p> <p>40 C.F.R. § 60.482-10(e), but only to the extent that this provision relates to flares;</p> <p>40 C.F.R. § 60.592(a), but only to the extent that this provision: (a) relates to flares, and (b) requires compliance with 40 C.F.R. § 60.18(d);</p> <p>40 C.F.R. §§ 63.643(a)(1) and 63.648(a), but only to the extent that these provisions: (a) relate to flares, and (b) require compliance with 40 C.F.R. §§ 60.18(d) and 63.11(b)(1); and</p> <p>40 C.F.R. § 63.1566(a)(1)(i) and Table 15 of Part 63, Subpart UUU, but only to the extent that these provisions: (a) relate to flares, and (b) require compliance with 40 C.F.R. § 63.11(b)(1).</p>

- b. Resolution of NSPS Subpart J Claims. With respect to emissions of SO<sub>2</sub> at the following flares, entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of the listed regulations from the Date of Lodging through the following dates:

<b>Flare(s)</b>	<b>40 C.F.R. § 60.104(a)(1) (Standards for sulfur oxides)</b>	<b>40 CFR § 60.105(a)(4) (Monitoring of emissions and operations)</b>
FCU	December 31, 2015	December 31, 2013
VRU	December 31, 2015	December 31, 2013
Alky	December 31, 2015	December 31, 2013
4UF	December 31, 2016	December 31, 2013
UIU	December 31, 2017	December 31, 2013

185. Conditional Resolution of Claims Under Stayed NSPS Subpart Ja Requirements. If EPA lifts the stay on the Stayed Subpart Ja Requirements and promulgates final regulations encompassing the Stayed Subpart Ja Requirements, then entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of the Stayed Subpart Ja Requirements as follows:

- a. For the following flares and the following Stayed Subpart Ja Requirements, from the date that a final rule encompassing the Stayed Subpart Ja Requirements is effective through the following dates:

<b>Name of Flare</b>	<b>SO<sub>2</sub> and H<sub>2</sub>S Emission Limits (currently at 40 C.F.R. § 60.102a(g)(1))</b>	<b>Sulfur and Flow Monitoring (currently at 40 C.F.R. §§ 60.107a(d), (e))</b>
DDU	Date of Lodging	December 31, 2013
FCU	December 31, 2015	December 31, 2013
VRU	December 31, 2015	December 31, 2013
Alky	December 31, 2015	December 31, 2013
4UF	December 31, 2016	December 31, 2013
UIU	December 31, 2017	December 31, 2013

- b. For the following heaters and units with respect to the following pollutants, from the date that a final rule encompassing the Stayed Subpart Ja

Requirements is effective through the Date of Lodging, except for 11 C Pipestill heater H-200:

- i. With respect to NO<sub>x</sub> emissions (currently, the limit is set forth in stayed provision 40 C.F.R. § 60.102a(g)(2)):
  - A. 12 Pipestill heaters (H-101A, H-101B, and H-102);
  - B. 11 C Pipestill heater H-200 through December 31, 2013;
  - C. #2 Coker heaters (F-201, F-202, and F-203);
  - D. GOHT heaters (F-901A and F-901B); and
  - E. BOU F-401 furnace.
- ii. With respect to SO<sub>2</sub> emissions (currently, the limit is set forth in stayed provision 40 C.F.R. § 60.102a(g)(1)):
  - A. 11 A Pipestill heaters (H-1X, H-2, and H-3);
  - B. 11 C Pipestill heaters (H-200 and H-300);
  - C. 12 Pipestill heaters (H-101A, H-101B, and H-102);
  - D. #2 Coker heaters (F-201, F-202, and F-203);
  - E. GOHT heaters (F-901A and F-901B);
  - F. BOU F-401 furnace;
  - G. ISOM H-1 Heater;
  - H. New Hydrogen Unit Heaters (HU-1 and HU-2);
  - I. HU B-501;
  - J. CFHU heaters (F-801A, F-801B, and F-801C);
  - K. DDU heaters (WB-301 and WB-302);
  - L. 4UF heaters (F-1, F-2, F-3, F-4, F-5, F-6, F-7, F-8A, and F-8B);



- M. ARU heaters (F-200A and F-200B);
- N. CRU heaters (F-101 and F-102A);
- O. 3SPS boilers (#1, #2, #3, #4, and #6);
- P. 3SPS Duct Burners; and
- Q. New Boiler 1.

186. Resolution of LDAR violations. Entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of (i) 40 C.F.R. Part 60, Subpart GGG and GGGa; (ii) 40 CFR Part 61, Subparts J and V; (iii) the LDAR provisions of 40 C.F.R. Part 63, Subpart CC; and (iv) 326 I.A.C. 8-4-8, that occurred from December 1, 2002 through the Date of Lodging of the Consent Decree at each process unit (as defined by 40 C.F.R. § 60.590a(e)) at the Whiting Refinery.

187. Resolution of Liability Regarding Benzene Waste NESHAP Requirements. Entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for violations of 40 C.F.R. Part 61, Subpart FF that occurred from December 1, 2002 through the Date of Lodging of the Consent Decree at waste management units at the Whiting Refinery.

188. Resolution of Title V violations. Entry of this Consent Decree shall resolve the civil claims of the United States and the State of Indiana against BPP for the violations at the Whiting Refinery of Sections 502(a), 503(c), and 504(a) of the CAA, 42 U.S.C. §§ 7661a(a), 7661b(c), 7661c(a), and of 40 C.F.R. §§ 70.1(b), 70.5(a) and (b), 70.6(a) and (c), and 70.7(b), that are based upon the violations resolved by Paragraphs 181-184, 186 and 187 for the time frames set forth in those Paragraphs.

189. Resolution of Consent Decree violations. Entry of this Consent Decree shall resolve the civil claims of the United States against BPP for the following violations at the Whiting Refinery of the Consent Decree entered on August 29, 2001 in *United States, et al. v. BP Exploration and Oil Co., et al.*, Civil No. 2:96 CV 095 RL (N.D. Ind.):

a. Violations of Paragraph 19.A.ii. (Facility Current Compliance Status) that occurred prior to December 31, 2008;

b. Violations of Paragraphs 20.B.i. (Training), 20.D (Leak Definition), 20.G First Attempt at Repair on Valves), 20.H.i. (LDAR Monitoring Frequency), 20.L (Adding New Valves and Pumps), and 20.S (Quarterly Reports) that occurred prior to the Date of Lodging; and

c. Violations of Paragraph 21.A (Sulfur Pit Emissions) that occurred at Sulfur Pits, A, B, C, and 2400 that occurred prior to the Date of Lodging.

190. The resolutions of liability in this Part are based exclusively on claims at BPP's Whiting Refinery.

191. Reservation of Rights: Resolution in Paragraphs 181, 184, 185 and 187 Can Be Rendered Void. Notwithstanding the resolutions of liability contained in Paragraphs 181, 184, 185 and 187 for the period of time between the Date of Lodging and the Post-Lodging Compliance Dates, those resolutions of liability shall be rendered void if BPP materially fails to comply with any of the obligations and requirements of Section F (NO<sub>x</sub> Emissions Reductions from Heaters and Boilers), Section O (Emissions Reductions from Flares and Control of Flaring Events), and Section P (Incorporation of Consent Decree Requirements into Federally Enforceable Permits) of Part V, and Part VI (Emission Credit Generation). However, the resolutions of liability in Paragraphs 181, 184, 185 and 187 shall not be rendered void if BPP remedies such material failure as expeditiously as practicable and pays all stipulated penalties due as a result of such material failure.

192. The United States and IDEM further reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or IDEM to obtain penalties or injunctive relief under the CAA or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraphs 179-188. The United States and IDEM further reserve all legal and equitable

remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, BPP's Whiting Refinery, whether related to the violations addressed in this Consent Decree or otherwise.

193. In any subsequent administrative or judicial proceeding initiated by the United States or IDEM for injunctive relief, civil penalties, other appropriate relief relating to the Whiting Refinery for violations of PSD/NSR, NSPS, NESHAP and/or LDAR requirements not identified in this Part:

a. BPP shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or IDEM in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraphs 179-188 of this Part and for which the resolution of liability has not been voided pursuant to Paragraph 190.

b. Except as set for in Subparagraph a., the United States and the State of Indiana may not assert or maintain that this Consent Decree constitutes a waiver, or determination of, or otherwise obviates, any claim or defense by BPP whatsoever, or that this Consent Decree constitutes an acceptance by BPP of any interpretation or guidance issued by EPA related to the matters addressed in this Consent Decree.

194. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. BPP is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and BPP's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and IDEM do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that BPP's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401 *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

195. This Consent Decree does not limit or affect the rights of BPP, the United States, or IDEM against any third parties that are not party to this Consent Decree, nor does it limit the rights of third parties that are not party to this Consent Decree against BPP, except as otherwise provided by law.

196. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

197. Nothing in this Consent Decree will be construed to limit or disqualify BPP, on the grounds that information was not discovered voluntarily, from seeking to apply EPA's Audit policy to any violation or noncompliance that BPP discovers during the course of any audit, investigation, or enhanced monitoring the BPP is required to undertake pursuant to this Consent Decree.

198. Resolution of Citizen-Intervenors Claims. In consideration of the commitments and agreements being made by BPP in this Consent Decree, Citizen-Intervenors hereby agree as follows:

a. Citizen-Intervenors shall not file or support the filing (by providing legal representation or financial contributions over which the Citizen-Intervenors have control) of any judicial or administrative objection(s), appeal(s), petitions(s) for review, petition to EPA pursuant to Section 505(b)(2) of the Clean Air Act, or citizen suit(s) relating to:

i. the issuance of any Source Modification Permit or any revision of the WRMP Operating Permit that is required by, contemplated by or necessary to implement this Consent Decree and the settlement of claims embodied herein; or

ii. any allegation that WRMP has been constructed or will operate without required permits;

provided that the foregoing shall not apply if the terms and conditions of any such permit differ in material respects from the terms and conditions of the draft terms and conditions that have been provided to Citizen-Intervenors prior to the date hereof and Citizen-Intervenors have not consented to such differences. The foregoing shall not prohibit the Citizen-Intervenors from communicating with other groups or individuals.

b. Upon the later of the (i) Date of Entry of this Consent Decree and (ii) the issuance of the WRMP Operating Permit in materially the same form as has been provided to the Citizen-Intervenors prior to the date hereof or with such modifications as have been consented to by the Citizen-Intervenors, Save the Dunes, Sierra Club, the Hoosier Environmental Council, Tom Tsourlis and Susan Eleuterio shall dismiss with prejudice their petitions for review pending before the OEA in Cause Nos. 08-A-J-4115 and 08-A-J-4142.

c. Citizen-Intervenors shall not file a citizen suit or support the filing (by providing legal representation or financial contributions over which Citizen-Intervenors have control) of any third party action related to the acts or omissions that form the basis of the claims of the United States and Indiana that are resolved in Part XV.

d. Citizen-Intervenors may seek to enforce the obligations of BPP under this Decree, except for the obligations under Part IX (Civil Penalty) and Part X (Stipulated Penalties), by filing with the Court a motion for appropriate relief. Such motion shall be governed by the Federal Rules of Civil Procedure and applicable law.

e. BPP's sole and exclusive remedy for a breach of this Agreement by Citizen-Intervenors shall be an action for specific performance or injunction. In no event shall BPP be entitled to monetary damages for breach of this Agreement. In addition, no legal action for specific performance or injunction shall be brought or maintained until: (a) BPP provides written notice to the breaching Party which explains with particularity the nature of the claimed breach, and (b) within (30) days after receipt of said notice, the breaching Party fails to cure the claimed breach or, in the case of a claimed breach which cannot be reasonably remedied within a thirty (30) day period, the breaching Party fails to commence to cure the claimed breach within such (30) day period, and thereafter diligently complete the activities reasonably necessary to remedy the claimed breach.

## **XVI. GENERAL PROVISIONS**

199. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree will relieve BPP of its obligations to comply with all applicable federal, state, regional and local laws and regulations, including, but not limited to, more stringent standards. In addition, nothing in this Consent Decree will be construed to prohibit or prevent the United States or IDEM from developing, implementing, and enforcing more stringent standards subsequent to the Date of Lodging of this Consent Decree through rulemaking, the permit process, or as otherwise authorized or required under federal, state, regional, or local laws, or as otherwise authorized or required under federal, state, regional, or local laws and regulations. Subject to Part XV (“Effect of Settlement”), Part X (“Stipulated Penalties”), and Paragraph 201 (“Permit Violations”) of this Consent Decree, nothing contained in this Consent Decree will be construed to prevent or limit the rights of the United States or IDEM to seek or obtain other remedies or sanctions available under other federal, state, regional, or local statutes or regulations, by virtue of BPP’s violations of the Consent Decree or of the statutes and regulations upon which the Consent Decree is based, or for BPP’s violations of any applicable provision of law. This will include the right of the United States or IDEM to invoke the authority of the Court to order BPP’s compliance with this Consent Decree in a subsequent contempt action. The requirements of this Consent Decree do not exempt BPP from complying with any and all new or modified federal, state, regional, and/or local statutory or regulatory requirements that may require technology, equipment, monitoring, or other upgrades after the Date of Lodging of this Consent Decree.

200. Startup, Shutdown, and Malfunction. Notwithstanding the provisions of this Consent Decree regarding Startup, Shutdown, and Malfunction, this Consent Decree does not exempt BPP from the requirements of state laws and regulations or from the requirements of any permits or plan approvals issued to BPP, as these laws, regulations, permits, and/or plan approvals may apply to Startups, Shutdowns, and Malfunctions.

201. Permit Violations. Except as specifically identified in Part XV (“Effect of Settlement”), nothing in this Consent Decree will be construed to prevent or limit the

right of the United States or IDEM to seek injunctive or monetary relief for violations of permits; provided, however, that with respect to monetary relief, the United States and IDEM must elect between filing a new action for such monetary relief or seeking stipulated penalties under this Consent Decree, if stipulated penalties also are available for the alleged violation(s).

202. Failure of Compliance. The United States and IDEM do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that BPP's complete compliance with the Consent Decree will result in compliance with the provisions of the CAA or the corollary state and local statutes. Notwithstanding the review or approval by EPA or IDEM of any plans, reports, policies or procedures formulated pursuant to the Consent Decree, BPP will remain solely responsible for compliance with the terms of the Consent Decree, all applicable permits, and all applicable federal, state, regional, and local laws and regulations, except as provided in Part XIII ("Force Majeure").

203. Changes to Law. In the event that during the life of this Consent Decree there is a change to the statutes or regulations that provide the underlying basis for the Consent Decree such that BPP would not otherwise be required to perform any of the obligations herein or would have the option to undertake or demonstrate compliance in an alternative or different manner, BPP may petition the Court for relief from any such requirements, in accordance with Fed. R. Civ. P. 60. However, if BPP applies to the Court for relief under this Paragraph, the United States reserves the right to seek to void all or part of the Resolution of Liability reflected in Part XVII ("Effect of Settlement"). Nothing in this Paragraph is intended to enlarge the Parties' rights under Fed. R. Civ. P. 60, nor is this Paragraph intended to confer on any Party any independent basis, outside of Fed. R. Civ. P. 60, for seeking such relief.

204. Alternative Monitoring Plans. If, for any monitoring required by this Consent Decree (other than CEMS), BPP submits an AMP to EPA for approval, then BPP shall comply with the proposed AMP pending EPA's approval or disapproval of the submitted AMP. If an AMP is not approved, then within ninety (90) Days of BPP's receipt of disapproval, BPP will submit to EPA for approval a plan and schedule that provide for compliance with the applicable monitoring requirements as soon as

practicable. Such plan may include physical or operational changes to the equipment, or additional or different monitoring.

205. Service of Process. BPP hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Fed. R. Civ. P. 4 and any applicable local rules of this Court, including, but not limited to, service of a summons.

206. Post-Lodging, Pre-Entry Obligations. Obligations of BPP under this Consent Decree to perform duties after the Date of Lodging but prior to the Date of Entry shall be legally enforceable only on or after the Date of Entry. Liability for stipulated penalties, if applicable, shall accrue for violations of such obligations, and the United States may demand payment as provided in the Decree, provided that stipulated penalties accruing between the Date of Lodging and the Date of Entry may not be collected unless and until this Decree is entered by the Court.

207. Costs. Each Party to this action shall bear its own costs and attorneys' fees.

208. Public Documents. All information and documents submitted by BPP pursuant to this Consent Decree shall be subject to public inspection in accordance with applicable federal law, unless subject to legal privileges or protection, or identified and supported as trade secrets or confidential business information in accordance with the applicable federal statutes or regulations.

209. Public Notice and Comment. The Parties agree to this Consent Decree and agree that this Consent Decree may be entered upon compliance with the public notice procedures set forth at 28 C.F.R. § 50.7, and upon notice to the Court from the United States Department of Justice requesting entry of this Consent Decree. The United States reserves the right to withdraw or withhold its consent to this Consent Decree at any time prior to the Date of Entry if public comments disclose facts or considerations indicating that this Consent Decree is inappropriate, improper, or inadequate.

210. Notice. Unless otherwise provided herein, notifications to or communications between the Parties shall be deemed submitted on the date they are postmarked and sent by U.S. Mail or overnight mail, postage prepaid, or to EPA by electronic mail as provided below, except for notices under Part XV ("Force Majeure")



and Part XVI (“Retention of Jurisdiction/Dispute Resolution”), which shall be sent by overnight mail or by certified or registered mail, return receipt requested. Notifications to or communications mailed to BPP shall be deemed to be received on the earlier of (i) actual receipt by BPP or (ii) receipt of an electronic version sent to the addressees set forth in this Paragraph. Each report, study, notification, or other communication of BPP shall be submitted as specified in this Consent Decree. If the date for submission of a report, study, notification, or other communication falls on a Saturday, Sunday or federal holiday, the report, study, notification, or other communication will be deemed timely if it is submitted the next Working Day. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this Consent Decree shall be addressed as follows:

As to the United States:

Chief  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Ben Franklin Station  
Washington, DC 20044-7611  
Reference Case No. 90-5-2-1-09244

As to EPA Headquarters:

Electronic submissions (and, if necessary, hard-copy submissions) shall be addressed to:

Director, Air Enforcement Division  
Office of Civil Enforcement (2242A)  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20004

and submitted electronically to:

Submissions not delivered electronically shall be sent to the address above and to:

Director, Air Enforcement Division  
Office of Civil Enforcement  
c/o Matrix New World Engineering, Inc.  
120 Eagle Rock Ave., Suite 207  
East Hannover, NJ 07936-3159

As to EPA Region 5:

Hard-copy and electronic submissions shall be addressed to:

Compliance Tracker (AE-17J)  
Air Enforcement and Compliance Assurance Branch  
U.S. EPA, Region 5  
77 W. Jackson Blvd.  
Chicago, IL 60604

and

Office of Regional Counsel  
U.S. EPA, Region 5  
77 West Jackson Blvd. (C-14J)  
Chicago, IL 60604

and submitted electronically to:

Submissions not delivered electronically shall be sent to the address above.

As to the State of Indiana:

Office of the Indiana Attorney General  
Environmental Litigation Division  
Indiana Government Center South- Fifth Floor  
302 West Washington Street  
Indianapolis, IN 46204

Chief, Air Compliance and Enforcement Branch  
Indiana Department of Environmental Management  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, IN 46204-2251

As to BPP:

Refinery Manager  
BPP Whiting Refinery  
2815 Indianapolis Blvd.  
Whiting, Indiana 46394

HSSE Manager  
BPP Whiting Refinery  
2815 Indianapolis Blvd.  
Whiting, Indiana 46394

Managing Attorney – HSSE  
BP America, Inc.  
150 W. Warrenville Road  
Mail Code 200-1W  
Naperville, Illinois 60563

Any Party may change either the notice recipient or the address for providing notices to it by serving the other Party with a notice setting forth such new notice recipient or address. In addition, the nature and frequency of reports required by this Consent Decree may be modified by mutual consent of the Parties. The consent of the United States to such modification must be in the form of a written notification from EPA, but need not be filed with the Court to be effective.

211. Approvals. All EPA approvals or comments required under this Consent Decree shall be in writing.

212. Paperwork Reduction Act. The information required to be maintained or submitted pursuant to this Consent Decree is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501 et seq.

213. Modification. This Consent Decree contains the entire agreement of the Parties and will not be modified by any prior oral or written agreement, representation, or understanding. Non-material modifications to this Consent Decree will be effective when signed by the United States and BPP. The United States will file non-material modifications with the Court on a periodic basis. For purposes of this Paragraph, non-material modifications include, but are not limited to, modifications to the

frequency of reporting obligations and modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment, provided that such changes are agreed upon in writing between the United States and BPP. Material modifications to this Consent Decree will be in writing, signed by the Parties, and will be effective upon approval by the Court. Specific provisions in this Consent Decree that govern specific types of modifications shall be effective as set forth in the specific provision governing the modification.

214. Effect of Shutdown. The permanent Shutdown of an emissions unit or equipment and the surrender of all permits for that emissions unit or equipment shall be deemed to satisfy all requirements of this Consent Decree applicable to that emissions unit or equipment on and after the later of: (i) the date of the permanent Shutdown of the emissions unit or equipment; and (ii) the date of the surrender of all permits applicable to the unit or piece of equipment. The permanent Shutdown of the Whiting Refinery and the surrender of all air permits for the Refinery shall be deemed to satisfy all requirements of this Consent Decree applicable to the Refinery on and after the later of: (i) the date of the Shutdown of the Refinery; or (ii) the date of the surrender of all air permits

## **XVII. TERMINATION**

215. Certification of Completion: Applicable Sections. Prior to moving for termination under Paragraph 220, BPP may seek to certify completion of one or more of the following Sections/Parts of the Consent Decree.

- a. Part V, Sections A through E - Fluid Catalytic Cracking Units (including operation of the units for one (1) year in compliance with the final emission limits established pursuant to this Consent Decree);
- b. Part V, Section F – NO<sub>x</sub> Emissions Reductions from Heaters and Boilers (including operation of the relevant units for one (1) year after installation of required emission controls and compliance with applicable emission limits established pursuant to this Consent Decree);

- c. Part V, Section G – SO<sub>2</sub> Emissions Reductions from Heaters and Boilers (including operation of the relevant units for one (1) year after completion in compliance with the emission limits established pursuant to this Consent Decree);
- d. Part V, Section H – Fuel Gas Sulfur Content (including operation of the relevant units for one (1) year after completion in compliance with the emission limits established pursuant to this Consent Decree);
- e. Part V, Sections I through K – CEMS Downtime, Benzene NESHAP and LDAR;
- f. Part V, Section L – Sulfur Recovery Plant (including operation of the relevant units for one (1) year after completion in compliance with the emission limits established pursuant to this Consent Decree);
- g. Part V, Section M – Tanks (including operation of the relevant units for one (1) year after completion in compliance with the emission limits established pursuant to this Consent Decree);
- h. Part V, Section N – Coker (including operation of the relevant units for one (1) year after completion in compliance with the emission limits established pursuant to this Consent Decree); and
- i. Part V, Section O and Appendix D – Flares; (including operation of the relevant units for one (1) year after completion in compliance with the flare efficiency requirements and the flare flow cap established pursuant to this Consent Decree); and;
- j. Part VII – Supplemental Environmental Project and Additional Injunctive Relief.

216. Certification of Completion: BPP Actions. If BPP concludes that any of the Section(s) or Part(s) identified in Paragraph 215 have been completed, BPP may submit a written report to EPA and IDEM describing the activities undertaken and certifying that the applicable Section(s) or Part(s) have been completed in full satisfaction of the requirements of this Consent Decree, and that BPP is in substantial and material compliance with the relevant Section of the Consent Decree. The report will contain the following statement, signed by a responsible corporate official of BPP.

“I certify under penalty of law that this information was prepared under my direction or supervision by personnel qualified to properly gather and evaluate the information submitted. Based on my directions and after reasonable inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.”

217. Certification of Completion: EPA Actions. Upon receipt of BPP’s certification, EPA will notify BPP whether the requirements set forth in the applicable Section(s) or Part(s) have been completed in accordance with this Consent Decree:

a. If EPA concludes that the requirements have not been fully complied with, EPA will notify BPP as to the activities that must be undertaken to complete the applicable Section. BPP will perform all activities described in the notice, subject to its right to invoke the dispute resolution procedures set forth in Part XVI (“Dispute Resolution”); and/or

b. If EPA concludes that the requirements of the applicable Section or Part have been completed in accordance with this Consent Decree, EPA will so certify in writing to BPP. This certification will constitute the certification of completion of the applicable Section or Part for purposes of this Consent Decree.

The parties recognize that ongoing obligations under such Sections remain and necessarily continue (*e.g.*, reporting, recordkeeping, training, auditing requirements), and that BPP’s certification is that it is in current compliance with all such obligations.

218. Certification of Completion: No Impediment to Stipulated Penalty Demand. Nothing in Paragraphs 216 and 217 will preclude the United States from seeking stipulated penalties for a violation of any of the requirements of the Consent Decree regardless of whether a Certification of Completion has been issued under Subparagraph 217.b. In addition, nothing in this Paragraph will permit BPP to fail to implement any ongoing obligations under the Consent Decree regardless of whether a Certification of Completion has been issued.

219. Termination: Conditions Precedent. This Consent Decree will be subject to termination upon motion by the Parties or upon motion by BPP acting alone under the conditions identified in this Paragraph. Prior to seeking termination, BPP must have completed and satisfied all of the following requirements of this Consent Decree:

- a. Installation of control technology systems as specified in this Consent Decree;
- b. Compliance with all provisions contained in this Consent Decree; such compliance may be established for specific parts of the Consent Decree in accordance with Paragraphs 216 and 217;
- c. Payment of all penalties and other monetary obligations due under the terms of the Consent Decree; unless all penalties and/or other monetary obligations owed to the United States or the State of Indiana are fully paid as of the time of the motion;
- d. Satisfaction of Part VII ("Supplemental Environmental Projects and Additional Injunctive Relief");
- e. Application for and receipt of permits incorporating the emission limits and standards established under this Consent Decree; and
- f. For parts of the Consent Decree for which Certificates of Compliance have not been issued in accordance with Paragraphs 216 and 217, operation for at least one (1) year of each unit in compliance with the emission limits established herein and certification of such compliance for each unit within the first progress report following the conclusion of the compliance period.

220. Termination: Procedure. At such time as BPP believes that it has satisfied the requirements for termination set forth in Paragraph 219, BPP will certify such compliance and completion to the United States and the State of Indiana in accordance with the certification language of Paragraph 216. Unless either the United States or the State of Indiana objects in writing with specific reasons within 120 days of receipt of BPP certification under this Paragraph, the Court may upon motion by BPP order that this Consent Decree be terminated. If either the United States or the State of Indiana objects to the certification by BPP, then the matter will be submitted to the Court for resolution under Part XVI (Retention of Jurisdiction/Dispute Resolution). In such case, BPP will bear the burden of proving that this Consent Decree should be terminated.

221. Optional Provision for Termination of Part V, Sections F and G (Heaters and Boilers). At any time after installation of all controls required by, and operation for one (1) year in compliance with the emission limits established pursuant to,

Part V, Sections F and G, BPP may move for termination of Part V, Sections F and G, as provided in this Paragraph:

- a. BPP shall prepare and submit to EPA and IDEM a Certification of Completion as provided in Paragraph 216 covering Part V, Sections F and G.
- b. In its Certification, BPP shall certify or demonstrate (as applicable) that it has satisfied the requirements of Paragraphs 219.a, 219.b, 219.c, 219.e and 219.f that are applicable to the requirements of Part V, Sections F and G.
  - i. With respect to the requirement in Paragraph 219.c for the payment of penalties and monetary obligations, BPP shall certify that it has complied with the requirements of Part IX (“Civil Penalty”) and Part X, Sections F and G (“Stipulated Penalties”).
  - ii. With respect to the requirement in Paragraph 219.e for the application and receipt of permits incorporating the emission limits and standards established under this Consent Decree, BPP shall include copies of the relevant portions of all applicable permits as required by Part V, Section P (“Incorporation of Consent Decree Requirements into Federally Enforceable Permits”).
- c. EPA shall review and respond to BPP’s Certification of Completion for Part V, Sections F and G as provided in Paragraph 217. If EPA concludes that the requirements of Part V, Sections F and G have been completed, EPA shall so notify BPP in lieu of certifying pursuant to Paragraph 217.b, and the Parties shall proceed to terminate Part V, Sections F and G as provided in Paragraph 220.
- d. Certification of Completion: No Impediment to Stipulated Penalty Demand. Nothing in this Paragraph will preclude the United States from seeking stipulated penalties for a violation of any of the requirements of Part V, Sections F or G regardless of whether a Certification of Completion has been issued under Subparagraph 221.c. In addition, no other provision of this Consent Decree may be terminated pursuant to this Paragraph.



222. Each of the undersigned representatives certifies that she or he is fully authorized to enter into this Consent Decree on behalf of the applicable Party, and to execute and to bind such Party to this Consent Decree.

#### **XVIII. INTEGRATION**

223. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Consent Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Consent Decree or the settlement it represents, nor shall it be used in construing the terms of this Consent Decree. Headings and Summaries in this Consent Decree are provided for convenience only and shall not affect the substance of any provision.

#### **XIX. SIGNATORIES**

224. Each of the undersigned representatives certifies that she or he is fully authorized to enter into this Consent Decree on behalf of the applicable Party, and to execute and to bind such Party to this Consent Decree.

Dated and entered this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

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UNITED STATES DISTRICT JUDGE

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF THE UNITED STATES OF AMERICA:**

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

5/11/12

IGNACIA S. MORENO  
Assistant Attorney General  
Environment and Natural Resources Division  
United States Department of Justice

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

5/16/12

SUSAN AKERS  
Senior Attorney  
Environmental Enforcement Section  
Environment and Natural Resources Division  
United States Department of Justice  
P.O. Box 7611  
Washington, DC 20044-7611

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

5/16/12

STEVEN D. SHERMER  
Trial Attorney  
Environment and Natural Resources Division  
United States Department of Justice

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY:**

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

3/28/12

\_\_\_\_\_  
CYNTHIA GILES

Assistant Administrator

Office of Enforcement and Compliance Assurance

United States Environmental Protection Agency

Washington, D.C. 20460

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

3/16/12

\_\_\_\_\_  
PAMELA J. MAZAKAS

Acting Director, Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

United States Environmental Protection Agency

Washington, D.C. 20460

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

3.15.12

\_\_\_\_\_  
JOHN FOGARTY

Associate Director, Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

United States Environmental Protection Agency

Washington, D.C. 20460

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY,  
REGION 5:**

Date: May 10, 2012

\_\_\_\_\_  
SUSAN HEDMAN  
US EPA Region 5  
Ralph Metcalfe Federal Building  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Date: May 2, 2012

\_\_\_\_\_  
ROBERT A. KAPLAN  
Regional Counsel  
US EPA Region 5  
Ralph Metcalfe Federal Building  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Date: May 2, 2012

\_\_\_\_\_  
WILLIAM WAGNER  
US EPA Region 5  
Ralph Metcalfe Federal Building  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR THE STATE OF INDIANA:**

GREGORY F. ZOELLER  
Indiana Attorney General


Date: May 14, 2012

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR THE  
SIERRA CLUB:** 

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

3-20-12

 \_\_\_\_\_  
DAVID MAIDENBERG  
Director, Sierra Club Hoosier Chapter

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR SAVE THE  
DUNES CONSERVATION FUND, INC., D/B/A  
SAVE THE DUNES:**

Date: 2/27/12

\_\_\_\_\_  
NICOLE BARKER  
Executive Director  
Save the Dunes

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR THE  
NATURAL RESOURCES DEFENSE  
COUNCIL:**

Date: 2/27/12

\_\_\_\_\_  
HENRY HENDERSON  
Director, Midwest Program  
Natural Resources Defense Council



Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR THE  
ENVIRONMENTAL INTEGRITY PROJECT:**

Date: 03/16/2012

\_\_\_\_\_  
ERIC SCHAEFFER  
Executive Director  
Environmental Integrity Project

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR THE  
ENVIRONMENTAL LAW AND POLICY  
CENTER:**

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

3/15/2012

\_\_\_\_\_  
HOWARD A. LEARNER  
President and Executive Director  
Environmental Law and Policy Center

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR SUSAN  
ELEUTERIO:**

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

3/19/12

\_\_\_\_\_  
SUSAN ELEUTERIO

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR PLAINTIFF-INTERVENOR TOM  
TSOURLIS:**

Date: 03-19-12

\_\_\_\_\_  
TOM TSOURLIS

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Consent Decree entered in the matter of *United States, et al., v. BP Products North America* (N.D. Ind.).

**FOR DEFENDANT BP PRODUCTS NORTH AMERICA INC.:**

Date: March 02, 2012

STEVE R. CORNELL  
President  
BP Products North America Inc.

Date: March 5, 2012

JAMES A. NOLAN, Jr., ESQ.  
Managing Counsel-HSSE  
BP America, Inc.

Date: Feb. 27, 2012

JOEL M. GROSS, ESQ.  
Arnold & Porter LLP

Date: February 28, 2012

WILLIAM L. PATBERG, ESQ.  
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**ATTORNEYS FOR BP PRODUCTS NORTH AMERICA INC.**