

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

**PELICAN REFINING COMPANY, L.L.C.
AI NO. 13058**

**PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT
LA. R.S. 30:2001, ET SEQ.**

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* **Settlement Tracking No**
* **SA-MM-15-0002**
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* **Enforcement Tracking Nos.**
* **AE-CN-07-0126**
* **HE-CN-07-0579**
* **AND OTHER MATTERS**
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SETTLEMENT

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SETTLEMENT

WHEREAS, the Secretary of the State of Louisiana Department of Environmental Quality (“LDEQ”), or her designee, pursuant to the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. (“the Act”) and the regulations promulgated thereto, is authorized to issue any Order necessary to effectuate the purposes of the Act;

WHEREAS, Pelican Refining Company, L.L.C. (“Pelican”) is a limited liability company authorized to do business in the State of Louisiana, and, as a limited liability company, is a person as that term is defined in La. R.S. 30:2004;

WHEREAS, Pelican owns and operates the Lake Charles Refinery (“Refinery”) located at 4646 Louisiana Highway 3059, Lake Charles, Calcasieu Parish, Louisiana;

WHEREAS, adjacent to and contiguous with the Refinery, Pelican owns a currently-idled independent industrial plant (“Asphalt Blending Facility”);

WHEREAS, for the purpose of this Settlement, Pelican’s Refinery and Asphalt Blending Facility are considered distinct, independent, mutually-exclusive, separately-permitted operating facilities, where the boundaries of the two entities are defined by the list of equipment, emissions units and operations contained in each facility’s minor source air permit issued by LDEQ;

WHEREAS, Pelican, in its operation of the Refinery, is subject to the Act and the regulations promulgated thereto;

WHEREAS, LDEQ issued to Pelican a Consolidated Compliance Order & Notice of Potential Penalty dated December 7, 2007, Enforcement Tracking No. AE-CN-07-0126;

WHEREAS, LDEQ issued to Pelican a Consolidated Compliance Order & Notice of Potential Penalty dated February 22, 2008, Enforcement Tracking No. HE-CN-07-0579;

WHEREAS, Pelican has identified and self-reported certain potential violations of

environmental regulations and agreed that resolution of these issues in this Settlement is the most appropriate means of resolving these matters;

WHEREAS, Pelican's Lake Charles Refinery has no fluidized catalytic cracking unit, no sulfur recovery unit, no tail gas unit, no sour water stripper and no amine unit;

WHEREAS, Pelican's Lake Charles Refinery is not currently in operation and shall not become subject to certain requirements of this Settlement unless and until all or a portion of the Lake Charles Refinery resumes operation;

WHEREAS, Pelican denies and continues to deny that it has violated any law or regulation with respect to its operation of the Refinery;

WHEREAS, Pelican has volunteered to enter into negotiations with LDEQ regarding the above-referenced enforcement actions and other matters;

WHEREAS, Pelican has agreed to undertake the installation of Qualifying Controls upon Startup of Refinery operations and also undertake enhancements to air pollution management practices at the Refinery to reduce air emissions;

NOW, THEREFORE, without any admission of fact or law, LDEQ and Pelican hereby agree as follows:

I. AUTHORITY TO ENTER INTO SETTLEMENT

1. The Secretary of LDEQ has the authority to enter into this Settlement pursuant to La. R.S. 30:2001, *et seq.*, including in pertinent part, La. R.S. 30:2025, La. R.S. 30:2050.3 and La. R.S. 30:2050.7.

II. APPLICABILITY AND BINDING EFFECT

2. The provisions of this Settlement shall apply to the Pelican Refinery. The provisions of this Settlement shall be binding upon LDEQ and Pelican and its officers, successors and

assigns.

3. Pelican agrees not to contest the validity of this Settlement in any subsequent proceeding to implement or enforce its terms.

4. Effective from the Effective Date of this Settlement until its termination, Pelican agrees that its Refinery is subject to the terms and conditions of this Settlement. From the Effective Date of this Settlement, Pelican shall give written notice of this Settlement to any successors in interest prior to the transfer of ownership or operation of any portion of the Lake Charles Refinery and shall provide a copy of this Settlement to any successor in interest. Pelican shall notify LDEQ in accordance with the notice provisions set forth in Paragraph 62 (Notice), of any successor in interest at least thirty (30) days prior to any such transfer. Pelican shall notify LDEQ at least ninety (90) days prior to Startup of operations at the Lake Charles Refinery. LDEQ may authorize shortening the duration of this ninety (90) day period upon receipt and consideration of a written request from Pelican or its successors which explains and justifies the need to expedite the Startup of the Refinery. Any such LDEQ approval to allow the Refinery to resume operations prior to the conclusion of the ninety (90) day period, which begins following Pelican's submittal of a Startup notification to LDEQ, shall be in the form of a written authorization letter from LDEQ to the Refinery.

5. Pelican 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 interest) in, the Lake Charles Refinery upon the execution by the transferee of a modification to this Settlement, which makes the terms and conditions of this Settlement that apply to such Lake Charles Refinery applicable to the transferee. In the event of any such transfer of ownership or other interest in the Lake Charles Refinery, Pelican shall be released from the obligations and

liabilities of this Settlement provided that, at the time of such transfer, the transferee has demonstrated to LDEQ the financial and technical ability to assume and has contractually agreed with Pelican to assume these obligations and liabilities.

6. Pelican shall provide a copy of the applicable provisions of this Settlement to each consulting or contracting firm that is retained to perform work required under this Settlement, upon execution of any contract relating to such work. No later than thirty (30) days after the Effective Date of this Settlement, Pelican also shall provide a copy of the applicable provisions of this Settlement to each consulting or contracting firm that Pelican already has retained to perform the work required under this Settlement. Copies of this Settlement do not need to be supplied to firms who are retained to supply materials or equipment to satisfy requirements under this Settlement.

III. OBJECTIVES

7. It is the purpose of LDEQ and Pelican in this Settlement to further the objectives of the Louisiana Environmental Quality Act.

IV. DEFINITIONS

8. Unless otherwise defined herein, terms used in this Settlement shall have the meaning given to those terms in the Louisiana Environmental Quality Act, La. R. S. 30:2001, *et seq.*, and the implementing regulations promulgated thereunder. The following terms used in this Settlement shall be defined for purposes of this Settlement and the reports and documents submitted pursuant thereto as follows:

A. "Asphalt Blending Facility" or "Asphalt Plant" shall mean the asphalt blending facility owned and or operated by Pelican in Lake Charles, Louisiana, where asphalt is blended with a polymer to make Polymer Modified Asphalt (PMA), which Pelican sells as a blending

feedstock to offsite Hot Mix Asphalt (HMA) Plants.

B. "Calendar quarter" shall mean the three month period ending on March 31st, June 30th, September 30th, and December 31st.

C. "CEMS" shall mean continuous emissions monitoring system.

D. "Controlled Heaters and Boilers" shall mean the heaters and boilers that are listed in Appendix B.

E. "CO" shall mean carbon monoxide.

F. "Current Generation Ultra-Low NOx Burners" shall mean those burners that are designed to achieve a NOx emission rate of 0.020 to 0.040 lb/MMBtu (HHV) when firing natural gas at 3% oxygen at full design load without air preheat, even if upon installation actual emissions exceed 0.040 lb/MMBtu (HHV).

G. "Day" or "Days" as used herein shall mean a calendar day or days.

H. "Effective Date of this Settlement" or "Effective Date" shall mean the date the Settlement has been executed by all parties.

I. "Flaring Device" shall mean a HC Flaring Device.

J. "Fuel Oil" shall mean any liquid fossil fuel with sulfur content of greater than 0.05% by weight.

K. "Hydrocarbon Flaring" or "HC Flaring" shall mean the combustion of refinery-generated gases in a Hydrocarbon Flaring Device.

L. "Hydrocarbon Flaring Device" or "HC Flaring Device" shall mean, a flaring device used to safely control (through combustion) any excess volume of a refinery-generated gas. The HC Flaring Devices currently in service at the Lake Charles Refinery are identified in Appendix A to this Settlement. To the extent that, during the duration of this Settlement, the

Lake Charles Refinery utilizes HC Flaring Devices other than those specified in Appendix A for the purpose of combusting any excess of a refinery-generated gas, those HC Flaring Devices shall be covered under this Settlement.

M. “Hydrocarbon Flaring Incident” or “HC Flaring Incident” shall mean the continuous or intermittent flaring of refinery-generated gases at a Hydrocarbon Flaring Device that results in the emission of sulfur dioxide equal to, or greater than five hundred (500) pounds in a 24-hour period; provided, however, that if five hundred (500) pounds or more of sulfur dioxide have been emitted in a twenty-four (24) hour period and Flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of five hundred (500) pounds of sulfur dioxide, then only one HC Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the HC Flaring Incident.

N. “Lake Charles Refinery” or “Refinery” shall mean the petroleum refinery owned and or operated by Pelican in Lake Charles, Louisiana.

O. “LDEQ” shall mean the Louisiana Department of Environmental Quality and any successor, departments or agencies of the State of Louisiana.

P. “Malfunction” shall mean, as specified in 40 C.F.R. Part 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.”

Q. “Next Generation Ultra-Low NO_x Burners” or “Next Generation ULNBs” shall mean those burners new to the market that are designed to achieve a NO_x emission rate of 0.012 to 0.020 lb/MMBtu (HHV) when firing natural gas at 3% stack oxygen at full design load without

air preheat.

R. "NOx" shall mean nitrogen oxides.

S. "O₂" shall mean oxygen.

T. "Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral.

U. "PM" shall mean particulate matter.

V. "Parties" shall mean LDEQ and Pelican.

W. "Pelican" shall mean Pelican Refining Company, L.L.C., its successors and assign, and its officers, directors, and employees in their capacities as such.

X. "Qualifying Controls" for the purposes of NOx control technology for heaters and boilers shall mean:

- i. retrofit of existing units with Current Generation or Next Generation Ultra-Low NOx Burner;
- ii. replacement of existing boiler(s) with units equipped with Current Generation or Next Generation Ultra-Low NOx Burners;
- iii. other technologies which Pelican demonstrates to LDEQ's satisfaction will reduce NOx emissions to 0.040 lbs. per MMBtu or lower; or
- iv. permanent shutdown of a heater or boiler with revocation of its operating permit.

Y. "Root Cause" shall mean the primary cause(s) of a Hydrocarbon Flaring Incident as determined through a process of investigation.

Z. "Scheduled Maintenance" shall mean any shutdown of any emission unit or control equipment that Pelican schedules at least fourteen (14) days in advance of the shutdown for the purpose of undertaking maintenance of such unit or control equipment.

AA. "Settlement" shall mean this Settlement including any and all appendices attached to

this Settlement.

BB. "Shutdown" shall mean the cessation of operation of equipment for any purpose.

CC. "SO₂" shall mean sulfur dioxide.

DD. "Startup" shall mean the setting in operation of equipment for any purpose.

V. AFFIRMATIVE RELIEF/ENVIRONMENTAL PROJECTS

9. NO_x Emissions Reductions from Heaters and Boilers.

A. Program Summary. Upon Startup of the equipment listed in Appendix B, Pelican shall implement a five-year program to reduce NO_x emissions from the heaters and boilers listed in Appendix B ("Controlled Heaters and Boilers") and shall demonstrate continuous compliance with lower NO_x emission limits through the use of source testing, CEMS, and/or parametric monitoring.

B. Control of NO_x Emissions from Heaters and Boilers. Upon Startup of the equipment listed in Appendix B, Pelican shall select one or any combination of the following "Qualifying Controls" to achieve the required NO_x emissions reductions from the heaters and boilers listed in Appendix B:

- i. retrofit of existing units with Current Generation or Next Generation Ultra-Low NO_x Burner;
- ii. replacement of existing boiler(s) with units equipped with Current Generation or Next Generation Ultra-Low NO_x Burners;
- iii. other technologies which Pelican demonstrates to LDEQ's satisfaction will reduce NO_x emissions to 0.040 lbs. per MMBtu or lower; or
- iv. permanent shutdown of a heater or boiler with revocation of its operating permit.

Pelican shall use Qualifying Controls to reduce potential NO_x emissions from the

Refinery heaters and boilers listed in Appendix B by at least 3.741 tons per year.

C. Testing and Monitoring NO_x Emissions from Controlled Heaters and Boilers.

Upon Startup of the equipment listed in Appendix B, Pelican shall monitor the Controlled Heaters and Boilers listed in Appendix B to meet the requirements of Paragraph 9.B as follows:

- i. For heaters and boilers with a heat input capacity greater than 150 mmBTU/hr (HHV), Pelican shall install or continue to operate CEMS to measure NO_x and O₂ by no later than the date of the installation of the applicable Qualifying Controls on the heater or boiler. Pelican shall install, certify, calibrate, maintain, and operate all CEMS required by this Paragraph 10 in accordance with the requirements of 40 C.F.R. §§ 60.11, 60.13 and Part 60 Appendix A and the applicable performance specification test of 40 C.F.R. Part 60 Appendices B and F. These CEMS will be used to demonstrate compliance with emission limits. Pelican shall make CEMS and process data available to LDEQ upon demand as soon as practicable;
- ii. For heaters and boilers with a heat input capacity of equal to or less than 150 mmBTU/hr (HHV) but greater than 100 mmBTU/hr (HHV), Pelican shall (a) install or continue to operate CEMS to measure NO_x and O₂ by no later than the date of the installation of the applicable Qualifying Controls on the heater or boiler; or (b) submit for LDEQ approval, by no later than 60 days after the date of installation of the applicable Qualifying Controls on the heater or boiler, a proposal for monitoring based on operating parameters, including but not limited to, firebox temperature, air preheat temperature, heat input rate, and combustion O₂; Pelican shall evaluate the necessity of using firebox or bridgewall

temperatures and additional operating parameters and agrees to use such parameters as a means of monitoring performance where Pelican and LDEQ mutually-agree to their effectiveness; and

- iii. For heaters and boilers with a heat input capacity of equal to or less than 100 mmBTU/hr (HHV), Pelican shall, by no later than twenty-one (21) days after the date of installation of the applicable Qualifying Controls, contact LDEQ's Air Permits Division, Manufacturing Section, to schedule a pre-test conference. Pelican shall, by no later than 60 days after the date of the installation of the applicable Qualifying Controls, conduct an initial performance test. The results of this test shall be reported based upon the average of three (3) one hour testing periods and shall be used to develop representative operating parameters for each unit, which will be used as indicators of compliance.

D. Establishing NOx Permit Limits for Heaters and Boilers. Within 120 days after the Startup of the operation of any Qualifying Controls required by this Paragraph 9, Pelican shall submit a permit application to LDEQ in which Pelican proposes NOx emission limits in units of lb NOx/MMBtu on a 3-hour average basis. The proposed permit limits shall be based on actual performance as demonstrated by CEMS and/or performance tests, and shall be low enough to ensure proper operation of the Qualifying Controls and high enough to provide a reasonable certainty of compliance.

E. Reporting and Recordkeeping. Commencing in 2015 by no earlier than December 1st but no later than December 31st of each calendar year, Pelican shall submit a report to LDEQ describing the progress towards installation of Qualifying Controls required by this Paragraph 9 and other requirements of this Paragraph. This report shall contain:

- i. A list of all Controlled Heaters and Boilers on which Qualifying Controls were installed;
- ii. The type of Qualifying Controls that was installed on each heater and boiler with a detailed description of the manufacturer name and model and the designed emission factors;
- iii. The results of all performance tests conducted on each heater and boiler to date;
- iv. A list of all heaters and boilers scheduled to have Qualifying Controls installed during the next calendar year, the projected date of installation, and the type of Qualifying Controls that will be installed on those units; and
- v. An identification of proposed and established permit limits applicable to each heater or boiler for which Qualifying Controls has been installed pursuant to this Paragraph.

10. SO₂ Emissions Reductions from and NSPS Applicability of Heaters and Boilers.

A. General. Pelican shall undertake measures to reduce SO₂ emissions from refinery heaters and boilers by restricting H₂S in refinery fuel gas and by agreeing not to continue and/or commence the burning of Fuel Oil except under the provisions set forth herein.

B. NSPS Applicability of Heaters and Boilers. Upon the Effective Date of this Settlement, the heaters and boilers at the Lake Charles Refinery shall be affected facilities, as that term is used in 40 C.F.R. Part 60, Subparts A and J and shall be subject to and comply with the requirements of NSPS Subparts A and J. By no later than the Effective Date of this Settlement, Pelican shall install, certify, calibrate, maintain and operate a H₂S fuel gas CEMS at the Lake Charles Refinery in accordance with the requirements of 40 C.F.R. §§ 60.11, 60.13 and Part 60 Appendix A, and the applicable performance specification test of 40 C.F.R. Part 60

Appendices B and F. This CEMS will be used to demonstrate compliance with emission limits.

i. Compliance with this Settlement constitutes compliance with certain NSPS Subpart A requirements. For each fuel gas combustion device that becomes an “affected facility,” as that term is used in 40 C.F.R. Part 60, Subparts A and J, pursuant to this Paragraph 10, compliance with the relevant monitoring requirements of this Settlement for such fuel gas combustion devices will satisfy the notice requirements of 40 C.F.R. 60.7(a) and the initial performance test requirements of 40 C.F.R. 60.8(a).

ii. If, prior to the termination of this Settlement, any heater, boiler or other fuel gas combustion device becomes subject to NSPS Subpart Ja for a particular pollutant due to a “modification” (as that term is defined in the final Subpart Ja rule), the modified affected facility shall be subject to and comply with NSPS Subpart Ja in lieu of NSPS Subpart J for that regulated pollutant to which a standard applies as a result of the modification.

iii. If, prior to the termination of this Settlement, any heater, boiler or other fuel gas combustion device becomes subject to NSPS Subpart Ja due to a “reconstruction” (as that term is defined in the final Subpart Ja rule), the reconstructed facility shall be subject to and comply with NSPS Subpart Ja for all pollutants in lieu of Subpart J.

C. Elimination of Fuel Oil Burning. From the Effective Date of this Settlement through termination, Pelican shall continue not to burn Fuel Oil in any combustion unit.

11. NSPS Applicability of and Compliance for Flaring Devices.

A. Identification of and NSPS Applicability for Flaring Devices. Pelican owns and operates the Flaring Device identified in Appendix A to this Settlement, which is currently not in operation. Consistent with the terms of this Paragraph 11 and the schedule in Appendix A, the Flaring Device listed in Appendix A shall be an affected facility, as that term is used in NSPS, 40

C.F.R. Part 60, and shall be subject to and comply with the requirements of 40 C.F.R. Part 60, Subparts A and J for fuel gas combustion devices.

i. If prior to the termination of this Settlement, a Flaring Device becomes subject to NSPS Subpart Ja for a particular pollutant due to a “modification” (as that term is defined in the final Subpart Ja rule), the modified affected facility shall be subject to and comply with NSPS Subpart Ja, in lieu of NSPS Subpart J, for that regulated pollutant to which a standard applies as a result of the modification.

ii. If prior to the termination of this Settlement, a Flaring Device becomes subject to NSPS Subpart Ja due to a “reconstruction” (as that term is defined in the final Subpart Ja rule), the reconstructed facility shall be subject to and comply with NSPS Subpart Ja for all pollutants in lieu of Subpart J.

B. Compliance with the Emission Limit at 40 C.F.R. § 60.104(a)(1)

i. Continuous or Intermittent, Routinely-Generated Refinery Fuel Gases. For continuous or intermittent, routinely-generated refinery fuel gases that are combusted in any Flaring Device identified in Appendix A, Pelican shall either take the Flaring Device that is associated with such a gas stream out of service or shall comply with the emission limit at 40 C.F.R. § 60.104(a)(1) upon the Effective Date of this Settlement.

ii. Non-Routinely Generated Gases. The combustion of gases generated by the Startup, Shutdown, or Malfunction of a refinery process unit or released to a Flaring Device as a result of relief valve leakage or an emergency Malfunction shall be exempt from the requirement to comply with 40 C.F.R. § 60.104(a)(1).

C. Good Air Pollution Control Practices. For all Flaring Devices identified in Appendix A, Pelican shall comply with the NSPS obligation to implement good air pollution

control practices as required by 40 C.F.R. § 60.11(d) to minimize HC Flaring Incidents.

D. Monitoring the Flaring Devices and Reporting. All Flaring Devices that Pelican keeps in service to combust continuous or intermittent, routinely-generated refinery fuel gases shall be equipped with a H₂S CEMS as required by 40 C.F.R. § 60.105(a)(4) or with a parametric monitoring system approved by EPA as an alternative monitoring system under 40 C.F.R. § 60.13(i). Pelican shall comply with the reporting requirements of 40 C.F.R. Part 60, Subpart J, for all such Flaring Devices.

12. Control of Hydrocarbon Flaring Incidents. By no later than one year after the Effective Date of this Settlement, Pelican shall identify the causes of HC Flaring Incidents that occurred between January 1, 2007 and December 31, 2011, if any, at the Refinery. Pelican shall identify and implement corrective actions to minimize the number and duration of HC Flaring Incidents. For future Hydrocarbon Flaring Incidents, Pelican shall follow the investigative, reporting, and corrective action procedures as outlined in Paragraphs 12.A – 12.B and use the formulas in Paragraph 12.C, for calculating the quantity and rate of sulfur dioxide emissions during HC Flaring Incidents.

A. Investigation and Reporting. No later than forty-five (45) days following the end of a HC Flaring Incident, Pelican shall submit to LDEQ a report that sets forth the following:

- i. The date and time that the HC Flaring Incident started and ended. To the extent that the HC Flaring Incident involved multiple releases either within a twenty-four (24) hour period or within subsequent, contiguous, non-overlapping twenty-four (24) hour periods, Pelican shall set forth the starting and ending dates and times of each release;
- ii. An estimate of the quantity of sulfur dioxide that was emitted and the calculations

- that were used to determine that quantity;
- iii. The steps, if any, that Pelican took to limit the duration and/or quantity of sulfur dioxide emissions associated with the HC Flaring Incident;
 - iv. A detailed analysis that sets forth the Root Cause and all contributing causes of that HC Flaring Incident, to the extent determinable;
 - v. An analysis of the measures, if any, that are available to reduce the likelihood of a recurrence of an HC Flaring Incident resulting from the same Root Cause or contributing causes in the future. The analysis shall discuss the alternatives, if any, that are available, the probable effectiveness and cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation and maintenance changes shall be evaluated. If Pelican concludes that corrective action(s) is (are) required under Paragraph 12.B, the report shall include a description of the action(s) and, if not already completed, a schedule for its (their) implementation, including proposed commencement and completion dates. If Pelican concludes that corrective action is not required under Paragraph 12.B, the report shall explain the basis for that conclusion;
 - vi. To the extent that investigations of the causes and/or possible corrective actions still are underway on the due date of the report, a statement of the anticipated date by which a follow-up report fully conforming to the requirements of this Paragraph 12.A.iv and 12.A.v shall be submitted; provided, however, that if Pelican has not submitted a report or a series of reports containing the information required to be submitted under this Paragraph within the 45 day time period set forth in Paragraph 12.A (or such additional time as LDEQ may allow) after the

due date for the initial report for the HC Flaring Incident, the stipulated penalty provisions of Paragraph 28 shall apply, but Pelican shall retain the right to dispute, under the dispute resolution provision of this Settlement, any demand for stipulated penalties that was issued as a result of Pelican's failure to submit the report required under this Paragraph within the time frame set forth. Nothing in this Paragraph shall be deemed to excuse Pelican from its investigation, reporting, and corrective action obligations under this Section for any HC Flaring Incident which occurs after a HC Flaring Incident for which Pelican has requested an extension of time under this Paragraph 12.A.vi.

- vii. To the extent that completion of the implementation of any identified corrective action is not finalized at the time of the submission of the report required under this Paragraph, then, by no later than thirty (30) days after completion of the implementation of corrective action(s), Pelican shall submit a report identifying the corrective action(s) taken and the dates of commencement and completion of implementation.

B. Corrective Action.

i. In response to any HC Flaring Incident, Pelican shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of that HC Flaring Incident.

ii. If LDEQ does not notify Pelican in writing within thirty (30) days of receipt of the report(s) required by Paragraph 12.A that it objects to one or more aspects of the proposed corrective action(s), if any, and schedule(s) of implementation, if any, then that (those) action(s)

and schedule(s) shall be deemed acceptable for purposes of compliance with Paragraph 12.B.i of this Settlement. LDEQ does not, however, by its signing of this Settlement or by its failure to object to any corrective action that Pelican may take in the future, warrant or aver in any manner that any corrective actions in the future shall result in compliance with the provisions of the Louisiana Environmental Quality Act or its implementing regulations. Notwithstanding LDEQ's review of any plans, reports, corrective measures or procedures under this Paragraph 12, Pelican shall remain solely responsible for non-compliance with the Louisiana Environmental Quality Act and its implementing regulations. Nothing in this Paragraph 12 shall be construed as a waiver of LDEQ's rights under the Louisiana Environmental Quality Act and its regulations for future violations of the Act or its regulations.

iii. If LDEQ does object, in whole or in part, to the proposed corrective action(s) and/or the schedule(s) of implementation, or, where applicable, to the absence of such proposal(s) and/or schedule(s), it shall notify Pelican of that fact within thirty (30) days following receipt of the report(s) required by Paragraph 12.A above. If LDEQ and Pelican cannot agree on the appropriate corrective action(s), if any, to be taken in response to a particular HC Flaring Incident, either Party may invoke the Dispute Resolution provisions of Section XV of this Settlement.

iv. Nothing in Paragraph 12 shall be construed to limit the right of Pelican to take such corrective actions as it deems necessary and appropriate immediately following a HC Flaring Incident or in the period during preparation and review of any reports required under this Section.

C. Miscellaneous.

i. Calculation of the Quantity of Sulfur Dioxide Emissions resulting from HC

Flaring. For purposes of this Settlement, the quantity of SO₂ emissions resulting from HC Flaring shall be calculated by the following formula:

$$\text{Tons of SO}_2 = [\text{FR}][\text{TD}][\text{ConcH}_2\text{S}][8.44 \times 10^{-5}].$$

The quantity of SO₂ emitted shall be rounded to one decimal point. (Thus, for example, for a calculation that results in a number equal to 10.050 tons, the quantity of SO₂ emitted shall be rounded to 10.1 tons.) For purposes of determining the occurrence of, or the total quantity of SO₂ emissions resulting from, a HC Flaring Incident that is comprised of intermittent HC Flaring, the quantity of SO₂ emitted shall be equal to the sum of the quantities of SO₂ flared during each such period of intermittent HC Flaring.

ii. Calculation of the Rate of SO₂ Emissions During HC Flaring. For purposes of this Settlement, the rate of SO₂ emissions resulting from HC Flaring shall be expressed in terms of pounds per hour, and shall be calculated by the following formula:

$$\text{ER} = [\text{FR}][\text{ConcH}_2\text{S}][0.169].$$

The emission rate shall be rounded to one decimal point. (Thus, for example, for a calculation that results in an emission rate of 19.95 pounds of SO₂ per hour, the emission rate shall be rounded to 20.0 pounds of SO₂ per hour; for a calculation that results in an emission rate of 20.05 pounds of SO₂ per hour, the emission rate shall be rounded to 20.1.)

iii. Meaning of Variables and Derivation of Multipliers used in the Equations in Paragraph 12.C.i-ii:

ER =	Emission Rate in pounds of SO ₂ per hour
FR =	Average Flow Rate to Flaring Device(s) during the Flaring Incident, in standard cubic feet per hour
TD =	Total Duration of Flaring Incident in hours
ConcH ₂ S =	Average Concentration of Hydrogen Sulfide in gas during the

Flaring Incident (or immediately prior to Flaring if all gas is being flared) expressed as a volume fraction (scf H₂S/scf gas)

$$8.44 \times 10^{-5} = \frac{[\text{lb mole H}_2\text{S}/379 \text{ scf H}_2\text{S}][64 \text{ lbs SO}_2/\text{lb mole H}_2\text{S}][\text{Ton}/2000 \text{ lbs}]}{[\text{lb mole H}_2\text{S}/379 \text{ scf H}_2\text{S}][1.0 \text{ lb mole SO}_2/1 \text{ lb mole H}_2\text{S}][64 \text{ lb SO}_2/1.0 \text{ lb mole SO}_2]}$$

$$0.169 = \frac{[\text{lb mole H}_2\text{S}/379 \text{ scf H}_2\text{S}][64 \text{ lbs SO}_2/\text{lb mole H}_2\text{S}][\text{Ton}/2000 \text{ lbs}]}{[\text{lb mole H}_2\text{S}/379 \text{ scf H}_2\text{S}][1.0 \text{ lb mole SO}_2/1 \text{ lb mole H}_2\text{S}][64 \text{ lb SO}_2/1.0 \text{ lb mole SO}_2]}$$

The flow of gas to the HC Flaring Device(s) (“FR”) shall be as measured by a relevant flow meter or determined by reliable engineering calculations for flow estimation. Hydrogen sulfide concentration (“ConcH₂S”) shall be determined from H₂S CEMS data, knowledge of the sulfur content of the process gas being flared, by direct measurement via tutwiler or draeger tube analysis or by any other method approved by LDEQ. In the event that any of these data assessment alternatives are unavailable or inaccurate, any missing H₂S concentration data shall be estimated using best engineering judgment. The report required under Paragraph 12.A shall include the data used in the calculation and an explanation of the basis for any estimates of missing data points.

13. Benzene Waste NESHAP Program Enhancements.

In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart FF (“Benzene Waste NESHAP” or “BWN” or “Subpart FF”), Pelican agrees to undertake, at the Lake Charles Refinery, the measures set forth in Paragraphs 13.B through 13.N to ensure continuing compliance with Subpart FF and to minimize or eliminate fugitive benzene waste emissions.

A. Current Compliance Status. As of the Effective Date of this Settlement, Pelican believes that the Lake Charles Refinery has a Total Annual Benzene (“TAB”) of less than 1 Mg/yr. Pelican will review and verify that the TAB at the Lake Charles Refinery is consistent with the requirements of Paragraph 13.C.

B. Refinery Compliance Status Changes. If at any time from the Effective Date of this Settlement through its termination, the Lake Charles Refinery is determined to have a TAB equal to or greater than 10 Mg/yr, Pelican shall comply with the compliance option set forth at 40 C.F.R. 61.342(e) (hereinafter referred to as the “6 BQ compliance option”).

C. One-Time Review and Verification of the Lake Charles Refinery’s TAB.

i. **Phase One of the Review and Verification Process.** By no later than 270 days from the Effective Date of this Settlement, Pelican shall complete a review and verification of the TAB of the Lake Charles Refinery. For the Lake Charles Refinery, the review and verification process shall include, but not be limited to: (i) an identification of each waste stream that is required to be included in the Lake Charles Refinery’s TAB (e.g., slop oil, tank water draws, spent caustic, desalter rag layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround wastes); (ii) a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream; (iii) an identification of the benzene concentration in each waste stream, including sampling for benzene concentration at no less than 10 waste streams at the Lake Charles Refinery consistent with the requirements of 40 C.F.R. 61.355(c)(1) and (3); provided however, that previous analytical data or documented knowledge of waste streams may be used [40 C.F.R. 61.355(c)(2)] for streams not sampled; and (iv) an identification of whether or not the stream is controlled consistent with the requirements of Subpart FF. By no later than thirty (30) days following the completion of Phase One of the review and verification process, Pelican shall submit a Benzene Waste NESHAP Compliance Review and Verification Report (“BWN Compliance Review and Verification Report”) that sets forth the results of Phase One, including but not limited to the items identified in (i) through (iv)

of this Paragraph 13.C.i.

ii. Phase Two of the Review and Verification Process. Based on LDEQ's review of the BWN Compliance Review and Verification Report(s), LDEQ may select up to 20 additional waste streams at the Lake Charles Refinery for sampling for benzene concentration. Pelican will conduct the required sampling and submit the results to LDEQ within ninety (90) days of receipt of LDEQ's request. Pelican will use the results of this additional sampling to recalculate the TAB and to amend the BWN Compliance Review and Verification Report, as needed. To the extent that LDEQ requires Pelican to re-sample a Phase One waste stream as part of this Phase Two review, Pelican may average the results of the two sampling events. Pelican shall submit an amended BWN Compliance Review and Verification Report within ninety (90) days following the date of the completion of the required Phase Two sampling, if Phase Two sampling is required by LDEQ.

D. Implementation of Actions Necessary to Correct Non-Compliance.

i. Amended TAB Reports. If the results of the BWN Compliance Review and Verification Report indicate that the Lake Charles Refinery has failed to file the reports required by 40 C.F.R. 61.357(c), or that the Lake Charles Refinery's most recently-filed report is inaccurate and/or does not satisfy the requirements of Subpart FF, Pelican shall submit, by no later than sixty (60) days after completion of the BWN Compliance Review and Verification Report, an amended TAB report to LDEQ. Pelican's BWN Compliance Review and Verification Report shall be deemed an amended TAB report for purposes of Subpart FF reporting to LDEQ.

ii. If the results of the BWN Compliance Review and Verification Report indicate that the Lake Charles Refinery has a TAB equal to or greater than 10 Mg/yr, Pelican shall submit to

LDEQ by no later than 180 days after completion of the BWN Compliance Review and Verification Report, a plan that identifies with specificity the compliance strategy and schedule that Pelican will implement to ensure that the Lake Charles Refinery complies with the 6 BQ compliance option as soon as practicable.

iii. Review and Approval of Plans Submitted Pursuant to Paragraph 13.D.ii. Any plan submitted pursuant to Paragraph 13.D.ii shall be subject to the approval of, disapproval of, or modification by LDEQ. Within sixty (60) days after receiving any notification of disapproval or request for modification from LDEQ, Pelican shall submit to LDEQ a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, Pelican shall implement the plan. Disputes arising under this Paragraph 13.D.iii. shall be resolved in accordance with the dispute resolution provisions of this Settlement.

iv. Certification of Compliance with the 6 BQ Compliance Option. By no later than thirty (30) days after completion of the implementation of all actions, if any, required pursuant to Paragraph 13.D.ii or pursuant to Paragraph 13.J.vi to come into compliance with the 6 BQ Compliance Option, Pelican shall submit a report to LDEQ that the Lake Charles Refinery complies with the Benzene Waste NESHAP.

v. TAB is under 1 Mg/Yr. If the results of the BWN Compliance Review and Verification Report indicate that the Lake Charles Refinery has a TAB of under 1 Mg/yr, the Lake Charles Refinery shall comply with the Benzene Waste NESHAP regulations applicable to the Refinery.

E. Annual Program. By no later than 180 days after the Effective Date of this Settlement, Pelican shall establish an annual program of reviewing process information for the Lake Charles Refinery, including but not limited to construction projects, to ensure that all new

benzene waste streams are included in the Refinery's waste stream inventory.

F. **Benzene Spills.** For each spill that occurs after the Effective Date of this Settlement at the Lake Charles Refinery during a calendar year, Pelican shall review such spills to determine if benzene waste was generated. Pelican shall include benzene generated by such spills in the TAB for the Lake Charles Refinery.

G. **Training.**

i. If and when the Lake Charles Refinery's TAB reaches 1 Mg/yr or more, then by no later than ninety (90) days from the receipt of the information showing that the Lake Charles Refinery's TAB has reached or exceeded 1 Mg/yr, Pelican shall develop and begin implementation of annual (i.e., once each calendar year) training for all employees asked to draw benzene waste samples.

ii. If and when the Lake Charles Refinery's TAB reaches 10 Mg/yr or more, Pelican shall complete the development of standard operating procedures for all control equipment used to comply with the Benzene Waste NESHAP. Pelican shall complete an initial training program regarding these procedures for all operators assigned to this equipment. Comparable training shall be provided to any persons who subsequently become operators, prior to their assumption of this duty. "Refresher" training shall be performed on a periodic basis. Pelican shall propose a schedule for the initial and refresher training at the same time that Pelican proposes a plan, pursuant to either Paragraph 13.D.ii, or Paragraph 13.J.vi, that identifies the compliance strategy and schedule that Pelican will implement to come into compliance with the 6 BQ compliance option.

iii. As part of Pelican's BWN training program, the Refinery must ensure that the employees of any contractors hired to perform the requirements of this Paragraph are properly

trained to implement all provisions of this Paragraph at the Lake Charles Refinery.

H. Waste/Slop/Off-Spec Oil Management.

i. By no later than ninety (90) days after the Startup of the Lake Charles Refinery, Pelican shall submit to LDEQ, for the Lake Charles Refinery, schematics that: (a) depict the waste management units (including sewers) that handle, store, and transfer waste/slop/off-spec oil streams; (b) identify the control status of each waste management unit; and (c) show how such oil is transferred within the Refinery. Representatives from Pelican and LDEQ thereafter may confer about the appropriate characterization of the Refinery's waste/slop/off-spec oil streams for the waste management units handling such oil streams, for purposes of the Lake Charles Refinery's TAB calculation. At a mutually-agreed upon time, Pelican shall submit, if necessary, revised schematics that reflect the agreements between LDEQ and Pelican regarding the characterization of these oil streams and the appropriate control standards.

ii. Organic Benzene Waste Streams. For the Lake Charles Refinery, if and when the Refinery's TAB reaches 10 Mg/yr and a compliance strategy is approved, all waste management units handling "organic" benzene wastes, as defined in Subpart FF, shall meet the applicable control standards of Subpart FF. If, as a result of the discussions between LDEQ and Pelican pursuant to Paragraph 13.H.i, LDEQ and Pelican agree that controls not already in place are necessary on any waste management unit handling organic benzene wastes, the Parties shall agree, in writing, to a schedule, not to exceed two years, for the completion of the installation of the necessary controls.

iii. Aqueous Benzene Waste Streams. For purposes of calculating the Lake Charles Refinery's TAB pursuant to the requirements of 40 C.F.R. 61.342(a), Pelican shall include all waste/slop/off-spec oil streams that become "aqueous" until such streams are recycled to a

process or put into a process feed tank (unless the tank is used primarily for the storage of wastes). If and when the Lake Charles Refinery's TAB reaches 10 Mg/yr, then, for purposes of complying with the 6BQ compliance option, all waste management units handling aqueous benzene waste streams shall either meet the applicable control standards of Subpart FF or shall have their uncontrolled benzene quantity count toward the applicable 6 megagram per year BQ limit specified in the 6BQ compliance option.

iv. Plan to Quantify Uncontrolled Waste/Slop/Off-Spec Oil Streams. By no later than ninety (90) days after LDEQ has approved the schematics (as revised if necessary) required under Paragraph 13.H.i., Pelican shall submit, for the Lake Charles Refinery, a plan to quantify waste/slop/off-spec oil movements for all benzene waste streams which are not "controlled" as that term is used in Subpart FF. LDEQ will review the plan and may recommend revisions consistent with Subpart FF. Upon plan approval, Pelican shall maintain records quantifying such movements of waste/slop/off-spec oil.

v. Disputes under this Paragraph 13.H. shall be resolved in accordance with the dispute resolution provisions of this Settlement.

I. End of Line Sampling (If the Lake Charles Refinery is Found to Have a TAB of 10 Mg/yr or More). The provisions of this Paragraph 13.I shall apply after the Lake Charles Refinery's TAB reaches or exceeds 10 Mg/yr and after the Lake Charles Refinery has completed implementation of an approved compliance plan submitted pursuant to either Paragraph 13.D.ii, or Paragraph 13.J.vi. The provisions shall continue to apply through termination ("Applicability Dates for Paragraph 13.I.").

i. By no later than sixty (60) days after the certification required by Paragraph 13.D.iv, Pelican shall submit to LDEQ for approval a plan for an "end of the line" ("EOL") determination

of the benzene quantity in uncontrolled waste streams. Pelican's proposed plan shall include, but not be limited to, sampling locations, methods for flow calculations, and the assumed volatilization rate(s) to be used in calculating the uncontrolled benzene quantity. Any disputes regarding plan approval under this Paragraph 13.I. shall be resolved in accordance with the dispute resolution provisions of this Settlement.

ii. If, during the Applicability Dates for Paragraph 13.I, changes in processes, operations, or other factors lead Pelican to conclude that the approved sampling locations, approved methods for determining flow calculations, and/or assumed volatilization rates no longer provide an accurate measure of the Lake Charles Refinery's EOL benzene quantity, Pelican shall submit a revised plan to LDEQ for approval.

iii. On a monthly basis, Pelican shall conduct EOL sampling, commencing during the first month of the first full calendar quarter after Pelican receives written approval from LDEQ of the sampling plan for the Lake Charles Refinery. Pelican shall take, and have analyzed, three representative samples from each approved sampling location. Pelican shall use the average of these three samples as the benzene concentration for the stream at the approved location. Based on the EOL monthly sampling results, the approved flow calculations, and the volatilization assumptions, Pelican shall calculate the sum of the EOL benzene quantity for the three months contained within the respective quarter. Nothing in this Paragraph 13.I shall preclude Pelican from taking representative samples more frequently within any calendar month, provided that Pelican identifies the basis for the additional samples. Such samples shall be included in calculating the average monthly EOL benzene quantity.

iv. If the sum of the EOL benzene quantity for the three month period contained within a quarter equals or exceeds 1.2 Mg, Pelican shall take and have analyzed three representative

samples, drawn on separate days during the subsequent calendar quarter, of each uncontrolled stream containing benzene over 0.05 Mg/yr, as identified in the later of (i) the final BWN Compliance Review and Verification Report; or (ii) the most recently submitted TAB report (hereinafter “Sampling of >0.05 Streams”). Pelican shall undertake Sampling of >0.05 Streams for the purpose of trying to identify the cause or source of the potentially elevated benzene quantities.

v. Pelican shall continue to undertake Sampling of >0.05 Streams in the second quarter after the EOL benzene quantity exceeded 1.2 Mg unless either: (i) the EOL benzene quantity in the first quarter of the Sampling of > 0.05 Streams demonstrates that the Lake Charles Refinery’s EOL benzene quantity, prorated on a yearly basis, will be below 4.8 Mg/yr; or (ii) Pelican discovers and corrects the cause of the potentially elevated benzene quantities and LDEQ concurs in the diagnosis and corrective measures of Pelican.

vi. If the sum of the EOL benzene quantity for two consecutive quarters indicates that the EOL benzene quantity, prorated on a yearly basis, will exceed 4.8 Mg/yr, and Pelican has not discovered and corrected the cause of the potentially elevated benzene through the process of Sampling of >0.05 Streams, Pelican shall take and have analyzed three representative samples, drawn on separate days during the third calendar quarter, of each uncontrolled stream containing benzene over 0.03 Mg/yr, as identified in the later of (i) the final BWN Compliance Review and Verification Report; or (ii) most recently submitted TAB report (hereinafter “Sampling of > 0.03 Streams”). Pelican shall undertake Sampling of >0.03 Streams for the purpose of continuing to try to identify the cause or source of the potentially elevated benzene quantities.

vii. Sampling of >0.05 and/or >0.03 Streams shall not be required if Pelican advises LDEQ, and LDEQ concurs, that the potentially elevated benzene quantities can be attributed to

an identifiable event, such as a spill to the sewer or a turnaround. After such an identifiable event, however, Pelican shall calculate its projected uncontrolled benzene quantity for the calendar year in which the event occurs. If that projection is greater than 6 Mg/yr, then Pelican shall submit to LDEQ for approval a plan that either (a) identifies with specificity the compliance strategy and schedule that Pelican will implement to ensure that the Lake Charles Refinery's BQ does not exceed 6 Megagrams of uncontrolled benzene for the calendar year; or (b) if as a result of the quantity of benzene released during the event Pelican is unable to propose a plan to ensure that the Refinery's uncontrolled benzene for the calendar year will be 6 Megagrams per year or less, then Pelican shall identify the actions to be taken to minimize the uncontrolled benzene for the remainder of the year. Pelican shall submit this plan within thirty (30) days after the end of the quarter which resulted in a BQ projection of greater than 6 Mg/yr of uncontrolled benzene. Sampling of >0.05 and/or >0.03 Streams shall not excuse Pelican from continuing to take monthly EOL samples.

viii. If in three consecutive quarters (a) the sum of the benzene quantity indicates that the EOL benzene quantity, prorated on a yearly basis, will exceed 4.8 Mg per year; or (b) the sampling of >0.05 and/or >0.03 streams indicates that projected uncontrolled benzene for the calendar year will exceed 6 Megagrams per year, and Pelican has not discovered and corrected, with LDEQ's concurrence, the cause of the potentially elevated benzene through the process of Sampling of >0.05 and >0.03 Streams, then, in the fourth quarter, Pelican shall retain a third party contractor to undertake a comprehensive TAB study and compliance review ("Third-Party TAB Study and Compliance Review"). By no later than the last day of the fourth quarter, Pelican shall submit a proposal to LDEQ that identifies the contractor, the contractor's scope of work, and the contractor's schedule for the Third-Party TAB Study and Compliance Review.

Unless, within thirty (30) days after LDEQ receives this proposal, LDEQ disapproves or seeks modifications, Pelican shall authorize the contractor to commence work. By no later than thirty (30) days after Pelican receives the results of the Third-Party TAB Study and Compliance Review, Pelican shall submit the results to LDEQ. LDEQ and Pelican subsequently shall discuss informally the results of the Third-Party TAB Study and Compliance Review. By no later than one-hundred twenty (120) days after Pelican receives the results of the Third-Party TAB Study and Compliance Review, or such other time as Pelican and LDEQ may agree, Pelican shall submit to LDEQ for approval a plan that addresses any deficiencies identified in the Third-Party TAB Study and Compliance Review and any deficiencies that LDEQ brought to the attention of Pelican as a result of the Third-Party TAB Study and Compliance Review. The review and approval of this Plan shall be done in accordance with Paragraph 13.D.iii of this Settlement. Certification of Compliance shall be done in accordance with Paragraph 13.D.iv.

J. End of Line Sampling (TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr). The provisions of this Paragraph 13.J shall apply from the date that the final BWN Compliance Review and Verification Report submitted for the Lake Charles Refinery pursuant to Paragraph 13.C shows that the Refinery's TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr, through the earlier of: (1) the time that the Refinery reaches a TAB of 10 Mg/yr or more (in which case, the provisions of Paragraph 13.I shall begin to apply); or (2) termination of this Settlement.

i. Pelican shall, once per calendar year, conduct sampling, consistent with the requirements of 40 C.F.R. 61.355(c)(1) and (3), of all waste streams containing benzene that contributed 0.05 Mg/yr or more to the TAB set forth in the final BWN Compliance Review and Verification Report or in the previous year's TAB, whichever is later;

ii. By no later than ninety (90) days after the date of submitting the final BWN Compliance Review and Verification Report, at LDEQ's option, representatives of LDEQ may meet at the Lake Charles Refinery with representatives from Pelican for the purpose of identifying an appropriate procedure for conducting EOL sampling and measuring EOL benzene quantities at that Refinery. LDEQ and Pelican shall confer about potential EOL sample locations and shall review process and flow information and oil movement transfers. By no later than thirty (30) days after LDEQ has met with Pelican at the Refinery, Pelican shall submit a plan to LDEQ for approval that contains proposed sampling locations and methods for flow calculations to be used in the EOL determination of benzene quantity. Any disputes regarding plan approval under this Paragraph 13.J shall be resolved in accordance with the dispute resolution provisions of this Settlement. If, during the life of this Settlement, changes in processes, operations, or other factors lead Pelican to conclude that either the approved sampling locations and/or the approved methods for determining flow calculations no longer provide an accurate measure of the Refinery's EOL benzene quantity, Pelican shall submit a revised plan to LDEQ for approval.

iii. On a quarterly basis, Pelican shall conduct an EOL determination of benzene quantity, commencing in the first full calendar quarter after Pelican receives written approval from LDEQ of the sampling plan for the Refinery. Pelican shall take, and have analyzed, at least three representative samples from each approved sampling location. Pelican shall use the average of these three samples as the benzene concentration for the stream at the approved location. Based on the EOL quarterly sampling results and the approved flow calculations, Pelican shall calculate the quarterly EOL benzene quantity.

iv. If the quarterly EOL benzene quantity exceeds 2.5 Mg, Pelican shall submit to LDEQ a plan that identifies with specificity the actions that Pelican shall take, and the schedule for such

actions, to ensure that the TAB for the Lake Charles Refinery does not exceed 10 Mg in the calendar year.

v. On a quarterly basis, Pelican shall also calculate a projected calendar year TAB, utilizing all EOL results for that calendar year and any other information (such as benzene wastes generated during process turnarounds) to undertake the projection. If the projected calendar year calculation of the TAB at the Lake Charles Refinery equals or exceeds 10 Mg, Pelican shall submit to LDEQ a plan that identifies with specificity the actions that Pelican shall take, and the schedule for such actions, to ensure that the TAB for the Lake Charles Refinery does not exceed 10 Mg in the calendar year. Pelican shall submit this plan within thirty (30) days after the end of the quarter which resulted in a projection of greater than 10 Mg.

vi. If it appears that appropriate actions cannot be taken to ensure that the Lake Charles Refinery maintains a TAB of under 10 Mg/yr, then Pelican shall retain a third party contractor to undertake a comprehensive TAB study and compliance review (“Third-Party TAB Study and Compliance Review”). At a mutually agreed upon date, Pelican shall submit a proposal to LDEQ that identifies the contractor, the contractor’s scope of work, and the contractor’s schedule for the Third-Party TAB Study and Compliance Review. Unless, within thirty (30) days after LDEQ receives this proposal, LDEQ disapproves or seeks modifications, Pelican shall authorize the contractor to commence work. By no later than thirty (30) days after Pelican receives the results of the Third-Party TAB Study and Compliance Review, Pelican shall submit the results to LDEQ. LDEQ and Pelican subsequently shall discuss informally the results of the Third-Party TAB Study and Compliance Review. By no later than 120 days after Pelican receives the results of the Third-Party TAB Study and Compliance Review, or such other time as Pelican and LDEQ may agree, Pelican shall submit to LDEQ for approval a plan that identifies

with specificity the compliance strategy and schedule that Pelican will implement to ensure that the Lake Charles Refinery complies with the 6BQ compliance option as soon as practicable. The review and approval of this Plan shall be done in accordance with Paragraph 13.D.iii of this Settlement. Certification of Compliance shall be done in accordance with Paragraph 13.D.iv.

K. Miscellaneous Measures.

i. Pelican shall comply with the Benzene Waste NESHAP provisions applicable to groundwater remediation conveyance systems at its Refinery if it has such systems.

ii. The provisions of this Paragraph 13.K.ii shall apply after a Lake Charles Refinery's TAB reaches or exceeds 10 Mg/yr and after the Refinery has completed implementation of an approved compliance plan submitted pursuant to either Paragraph 13.D.ii or Paragraph 13.J.vi. The provisions shall continue to apply until termination of this Settlement. Pelican shall:

- a. Conduct monthly visual inspections of all water traps within the Lake Charles Refinery's individual drain systems; and
- b. On a weekly basis, visually inspect all conservation vents or indicator devices (e.g., a device on a carbon adsorption system for sewer gas vapor control that indicates carbon breakthrough has occurred) on process sewers for detectable leaks; reset any vents where leaks are detected; and record the results of the inspections. After two (2) years of weekly inspections, and based upon an evaluation of the recorded results, Pelican may submit a request to LDEQ to modify the frequency of the inspections. LDEQ shall not unreasonably withhold its consent. Nothing in this Paragraph 13.K.ii.b. shall require Pelican to monitor conservation vents on fixed roof tanks.

iii. From the date that the final BWN Compliance Review and Verification Report

submitted for the Lake Charles Refinery pursuant to Paragraph 13.C shows that the Lake Charles Refinery's TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr, and through termination of this Settlement, Pelican shall identify and mark all area drains that are segregated stormwater drains.

L. Projects/Investigations.

Unless and until the TAB of the Lake Charles Refinery reaches or exceeds 10 Mg/yr, Pelican will not be required to undertake any projects or any investigations relating to the Benzene Waste NESHAP other than those required in Paragraphs 13.C - 13.K. Within 60 days of receipt of information indicating that the TAB of the Lake Charles Refinery has reached or exceeded 10 Mg/yr, LDEQ and Pelican may meet and confer to discuss and establish an appropriate project or investigation relating to the Benzene Waste NESHAP.

M. Reporting and Recordkeeping Requirements for this Paragraph 13

i. Outside of the Reports Required under 40 C.F.R. 61.357 and under the Quarterly Progress Report Procedures of Section IX (Reporting and Recordkeeping). At the times specified in the applicable provisions of this Paragraph, Pelican shall submit, as and to the extent required, the following reports to LDEQ:

- a. BWN Compliance Review and Verification Report (§ 13.C.i.), as amended, if necessary (§ 13.C.ii.);
- b. Amended TAB Report, if necessary (§ 13.D.i.);
- c. Plan for a Lake Charles Refinery to come into compliance with the 6 BQ compliance option upon discovering that its TAB equals or exceeds 10 Mg/yr through the BWN Compliance Review and Verification Report (§ 13.D.ii.), or the Third-Party TAB Study and Compliance Review that may result from EOL sampling (§ 13.J.vi);
- d. Compliance certification, if necessary (§ 13.D.iv.);
- e. Schematics of waste/slop/off-spec oil movements (§ 13.H.i.), as revised, if

necessary (§ 13.H.i.);

- f. Schedule to complete implementation of controls on waste management units handling organic benzene waste, if necessary (§ 13.H.ii.);
- g. Plan to quantify uncontrolled waste/slop/off-spec oil movements (§ 13.H.iv.)
- h. EOL Sampling Plans (§§ 13.I.i., 13.J.ii.), and revised EOL Sampling Plans, if necessary (§§ 13.I.ii., 13.J.ii.);
- i. Plan, if necessary, to ensure that uncontrolled benzene does not equal or exceed, as applicable, 6 or 10 Mg/yr -- or is minimized -- based on projected calendar year uncontrolled benzene quantities as determined through EOL sampling (§§ 13.I.vii., 13.J.iv.-v.)
- j. Proposal for a Third-Party TAB Study and Compliance Review, if necessary (§§ 13.I.viii., 13.J.vi.);
- k. Third-Party TAB Study and Compliance Review, if necessary (§§ 13.I.viii., 13.J.vi.); and
- l. Plan to implement the results of the Third-Party TAB Study and Compliance Review, if necessary (§§ 13.I.viii., 13.J.vi.).

ii. **As part of the Reports Required under the Quarterly Progress Report**

Procedures of Section IX (Reporting and Recordkeeping).

a. **TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr.** From the date that the final BWN Compliance Review and Verification Report submitted for the Lake Charles Refinery pursuant to Paragraph 13.C shows that the Lake Charles Refinery's TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr, until the earlier of: (1) the time that the Refinery reaches a TAB of 10 Mg/yr or more (in which case, the provisions of Paragraph 13.M.ii.b shall begin to apply); or (2) termination of this Settlement, Pelican shall submit the following information in Quarterly Progress Reports pursuant to the requirements of Section IX of this Settlement:

- (1) A description of the measures that it took to comply with the training provisions of Paragraph 13.G;

- (2) The annual, non-EOL sampling required at the Lake Charles Refinery pursuant to the requirements of Paragraph 13.J.i (this information shall be submitted in the first quarterly progress report for the first calendar quarter of each year);
- (3) The results of the quarterly EOL sampling undertaken pursuant to Paragraph 13.J.iii. for the calendar quarter. The report shall include a list of all waste streams sampled, the results of the benzene analysis for each sample, and the computation of the EOL benzene quantity for the respective quarter. The Refinery shall identify whether the quarterly benzene quantity equals or exceeds 2.5 Mg and whether the projected calendar year benzene quantity equals or exceeds 10 Mg. If either condition is met, the Refinery shall include in the quarterly report the plan required pursuant to Paragraph 13.J.iv and/or 13.J.v., and shall specifically seek LDEQ's concurrence in the plan.

b. TAB is 10 Mg/yr or More. The provisions of this Paragraph 13.M.ii.b shall apply after the Refinery's TAB reaches or exceeds 10 Mg/yr and after the Refinery has completed implementation of an approved compliance plan submitted pursuant to either Paragraph 13.D.ii, or Paragraph 13.J.vi. The provisions shall continue to apply until Settlement termination. Pelican shall submit the following information in Quarterly Progress Reports pursuant to the requirements of Section IX of this Settlement:

- (1) A description of the measures that it took to comply with the training provisions of Paragraph 13.G;
- (2) The results of the three months of monthly EOL sampling undertaken pursuant to Paragraph 13.I.iii. for the calendar quarter. The report shall include a list of all waste streams sampled, the results of the benzene analysis for each sample, and the computation of the EOL benzene quantity for the three months contained within the respective quarter;
- (3) If the quarter is one in which Pelican is required to undertake Sampling of >0.05 Streams or Sampling of >0.03 Streams the Refinery, Pelican also shall: (A) submit the results of those sampling events; (B) describe the actions that Pelican is taking to identify and correct the source of the potentially elevated benzene quantities; and (C) to the extent that Pelican identifies actions to correct the potentially elevated benzene quantities, specifically seek LDEQ's concurrence with the proposal of Pelican.

N. LDEQ to Receive Reports, Plans and Certifications Required in this Paragraph

13. Pelican shall submit all reports, plans and certifications required to be submitted under this Paragraph 13 to LDEQ. By agreement between LDEQ and Pelican, the materials may be submitted electronically.

14. Leak Detection and Repair (“LDAR”) Program Enhancements.

In order to minimize or eliminate fugitive emissions of volatile organic compounds (“VOCs”), benzene, volatile hazardous air pollutants (“VHAPs”), and organic hazardous air pollutants (“HAPs”) from equipment in light liquid and/or in gas/vapor service, Pelican shall undertake at the Refinery the enhancements in Paragraph 14.A through Paragraph 14.P to the Refinery’s LDAR program under Title 40 of the Code of Federal Regulations, Part 60, Subpart GGG; Part 61, Subparts J and V; and applicable LDEQ LDAR requirements. The terms “equipment,” “in light liquid service” and “in gas/vapor service” shall have the definitions set forth in the applicable provisions of Title 40 of the Code of Federal Regulations, Part 60, Subpart GGG; Part 61, Subparts J and V; and applicable LDEQ LDAR regulations. Nothing in this Paragraph 14 shall be construed to require Pelican to include in the enhanced program described herein any equipment or units not otherwise subject to any applicable federal or state LDAR regulation.

A. Written Refinery-Wide LDAR Program. By no later than 120 days after the Effective Date of this Settlement, Pelican shall develop and maintain, for the Refinery, a written, Refinery-wide program for compliance with all applicable federal and state LDAR regulations. Until termination of this Settlement, Pelican shall implement this program on a Refinery-wide basis, and Pelican shall update the Refinery’s program as necessary to ensure continuing compliance. The Refinery-wide program shall include at a minimum:

i. An overall, Refinery-wide leak rate goal that will be a target for achievement on a process-unit-by-process-unit basis;

ii. An identification of all equipment in light liquid and/or in gas/vapor service that has the potential to leak VOCs, HAPs, VHAPs, and benzene within process units that are owned and maintained by the Refinery;

iii. Procedures for identifying leaking equipment within process units that are owned and maintained by the Refinery;

iv. Procedures for repairing and keeping track of leaking equipment;

v. Procedures for identifying and including in the LDAR program new equipment; and

vi. A process for evaluating new and replacement equipment to promote consideration and installation of equipment that will minimize leaks and/or eliminate chronic leakers.

B. Training. By no later than one year from the Effective Date of this Settlement, Pelican shall implement the following training programs at the Refinery:

i. For personnel newly-assigned to LDAR responsibilities, Pelican shall require LDAR training prior to each employee beginning such work;

ii. For all personnel assigned LDAR responsibilities, Pelican shall provide and require completion of annual LDAR training; and

iii. For all other Refinery operations and maintenance personnel (including contract personnel), Pelican shall provide and require completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties. Until termination of this Settlement, "refresher" training in LDAR shall be performed on a three year cycle.

C. LDAR Audits. Commencing upon the Effective Date of this Settlement, Pelican

shall implement at the Refinery, the Refinery-wide audits set forth in this Paragraph 14.C, to ensure the Refinery's compliance with all applicable LDAR requirements. The LDAR audits shall include but not be limited to, comparative monitoring, records review, tagging, data management, and observation of the LDAR technicians' calibration and monitoring techniques.

Third-Party Audits. Pelican shall retain a contractor(s) to perform a third-party audit of the Refinery's LDAR program at least once every three years. The first third-party audit for the Refinery shall be completed no later than one year from the Effective Date of this Settlement. Third-party audits shall be separated by at least 18 months but no longer than 36 months.

D. Implementation of Actions Necessary to Correct Non-Compliance.

If the results of any of the audits conducted pursuant to Paragraph 14.C at the Refinery identify any areas of non-compliance, Pelican shall implement, as soon as practicable, all steps necessary to correct the area(s) of non-compliance, and to prevent, to the extent practicable, a recurrence of the cause of the non-compliance. Until termination of this Settlement, Pelican shall retain the audit reports generated pursuant to Paragraphs 14.C and shall maintain a written record of the corrective actions that Pelican takes at the Refinery in response to any deficiencies identified in any audits. In the quarterly report submitted pursuant to the provisions of Section IX of this Settlement (Reporting and Recordkeeping) for the first calendar quarter of each year, Pelican shall submit the audit reports and corrective action records for audits performed and actions taken during the previous year.

E. Internal Leak Definition for Valves and Pumps.

Pelican shall utilize the following internal leak definitions for valves and pumps in light liquid and/or gas/vapor service, unless other permit(s), regulations, or laws require the use of lower leak definitions.

i. Leak Definition for Valves. By no later than two years after the Effective Date of this Settlement, Pelican shall utilize an internal leak definition of 500 ppm VOCs for all of the Refinery's valves, excluding pressure relief devices.

ii. Leak Definition for Pumps. By no later than two years after the Effective Date of this Settlement, Pelican shall utilize an internal leak definition of 2000 ppm for all of the Refinery's pumps.

F. Reporting, Recording, Tracking, Repairing and Remonitoring Leaks of Valves and Pumps Based on the Internal Leak Definitions.

i. Reporting. For regulatory reporting purposes, Pelican may continue to report leak rates in valves and pumps against the applicable regulatory leak definition, or may use the lower, internal leak definitions specified in Paragraph 14.E.

ii. Recording, Tracking, Repairing and Remonitoring Leaks. Pelican shall record, track, repair and remonitor all leaks in excess of the internal leak definitions of Paragraphs 14.E.i and 14.E.ii at such time as those definitions become applicable, except that Pelican shall have thirty (30) days to make repairs and remonitor leaks that are greater than the internal leak definitions but less than the applicable regulatory leak definitions.

G. First Attempt at Repairs on Valves. Beginning no later than ninety (90) days after the Effective Date of this Settlement, Pelican shall make a "first attempt" at repair on any valve that has a reading greater than 200 ppm of VOCs, excluding control valves, pumps, and components that LDAR personnel are not authorized to repair. Pelican, or its designated contractor, however, shall remonitor, by no later than the end of the next calendar day, all valves that LDAR personnel attempted to repair. Unless the remonitored leak rate is greater than the applicable leak definition, no further action will be necessary. If, after two years from the

commencement of the “first attempt at repair” program set forth in this Paragraph 14.G, Pelican can demonstrate with sufficient monitoring data that the “first attempt” repair at 200 ppm will worsen or not improve the Refinery’s leak rates, Pelican may request that LDEQ reconsider or amend this requirement.

H. LDAR Monitoring Frequency.

i. Pumps. When the lower leak definition for pumps becomes applicable pursuant to Paragraph 14.E.ii, Pelican shall monitor pumps at the lower leak definition on a monthly basis.

ii. Valves. When the lower leak definition for valves becomes applicable pursuant to Paragraph 14.E.i, Pelican shall monitor valves more frequently than is required by applicable regulations by monitoring valves (other than difficult to monitor or unsafe to monitor valves) on a quarterly basis, with no ability to skip periods on a process-unit-by-process-unit basis.

I. Electronic Monitoring, Storing, and Reporting of LDAR Data.

i. Electronic Storing and Reporting of LDAR Data. At the Refinery, Pelican has and will continue to maintain an electronic database for storing and reporting LDAR data. By no later than six months after the Effective Date of this Settlement, the electronic database shall include data identifying the date and time of the monitored event, and the operator and instrument used in the monitored event.

ii. Electronic Data Collection During LDAR Monitoring and Transfer Thereafter. By no later than six months after the Effective Date of this Settlement, Pelican shall submit to LDEQ operational specifications for the data logger, software, and monitoring equipment. By no later than six months after the Effective Date of this Settlement, Pelican shall use dataloggers and/or electronic data collection devices during all LDAR monitoring. Pelican, or its designated contractor, shall use its/their best efforts to transfer, on a daily basis, electronic data from

electronic datalogging devices to the electronic database of Paragraph 14.I.i. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp. Pelican may use paper logs where necessary or more feasible (e.g., small rounds, remonitoring, or when dataloggers are not available or broken), and shall record, at a minimum, the identification of the technician undertaking the monitoring, the date, and the identification of the monitoring equipment. Pelican shall use its best efforts to transfer any manually recorded monitoring data to the electronic database of Paragraph 14.I.i within seven days of monitoring.

J. QA/QC of LDAR Data. By no later than ninety (90) days after the Effective Date of this Settlement, Pelican, or a third party contractor retained by Pelican, shall develop and implement a procedure to ensure a quality assurance/quality control (“QA/QC”) review of all data generated by LDAR monitoring technicians. Pelican shall ensure that monitoring data provided to Pelican by its contractors is reviewed for QA/QC before the contractor submits the data to Pelican. At least once per calendar quarter, Pelican shall perform QA/QC of the contractor’s monitoring data which shall include, but not be limited to: number of components monitored per technician, time between monitoring events, and abnormal data patterns.

K. LDAR Personnel. By no later than the Effective Date of this Settlement, Pelican shall establish a program that will hold LDAR personnel accountable for LDAR performance. Pelican shall maintain a position within the Refinery responsible for LDAR management, with the authority to implement improvements. For purposes of this Settlement, “LDAR personnel” shall mean refinery employees and contractor employees having LDAR responsibilities.

L. Adding New Valves and Pumps. By no later than one hundred and twenty (120) days from the Effective Date of this Settlement, Pelican shall establish a tracking program for

maintenance records (e.g., a Management of Change program) to ensure that valves and pumps added to the Refinery during maintenance and construction is integrated into the LDAR program.

M. Calibration/Calibration Drift Assessment.

i. Calibration. Pelican shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas, in accordance with 40 C.F.R. Part 60, Appendix A, EPA Reference Test Method 21.

ii. Calibration Drift Assessment. Beginning no later than the Effective Date of this Settlement, Pelican shall conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift, at a minimum. Pelican shall conduct the calibration drift assessment using, at a minimum, a 500 ppm calibration gas. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, Pelican shall remonitor all valves that were monitored since the last calibration that had a reading greater than 100 ppm and shall remonitor all pumps that were monitored since the last calibration that had a reading greater than 500 ppm.

N. Delay of Repair. Beginning no later than the Effective Date of this Settlement, for any equipment for which Pelican is allowed, under the applicable regulations, to place on the "delay of repair" list for repair:

i. For all equipment, Pelican shall:

a. Require sign-off by the unit supervisor that the piece of equipment is technically infeasible to repair without a process unit shutdown, before the component is eligible for inclusion on the "delay of repair" list; and

b. Include equipment that is placed on the "delay of repair" list in Pelican's regular LDAR monitoring.

ii. For valves: For valves, other than control valves, leaking at a rate of 10,000 ppm or greater, Pelican shall use the “drill and tap” method (or an equivalent) for fixing such leaking valves, rather than placing the valve on the “delay of repair” list, unless Pelican can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in this manner. After two unsuccessful attempts to repair a leaking valve through the drill and tap method, Pelican may place the leaking valve on its “delay of repair” list. If a new method develops for repairing such valves, Pelican will advise LDEQ prior to implementing such new method.

iii. For pumps: At such time as the lower leak rate definition applies pursuant to Paragraph 14.E.ii, for pumps leaking at a rate of 2000 ppm or greater, Pelican shall undertake its best efforts to isolate and repair such pumps with a first attempt at fifteen (15) days.

O. Reporting and Recordkeeping Requirements for this Paragraph.

i. Outside of the Reports Required under the applicable LDAR program and the Quarterly Progress Report Procedures of Section IX (Reporting and Recordkeeping).

a. Written Refinery-Wide LDAR Program No later than thirty (30) days after completion of the development of the written refinery-wide LDAR program that Pelican develops pursuant to Paragraph 14.A, Pelican shall submit a copy of the Refinery’s Program to LDEQ.

b. Submission of Operational Specifications for Electronic Data Collection during LDAR Monitoring and Certification of Use of Electronic Data Collection during LDAR Monitoring. By no later than six months after the Effective Date of this Settlement, Pelican shall submit to LDEQ operational specifications designed to minimize the use of any form of data collection and data transfer during and after LDAR monitoring other than electronic data

collection and transfer.

ii. As Part of Either the Reports Required under the applicable LDAR program or the Quarterly Progress Report Procedures of Section IX (Reporting and Recordkeeping). Consistent with the requirements of Section IX (Reporting and Recordkeeping), Pelican shall include the following information, at the following times, in their quarterly progress reports:

a. First Quarterly Progress Report Due under this Settlement. At the later of: (i) the first quarterly progress report due under this Settlement; or (ii) the first quarterly progress report in which the requirement becomes due, Pelican shall include the following:

- (1) A certification of the implementation of the “first attempt at repair” program of Paragraph 14.G;
- (2) A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 14.J;
- (3) An identification of the individual at the Refinery responsible for LDAR performance as required by Paragraph 14.K;
- (4) A certification of the development of a tracking program for new valves and pumps added during maintenance and construction as required by Paragraph 14.L;
- (5) A certification of the implementation of the calibration drift assessment procedures of Paragraph 14.M; and
- (6) A certification of the implementation of the “delay of repair” procedures of Paragraph 14.N.

b. Quarterly Progress Report for the First Calendar Quarter of Each Year. Until termination of this Settlement, in the quarterly progress report that Pelican submits pursuant to Section IX for the first calendar quarter of each year, Pelican shall include an identification of each audit that was conducted pursuant to the requirements of Paragraph 14.C in the previous calendar year including an identification of the auditors, a summary of the audit results, and a summary of the actions that Pelican took or intends to take to correct all deficiencies identified in

the audits.

c. In Each Report due under the applicable LDAR Program. In each report due under the applicable LDAR program, Pelican shall include:

- (1) Training. Information identifying the measures that Pelican took to comply with the provisions of Paragraph 14.B; and
- (2) Monitoring. The following information on LDAR monitoring: (a) a list of the process units monitored during the quarter; (b) the number of valves and pumps monitored in each process unit; (c) the number of valves and pumps found leaking; (d) the number of “difficult to monitor” pieces of equipment monitored; (e) the projected month of the next monitoring event for that unit; and (f) a list of all equipment currently on the “delay of repair” list and the date each component was placed on the list.

P. LDEQ to Receive Reports, Plans and Certifications Required in this Paragraph

14. Pelican shall submit all reports, plans and certifications required to be submitted under this Paragraph to LDEQ. By agreement between LDEQ and Pelican, the materials may be submitted electronically.

15. Incorporation of Settlement Requirements into Federally-Enforceable Permits.

A. Within 180 Days After the Effective Date of this Settlement. As soon as practicable following the Effective Date of this Settlement, but in no event later than 180 days following the Effective Date of this Settlement, Pelican shall submit application(s) to LDEQ to incorporate the emission limits, standards, and/or schedules required by this Settlement that are effective as of the Effective Date of this Settlement into the air quality permit(s) of the Refinery. Following submission of the permit applications, Pelican shall cooperate with LDEQ by promptly submitting to LDEQ all information that LDEQ seeks following its receipt of the permit application(s).

B. At Variable Times. Prior to Startup of the Lake Charles Refinery, Pelican shall submit applications to LDEQ to incorporate any changes to emission limitations, standards,

and/or schedules into the air quality permits of the Refinery. Following submission of the permit applications, Pelican shall cooperate with LDEQ by promptly submitting to LDEQ all information that LDEQ seeks following its receipt of the permit applications.

C. **Mechanism for Air Quality Permit Incorporation.** The Parties agree that the incorporation of the requirements of this Settlement into air quality permits shall be in accordance with LDEQ air quality permitting procedures and rules.

16. **Obtaining Construction Permits.** Pelican agrees to use best efforts to obtain all required, federally enforceable permits or other accepted authorizations, as appropriate, for the construction of the pollution control technology and/or the installation of equipment necessary to implement the affirmative relief and environmental projects set forth in this Section V and in Section VIII. To the extent that Pelican must submit permit applications for this construction or installation to LDEQ, Pelican shall cooperate with LDEQ by promptly submitting to LDEQ all information that LDEQ seeks following its receipt of the permit applications. This Paragraph 16 is not intended to prevent Pelican from applying to LDEQ for a pollution control project exemption.

VI. **EMISSION CREDIT GENERATION**

17. **Emission Credit Generation.**

A. **Summary.** The intent of this Section generally is to prohibit Pelican from using the emissions reductions that will result from the installation and operation of the controls required by this Settlement (“Settlement Emissions Reductions”) for the purpose of emissions netting or emissions offsets.

B. **General Prohibition.** Pelican shall not generate or use any NO_x, SO₂, PM, VOC, or CO emissions reductions that result from any projects conducted or controls required pursuant to

this Settlement as netting reductions or emissions offsets in any PSD, major non-attainment and/or minor New Source Review (“NSR”) permit or permit proceeding.

C. Outside the Scope of the General Prohibition. Nothing in this Section VI is intended to prohibit Pelican from seeking to: (1) utilize or generate emissions credits or reductions from refinery units that are covered by this Settlement to the extent that the proposed credits or reductions represent the difference between the emissions limitations set forth in this Settlement for these refinery units and the more stringent emissions limitations that Pelican may elect to accept for these refinery units in a permitting process; or (2) utilize or generate emissions credits or reductions on refinery units that are not covered by this Settlement.

VII. MODIFICATIONS TO IMPLEMENTATION SCHEDULES

18. Securing Permits. For any work under Sections V or VIII of this Settlement that requires a federal, state and/or local permit or approval, Pelican shall be responsible for submitting in a timely fashion applications for federal, state and local permits and approvals for work and activities required so that permit or approval decisions can be made in a timely fashion. Pelican shall use its best efforts to: (i) submit permit applications (i.e., applications for permits to construct, operate, or their equivalent) that comply with all applicable requirements; and (ii) secure approval of permits after filing the applications, including timely supplying additional information, if requested. If it appears that the failure of a governmental entity to act upon a timely-submitted permit application may delay Pelican’s performance of work according to an applicable implementation schedule, Pelican shall notify LDEQ of any such delays as soon as Pelican reasonably concludes that the delay could affect its ability to comply with the implementation schedule set forth in this Settlement. Pelican shall propose for approval by LDEQ a modification to the applicable schedule of implementation. LDEQ shall not

unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. All modifications to any dates initially set forth in this Settlement or in any approved schedule of implementation shall be signed in writing by LDEQ and Pelican. Stipulated penalties shall not accrue nor be due and owing during any period between an originally-scheduled implementation date and an approved modification to such date; provided however, that LDEQ shall retain the right to seek stipulated penalties if LDEQ does not approve a modification to a date or dates. The failure of a governmental entity to act upon a timely-submitted permit or approval application shall not constitute a force majeure event triggering the requirements of Section XIV; this Paragraph shall apply.

19. Commercial Unavailability of Control Equipment and/or Additives. Pelican shall be solely responsible for compliance with any deadline or the performance of any work described in Sections V and VIII of this Settlement that requires the acquisition and installation of control equipment and/or catalyst additive. If it appears that the commercial unavailability of any control equipment and/or catalyst additive may delay Pelican's performance of work according to an applicable implementation schedule, Pelican shall notify LDEQ of any such delays as soon as Pelican reasonably concludes that the delay could affect its ability to comply with the implementation schedule set forth in this Settlement. Pelican shall propose for approval by LDEQ a modification to the applicable schedule of implementation. Prior to the notice required by this Paragraph 19, Pelican must have contacted a reasonable number of vendors of such equipment or additive and obtained a written representation (or equivalent communication to LDEQ) from the vendor that the equipment or additive is commercially unavailable. In the notice, Pelican shall reference this Paragraph 19 of this Settlement, identify the milestone date(s) it contends it will not be able to meet, provide LDEQ with written correspondence to the vendor

identifying efforts made to secure the control equipment or catalyst additive, and describe the specific efforts Pelican has taken and will continue to take to find such equipment or additive. Pelican may propose a modified schedule or modification of other requirements of this Settlement to address such commercial unavailability. Section XV (“Dispute Resolution”) shall govern the resolution of any claim of commercial unavailability. LDEQ shall not unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. All modifications to any dates initially set forth in this Settlement or in any approved schedule of implementation shall be signed in writing by LDEQ and Pelican. Stipulated penalties shall not accrue nor be due and owing during any period between an originally-scheduled implementation date and an approved modification to such date; provided however, that LDEQ shall retain the right to seek stipulated penalties if LDEQ does not approve a modification to a date or dates. The failure by Pelican to secure control equipment and/or catalyst additive shall not constitute a force majeure event triggering the requirements of Section XIV; this Paragraph shall apply.

VIII. ENVIRONMENTALLY BENEFICIAL PROJECT

20. Compliance with NSPS Subpart QQQ.

A. By no later than 180 days after Startup of the Refinery, Pelican shall conduct an audit to ensure that the Refinery complies with the requirements of NSPS Subpart QQQ, 40 C.F.R. §§ 60.690, et seq. A summary of the results of the audit shall be included in the Calendar Quarterly Report required in Section IX that covers that period in which the audit was completed.

B. Plan to Comply with NSPS Subpart QQQ. By no later than 90 days after the completion of the audit, Pelican shall submit a plan to LDEQ that sets forth with specificity the actions, including but not limited to, the installation of any necessary control equipment that

Pelican will take to ensure that the Refinery complies, within 36 months after LDEQ's written approval of the plan, with the requirements of the NSPS at Subpart QQQ, 40 C.F.R. §§ 60.690 - 60.699. The plan shall include a proposed schedule of implementation for the installation of any necessary control equipment. The plan shall also include proposed schedules for compliance with the monitoring, testing, recordkeeping, and reporting requirements of 40 C.F.R. §§ 60.695 - 60.698. The plan shall be subject to the approval of, disapproval of, or modification by LDEQ. Within sixty (60) days after receiving any notification of disapproval or request for modification from LDEQ, Pelican shall submit to LDEQ a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, Pelican shall implement the plan. Disputes arising under this Paragraph 20 shall be resolved in accordance with the dispute resolution provisions of this Settlement.

IX. REPORTING AND RECORDKEEPING

21. Beginning with the first full calendar quarter after the Effective Date of this Settlement, Pelican shall submit to LDEQ within thirty (30) days after the end of each calendar quarter until termination of this Settlement a calendar quarterly progress report ("Calendar Quarterly Report") for the Refinery. This calendar quarterly report shall contain, for the Refinery, the following: the amount of time that the Refinery operated (in days and hours per day) during the applicable calendar quarter; progress report on the implementation of the requirements of Section V (Affirmative Relief/Environmental Projects); a summary of the emissions data as required by Section V of this Settlement for the calendar quarter; a description of any problems anticipated with respect to meeting the requirements of Section V of this Settlement; a description of the environmentally beneficial project and implementation activity in accordance with Paragraph 20 of this Settlement; and any such additional matters as Pelican

believes should be brought to the attention of LDEQ. The calendar quarterly report shall be certified by either the person responsible for environmental management and compliance for the Refinery, or by a person responsible for overseeing implementation of this Settlement, as follows:

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or 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.

X. CIVIL PENALTY

22. In satisfaction of the civil claims asserted by LDEQ, within thirty (30) days of the Effective Date of this Settlement, Pelican shall pay a civil penalty of ONE HUNDRED NINETY THOUSAND AND NO/100 DOLLARS (\$190,000.00) to LDEQ, of which Nine Thousand Four Hundred Seventeen and 72/100 Dollars (\$9,417.72) represents the Department's enforcement costs. Payment of the civil penalty owed to LDEQ under this Paragraph 22 shall be made by certified check made payable to the Louisiana Department of Environmental Quality and sent to Fiscal Director, Office of Management and Finance, LDEQ, P. O. Box 4303, Baton Rouge, LA 70821-4303.

23. The total amount of money expended by Pelican on cash payments to LDEQ shall be considered a civil penalty for tax purposes, as required by La. R. S. 30:2050.7(E)(1).

XI. STIPULATED PENALTIES

24. Pelican shall pay stipulated penalties for each failure by Pelican to comply with the terms of this Settlement as provided herein. Stipulated penalties shall be calculated in the amounts specified in Paragraphs 25 through 38.

25. Paragraph 9 - Requirements for NO_x Emission Reductions from Heaters and

Boilers.

A. For failure to install required Qualifying Controls by the required dates, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$500
31 st through 60 th day after deadline	\$1,000
Beyond 60 th day after deadline	\$2,000

B. For failure to install and/or certify a CEMS or a parametric emission monitoring system on a Controlled Heater or Boiler by the required deadline, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$450
31 st through 60 th day after deadline	\$1,000
Beyond 60 th day after deadline	\$2,000

C. For failure to submit the written deliverables required by Paragraph 9, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$200
31 st through 60 th day after deadline	\$500
Beyond 60 th day	\$1,000

D. For each failure to meet NO_x emission limits proposed by Pelican pursuant to Paragraph 9.D, \$500 per day, per unit for each calendar day in a calendar quarter on which the specified 3-hour average exceeds the applicable limit.

26. Paragraph 10 - Requirements for SO₂ Emission Reductions from Heaters and

Boilers.

A. After the date set forth in this Settlement for NSPS applicability of any fuel gas combustion device, for burning any refinery fuel gas that contains hydrogen sulfide in excess of 0.1 grains per dry standard cubic foot on a 3-hour rolling average at any fuel gas combustion device, per day in a calendar quarter:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 st through 5 th day	\$1,000
6 th through 15 th day	\$2,000
Over 15 days	\$3,000

B. For failure to install and/or certify a fuel gas CEMS, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$250
31 st through 60 th day after deadline	\$500
Beyond 60 th day after deadline	\$1,000

C. For burning Fuel Oil in a manner inconsistent with the requirements of Paragraph 10.C, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 st through 30 th day	\$1,750
Beyond 31 st day	\$5,000

27. Paragraph 11 - Requirements for NSPS Applicability of Flaring Devices.

A. For failure to comply with NSPS Subpart J at the flares listed in Appendix A after the date on which Pelican accepted NSPS applicability for the relevant flare as set forth in Paragraph

11, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1st through 30th day after deadline	\$ 500 per day
31st through 60th day after deadline	\$1,500 per day
Beyond 60th day after deadline	\$2,000 per day

B. For failure to install and/or certify an H₂S CEMS or submit and comply with an H₂S AMP, at flares that combust continuous or intermittent, routinely-generated refinery fuel gases, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$500
31 st through 60 th day after deadline	\$1,000
Beyond 60 th day after deadline	\$2,000

28. Paragraph 12 - Requirements for Control of Hydrocarbon Flaring Incidents.

A. For each failure to perform a root cause analysis or submit a written report or perform corrective actions for a Hydrocarbon Flaring Incident:

<u>Period of Delay or Non-Compliance</u>	<u>Penalty per day</u>
1st through 30th day	\$500
31st through 60th day	\$1,500
Beyond 60th day	\$2,000

29. Paragraph 13 - Requirements for Benzene Waste NESHAP Program

Enhancements. For each violation in which a frequency is specified in Paragraph 13, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth

consecutive, continuing period of violation. For requirements where no frequency is specified, penalties will not be doubled.

A. For failure to complete the BWN Compliance Review and Verification Report as required by Paragraph 13.C:

\$7,500 per month

B. For failure to implement the actions necessary to correct non-compliance as required by Paragraph 13.D:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$1,250
31 st through 60 th day after deadline	\$3,000
Beyond 60 th day	\$5,000

C. For failure to submit or maintain any records or materials required by Paragraph 13.H of this Settlement:

\$2,000 per record or submission

D. For failure to install controls on waste management units handling organic wastes as required by Paragraph 13.H.ii:

\$10,000 per month, per waste management unit

E. For failure to conduct sampling in accordance with the sampling plans required by Paragraphs 13.I (10 Mg/yr or more) or 13.J (1 Mg/yr or more), as applicable:

\$5,000 per week, per stream, or \$30,000 per quarter, per stream, whichever is greater, but not to exceed \$150,000 per quarter

F. For failure to submit the plan or retain the third-party contractor required by Paragraphs 13.I.viii (10 Mg/yr or more), 13.J.v (1 Mg/yr or more), or 13.J.vi (1 Mg/yr or more):

\$10,000 per month

G. For failure to comply with the miscellaneous compliance measures set forth in Paragraph 13.K.ii, as follows:

For K.ii.a, monthly visual inspections: \$500 per drain not inspected;

For K.ii.b, weekly monitoring of vents: \$500 per vent not monitored;

H. For failure to identify/mark segregated stormwater drains as required in Paragraph 13.K.iii: \$1,000 per week per drain;

I. For failure to submit the written deliverables required by Paragraph 13.M:

\$1,000 per week, per report

J. If it is determined through an LDEQ investigation that the Lake Charles Refinery has failed to include all benzene containing waste streams in its TAB calculation submitted pursuant to Paragraphs 13.C., Pelican shall pay the following:

<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	\$1,000
for waste streams between 0.1 and 0.5 Mg/yr	\$5,000
for waste streams > 0.5 Mg/yr	\$10,000

30. Paragraph 14 - Requirements for Leak Detection and Repair Program

Enhancements. For each violation in which a frequency is specified in Paragraph 14, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth consecutive, continuing period of violation. For requirements where no frequency is specified, penalties will not be doubled.

A. For failure to implement the training programs specified in Paragraph 14.B:

\$10,000 per month, per program

B. For failure to conduct any of the audits described in Paragraph 14.C:

\$5,000 per month, per audit

C. For failure to implement any actions necessary to correct non-compliance as required in Paragraph 14.D:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$1,250
31 st through 60 th day after deadline	\$3,000
Beyond 60 th day	\$5,000

D. For failure to initiate an internal leak rate definition as specified in Paragraph 14.E:

\$10,000 per month per process unit

E. For failure to implement the first attempt repair program in Paragraph 14.G or for failure to implement the QA/QC procedures described in Paragraph 14.J:

\$10,000 per month

F. For failure to implement the more frequent monitoring program required by Paragraph 14.H.ii:

\$10,000 per month, per unit

G. For failure to designate an individual as accountable for LDAR performance as required in Paragraph 14.K, or for failure to implement the maintenance tracking program in Paragraph 14.L, or for failure to write a LDAR program that meets the requirements of Paragraph 14.A:

\$3,750 per week

H. For failure to use dataloggers or maintain electronic data as required by

Paragraph 14.I.:

\$5,000 per month

I. For failure to conduct the calibration drift assessments or remonitor valves and pumps based on calibration drift assessments in Paragraph 14.M:

\$100 per missed event

J. For failure to comply with the requirements for repair set forth at Paragraphs 14.N.ii and 17.N.iii:

\$5,000 per valve or pump

K. For failure to submit the written deliverables required by Paragraph 14.O:

\$1,000 per week, per report

L. If it is determined through an LDEQ investigation that Pelican has failed to include all valves and pumps in its LDAR program, Pelican shall pay \$175 per component that it failed to include.

31. Paragraph 15 - Requirements to Incorporate Settlement Requirements into Federally-Enforceable Permits.

For each failure to submit an application as required by Paragraph 15:

<u>Period of Delay</u>	<u>Penalty per day</u>
Days 1-30	\$800
Days 31-60	\$1,600
Over 60 Days	\$3,000

32. Paragraph 20 - Requirements Related to Environmentally Beneficial Projects.

A. For failure to submit a plan conforming to the requirements of Paragraph 20, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
------------------------	------------------------

1 st through 30 th day after deadline	\$200
31 st through 60 th day after deadline	\$500
Beyond 60 th day	\$1,000

B. For failure to install the controls required pursuant to the approved schedule of implementation required in Paragraph 20, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$1,000
31 st through 60 th day after deadline	\$1,500
Beyond 60 th day	\$2,000

C. For failure to complete the requirements of Paragraph 20:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$1,000
31 st through 60 th day after deadline	\$1,500
Beyond 60 th day	\$2,000

33. Paragraph 21 - Requirements for Reporting and Recordkeeping.

For failure to submit reports as required by Section IX, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 st through 30 th day after deadline	\$300
31 st through 60 th day after deadline	\$1,100
Beyond 60 th day	\$2,000

34. Paragraph 22 - Requirements for Payment of Civil Penalty. For Pelican's failure to pay the civil penalty as specified in Paragraph 22 of this Settlement, Pelican shall be liable for \$10,000 per day plus interest on the amount overdue at the rate specified as the Judicial Interest

Rate.

35. Paragraph 37 - Requirement to Escrow Stipulated Penalties. For failure to escrow stipulated penalties as required by Paragraph 37 of this Settlement, Pelican shall be liable for \$2,500 per day and shall be liable for interest on the amount overdue at the rate specified as the Judicial Interest Rate.

36. Payment of Stipulated Penalties. Pelican shall pay stipulated penalties upon written demand by LDEQ no later than sixty (60) days after Pelican receives such demand. Stipulated penalties owed by Pelican shall be paid to LDEQ. Stipulated penalties shall be paid to LDEQ in the manner set forth in Section X (Civil Penalty) of this Settlement. A demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount LDEQ 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. LDEQ may, in its unreviewable discretion, waive payment of any portion of stipulated penalties that may accrue under this Settlement.

37. Stipulated Penalties Dispute. Should Pelican dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of a stipulated penalty for failure to pay a stipulated penalty under Paragraph 35 by placing the disputed amount demanded in a commercial escrow account pending resolution of the matter and by invoking the dispute resolution provisions of Section XV within the time provided in Paragraph 36 for payment of stipulated penalties. If the dispute is thereafter resolved in Pelican's favor, the escrowed amount plus accrued interest shall be returned to them; otherwise, LDEQ shall be entitled to the amount that was determined to be due by dispute resolution, plus the interest that has accrued in the escrow account on such amount. LDEQ reserves the right to pursue any other non-monetary

remedies to which they are entitled, including but not limited to, additional injunctive relief for Pelican's violations of this Settlement.

XII. INTEREST

38. Pelican shall be liable for interest on the unpaid balance of the civil penalty specified in Section X, and for interest on any unpaid balance of stipulated penalties to be paid in accordance with Section XI. All such interest shall accrue at the rate specified as the Judicial Interest Rate as determined by the Louisiana Commissioner of Financial Institutions per La. R.S.13:4202(B)(1). Interest shall be computed daily and compounded annually. Interest shall be calculated from the date payment is due under this Settlement through the date of actual payment. For purposes of this Paragraph 38, 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 37 of this Settlement. Monies timely paid into escrow shall not be considered to be an unpaid balance under this Section.

XIII. RIGHT OF ENTRY

39. Any authorized representative of LDEQ, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of the facilities of the Refinery, at any reasonable time for the purpose of monitoring compliance with the provisions of this Settlement, including inspecting plant equipment, and inspecting and copying all records maintained by Pelican required by this Settlement. Pelican shall retain such records for the period of this Settlement. Nothing in this Settlement shall limit the authority of LDEQ to conduct tests, inspections, or other activities under any statutory or regulatory provision.

XIV. FORCE MAJEURE

40. If any event occurs which causes or may cause a delay or impediment to

performance in complying with any provision of this Settlement, Pelican shall notify LDEQ in writing as soon as practicable, but in no event later than ten (10) business days following the date when Pelican first knew of the event or should have known of the event by the exercise of due diligence. In this notice, Pelican shall specifically reference this Paragraph 40 of this Settlement and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by Pelican to prevent or minimize the delay and the schedule by which those measures shall be implemented. Pelican shall adopt all reasonable measures to avoid or minimize such delays. The notice required by this Section shall be effective upon the mailing of the same by certified mail, return receipt requested, to LDEQ as specified in Paragraph 62 (Notice).

41. Failure by Pelican to substantially comply with the notice requirements of Paragraph 40 as specified above shall render this Section XIV (Force Majeure) voidable by LDEQ as to the specific event for which Pelican has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

42. LDEQ shall notify Pelican in writing regarding its claim of a delay or impediment to performance within thirty (30) days of receipt of the force majeure notice provided under Paragraph 40.

43. If LDEQ agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Pelican, including any entity controlled by Pelican and that Pelican could not have prevented the delay by the exercise of due diligence, the Parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be filed as a modification to the Settlement pursuant to the modification

procedures established in this Settlement. Pelican shall not be liable for stipulated penalties for the period of any such delay.

44. If LDEQ does not accept Pelican's claim of a delay or impediment to performance, Pelican must submit the matter for dispute resolution to avoid payment of stipulated penalties. If it is determined that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Pelican, including any entity controlled by Pelican, and that the delay could not have been prevented by Pelican by the exercise of due diligence, Pelican shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

45. Pelican shall bear the burden of proving that any delay of any requirement(s) of this Settlement was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that it could not have prevented the delay by the exercise of due diligence. Pelican shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date or dates.

46. Unanticipated or increased costs or expenses associated with the performance of Pelican's obligations under this Settlement shall not constitute circumstances beyond its control, or serve as the basis for an extension of time under this Section XIV.

47. As part of the resolution of any matter submitted for dispute resolution under this Section XIV, the Parties by agreement or by order, may in appropriate circumstances extend or modify the schedule for completion of work under the Settlement to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by LDEQ.

Pelican shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

XV. DISPUTE RESOLUTION

48. The dispute resolution procedure set forth in this Section XV shall be available to resolve all disputes arising under this Settlement, including assertion of commercial unavailability under Paragraph 19 of this Settlement, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Party.

49. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the Parties to this Settlement to another advising of a dispute pursuant to this Section XV. The notice shall describe the nature of the dispute, and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice and the Parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.

50. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the Parties, unless it is agreed that this period should be extended.

51. In the event that the Parties are unable to reach agreement during such informal negotiation period, LDEQ shall provide Pelican with a written summary of its position regarding the dispute. The position advanced by LDEQ shall be considered binding unless, within forty-five (45) calendar days of Pelican's receipt of the written summary of LDEQ's position, Pelican files a request for a hearing with the Secretary of LDEQ. If the request for hearing is granted, the issues raised in the request shall be resolved by an adjudicatory hearing before a hearing

officer. The Secretary's final decision or order after this hearing is a Final Agency Action for the purpose of judicial review. In the event Pelican fails to object to LDEQ written notice of non-acceptance or decision made pursuant to this Settlement Agreement, Pelican will be bound by such written notice of non-acceptance or decision.

52. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set forth in this Section XV may be shortened upon request of one of the Parties to the dispute.

53. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement or by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Settlement to account for the delay in the work that occurred as a result of dispute resolution. Pelican shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XVI. EFFECT OF SETTLEMENT

54. The effect of settlement of this action is governed by this Paragraph 54.

A. **Definitions.** For purposes of Paragraph 54, the following definitions apply:

- i. "Applicable PSD Requirements" shall mean PSD requirements at LAC 33:III.509.
- ii. "Applicable NSPS Subparts A and J Requirements" shall mean the standards, monitoring, testing, reporting and recordkeeping requirements, found at 40 C.F.R. §§ 60.100 through 60.109 (Subpart J), relating to a particular pollutant and a particular affected facility, and the corollary general requirements found 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart J.

iii. "Post Effective Date Compliance Dates" shall mean any dates in this Paragraph 54 after the Effective Date of this Settlement. Post Effective Date Compliance Dates include dates

certain (e.g., “December 31, 2013”), dates after the Effective Date represented in terms of “months after the Effective Date” (e.g., “Twelve Months after the Effective Date”), and dates after the Effective Date represented by actions taken (e.g., “Date of Certification”). The Post Effective Date Compliance Dates represent the dates by which work is required to be completed or an emission limit is required to be met under the applicable provisions of this Settlement.

B. New Source Review/Prevention of Significant Deterioration.

i. Liability Resolution regarding the Applicable NSR/PSD Requirements.

a. Specific Pollutant and Units. With respect to emissions of the following pollutants from the following Refinery units, this Settlement shall resolve all civil liability of Pelican to LDEQ: (i) for violations of the Applicable NSR/PSD Requirements resulting from construction or modification, that occurred prior to the Effective Date of this Settlement, of the following Refinery units; and (ii) for any pre-Effective Date construction or modification of the following units that resulted in violations of the Applicable NSR/PSD Requirements that continued up to the following dates:

<u>Refinery Unit</u>	<u>Pollutant</u>	<u>Date</u>
Refinery heaters and boilers listed in Appendix B	NO _x	Date of installation of Qualifying Controls
All Refinery heaters and boilers other than those listed in Appendix B	NO _x	Effective Date
All Refinery heaters and boilers	SO ₂	Effective Date

ii. Reservation of Rights: Release for Violations Continuing After the Effective Date Can be Rendered Void. Notwithstanding the resolution of liability in Paragraph 54.B.i, the release of liability by LDEQ to Pelican for violations of the Applicable NSR/PSD Requirements during the period between the Effective Date of this Settlement and the Post

Effective Date Compliance Dates shall be rendered void if Pelican materially fails to comply with the obligations and requirements of Paragraphs 9 - 10; provided however, that the release in Paragraph 54.B.i shall not be rendered void if Pelican remedies such material failure and pays any stipulated penalties due as a result of such material failure.

iii. Exclusions from Release Coverage: Construction and/or Modification Not Covered by Paragraph 54.B.i. Notwithstanding the resolution of liability in Paragraph 54.B.i, nothing in this Settlement precludes LDEQ from seeking from Pelican injunctive relief, penalties, or other appropriate relief for violations by Pelican of the Applicable NSR/PSD Requirements resulting from construction or modification that: (1) commenced prior to or commences after the Effective Date of this Settlement for pollutants or units not covered by the Settlement; or (2) commences after the Effective Date of this Settlement for units covered by this Settlement, except for construction and/or modification required by this Settlement.

iv. Evaluation of Applicable NSR/PSD Requirements Must Occur. Increases in emissions from units covered by this Settlement, where the increases result from the Post Effective Date construction or modification of any units within the Lake Charles Refinery, are beyond the scope of the release in Paragraph 54.B.i, and Pelican must evaluate any such increases in accordance with the Applicable NSR/PSD Requirements.

C. New Source Performance Standards Subparts A and J.

i. Resolution of Liability.

a. Specific Pollutants and Units. With respect to emissions of the following pollutants from the following Refinery units, for violations of the Applicable NSPS Subparts A and J Requirements, this Settlement shall resolve all civil liability of Pelican to LDEQ from the date that the claims of LDEQ accrued through the following dates:

<u>Refinery Unit</u>	<u>Pollutant</u>	<u>Date</u>
All Refinery heaters and boilers	SO ₂	Effective Date
Refinery Flaring Device (4-78, EQT0003)	SO ₂	Effective Date

ii. **Reservation of Rights: Release for NSPS Violations Occurring After the Effective Date Can be Rendered Void.** Notwithstanding the resolution of liability in Paragraph 54.C.i.a, the release of liability by LDEQ to Pelican for violations of any Applicable NSPS Subparts A and J Requirement that occurred at the Refinery between the Effective Date and the Post Effective Date Compliance Dates shall be rendered void if Pelican materially fails to comply with the obligations and requirements of Paragraphs 10 - 11; provided however, that the release in Paragraph 58.C.i.a shall not be rendered void if Pelican remedies such material failure and pays any stipulated penalties due as a result of such material failure.

iii. **Prior NSPS Applicability Determinations.** Nothing in this Settlement shall affect the status of any fuel gas combustion device currently subject to NSPS as previously determined by any federal, state, or local authority or any applicable permit.

D. LDAR and Benzene Waste NESHAP.

i. **Resolution of Liability.** This Settlement shall resolve all civil liability of Pelican to LDEQ for violations of the following statutory and regulatory requirements that occurred at the Refinery prior to the Effective Date of this Settlement:

a. **LDAR.** For all equipment in light liquid service and gas and/or vapor service, all State LDAR requirements (i.e. LAC 33:III.2122), including those that are adopted as Louisiana regulations in LAC 33:III.3003, LAC 33:III.5116, and LAC 33:III.5122.

b. **Benzene Waste NESHAP.** The National Emission Standard for Benzene Waste Operations, 40 C.F.R. Part 61, Subpart FF, which language has been adopted as a Louisiana

regulation in LAC 33:III.5116.

ii. Reservation of Rights. Notwithstanding the resolution of liability in Paragraphs 60.D.i, nothing in this Settlement precludes LDEQ from seeking from Pelican:

- (a) injunctive and/or other equitable relief for violations of the Benzene Waste NESHAP and/or LDAR that (A) commenced prior to the Effective Date of this Settlement and continued after the Effective Date; or (B) commenced after the Effective Date of the Settlement; or
- (b) civil penalties for violations of the Benzene Waste NESHAP and/or LDAR occurring on or after the Effective Date of this Settlement.

E. NSPS Subpart QQQ.

i. This Settlement shall resolve all civil liability of Pelican to LDEQ for violations of 40 C.F.R. §§ 60.690-60.699 (Subpart QQQ) which language has been adopted as a Louisiana regulation in LAC 33:III.3003, that occurred at the Refinery from the date that the claims of LDEQ accrued through the date that Pelican completes the requirements of the compliance plan and schedule in accordance with Paragraph 20; provided however, that the release of liability for the period between the Effective Date and the date that Pelican completes the requirements of the compliance plan in accordance with Paragraph 20 shall be rendered void if Pelican does not meet the NSPS requirements at 40 C.F.R. §§ 60.692-60.693, on or before the dates specified in the compliance plan and schedule.

F. Other Matters. This Settlement shall resolve all of Pelican's liability to LDEQ for violations that occurred at the Refinery and Asphalt Plant as noted in the following and described below: (1) Consolidated Compliance Order & Notice of Potential Penalty dated December 7, 2007, Enforcement Tracking No. AE-CN-07-0126; (2) Consolidated Compliance Order &

Notice of Potential Penalty dated February 22, 2008, Enforcement Tracking No. HE-CN-07-0579; (3) the alleged past violations specified in Appendix C; and (4) any potential violations or noncompliance disclosed to LDEQ in writing or otherwise known to LDEQ up to and through June 30, 2012.

G. Claim/Issue Preclusion. In any subsequent administrative or judicial proceeding initiated by LDEQ for injunctive relief, penalties, or other appropriate relief relating to Pelican for violations of the PSD, NSPS, NESHAP, and/or LDAR requirements, not identified in Paragraph 54 of the Settlement and/or Appendix C:

a. Pelican shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, or claim-splitting. Nor may Pelican assert, or maintain, any other defenses based upon any contention that the claims raised by LDEQ in the subsequent proceeding were or should have been brought in the instant case. Nothing in the preceding sentences is intended to affect the ability of Pelican to assert that the claims are deemed resolved by virtue of this Paragraph 54 of this Settlement.

b. LDEQ may not assert or maintain that this Settlement constitutes a waiver or determination of, or otherwise obviates, any claim or defense whatsoever, or that this Settlement constitutes acceptance by Pelican of any interpretation or guidance issued by LDEQ related to the matters addressed in this Settlement.

H. Imminent and Substantial Endangerment. Nothing in this Settlement shall be construed to limit the authority of LDEQ to undertake any action against any person, including Pelican, to abate or correct conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

XVII. GENERAL PROVISIONS

55. Other Laws. Except as specifically provided by this Settlement, nothing in this Settlement shall relieve Pelican of its obligations to comply with all applicable federal, state and local laws and regulations. Subject to Paragraph 54, nothing contained in this Settlement shall be construed to prevent or limit the rights of LDEQ to seek or obtain other remedies or sanctions available under other state statutes or regulations, by virtue of Pelican's violation of the Settlement or of the statutes and regulations upon which the Settlement is based, or for Pelican's violations of any applicable provision of law, other than the specific matters resolved herein. This shall include the right of LDEQ to invoke the authority of the court to order Pelican's compliance with this Settlement in a subsequent contempt action.

56. Post-Permit Violations. Nothing in this Settlement shall be construed to prevent or limit the right of LDEQ to seek injunctive or monetary relief for violations of permits issued as a result of the procedure required under Paragraphs 15-16 of this Settlement; provided however, that with respect to monetary relief, LDEQ must elect between filing a new action for such monetary relief or seeking stipulated penalties under this Settlement, if stipulated penalties also are available for the alleged violation(s).

57. Failure of Compliance. LDEQ does not, by its consent to this Settlement, warrant or aver in any manner that Pelican's complete compliance with the Settlement will result in compliance with the provisions of the Louisiana Environmental Quality Act. Notwithstanding the review or approval by LDEQ of any plans, reports, policies or procedures formulated pursuant to the Settlement, Pelican shall remain solely responsible for compliance with the terms of this Settlement, all applicable permits, and all applicable federal, state and local laws and regulations, except as provided in Section XIV (Force Majeure).

58. Service of Process. Pelican hereby agrees to accept service of process by mail with respect to all matters arising under or relating to the Settlement and to waive the formal service requirements. The persons identified by Pelican at Paragraph 62 (Notice) are authorized to accept service of process with respect to all matters arising under or relating to the Settlement.

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

60. Public Documents. All information and documents submitted by Pelican to LDEQ pursuant to this Settlement shall be subject to public inspection in accordance with the statutes and regulations that are applicable to LDEQ, unless subject to legal privileges or protection or identified and supported as business confidential in accordance with LDEQ statutes or regulations.

61. Public Notice and Comment. The Parties agree and acknowledge that final approval by LDEQ of this Settlement is subject to the requirements of La R.S. 30:2050.7, which provides for public notice of this Settlement in newspapers of general circulation and the official journals of parishes in which the facilities are located, an opportunity for public comment, consideration of any comments, and concurrence by the State Attorney General. The State of Louisiana reserves the right to withdraw or withhold consent if the comments regarding this Settlement disclose facts or considerations which indicate that this Settlement is inappropriate, improper or inadequate.

62. 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, postage pre-paid, except for notices under Section XIV (Force Majeure) and Section XV (Dispute Resolution) which shall be sent by overnight mail or by certified or registered mail, return receipt requested. Each report, study, notification or other communication of Pelican shall

be submitted as specified in this Settlement. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this Settlement to be submitted or delivered to LDEQ shall be addressed as follows:

As to LDEQ:

Administrator, Enforcement Division
Office of Environmental Compliance
Louisiana Department of Environmental Quality
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312

As to Pelican:

Corporate Compliance Manager
Pelican Refining Company, L.L.C.
3355 W. Alabama, Suite 575
Houston, Texas 77098

Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address. In addition, the nature and frequency of reports required by the Settlement may be modified by mutual consent of the Parties. The consent of LDEQ to such modification must be in the form of a written notification from LDEQ.

63. Approvals. All LDEQ approvals or comments required under this Settlement shall come from LDEQ, Office of Environmental Compliance, Enforcement Division, at the address listed in Paragraph 62 (Notice).

64. Modification. The Settlement contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation or understanding. Prior drafts of the Settlement shall not be used in any action involving the interpretation or enforcement of the Settlement. Non-material modifications to this Settlement shall be in writing, signed by the Parties. Material modifications to this Settlement shall be in writing, signed by the

Parties, and shall be effective upon finalizing of the modification. Specific provisions in this Settlement that govern specific types of modifications shall be effective as set forth in the specific provision governing the modification.

XVIII. TERMINATION

65. A. Provisions of this Settlement relating to Pelican shall be subject to termination upon request by Pelican (under the conditions identified in Paragraph 65.B). Pelican must have satisfied all of the following requirements of this Settlement:

- i. installation of control technology systems as specified in this Settlement;
- ii. achieving compliance with all provisions contained in this Settlement;
- iii. paying all penalties and other monetary obligations due under the terms of the Settlement; no penalties or other monetary obligations due hereunder can be outstanding or owed to LDEQ;
- iv. the completion of the project set forth in Paragraph 20;
- v. the receipt of permits incorporating the emission limits established under Section V;
- vi. LDEQ's receipt of the first calendar quarterly progress report following the conclusion of the operation for at least one year of all units in compliance with the emission limits established herein; and
- vii. Pelican has certified compliance pursuant to Paragraph 65.A.i-vi, above, to LDEQ in writing.

B. Unless, within 120 days of receipt of the certification required by Paragraph 65.A.vii, LDEQ objects in writing with specific reasons, this Settlement shall be deemed terminated. If LDEQ objects to the certification by Pelican, then the matter shall be subject to

dispute resolution under Section XV (Dispute Resolution) of this Settlement. In such case, Pelican shall bear the burden of proving that this Settlement should be terminated.

XIX. SIGNATORIES

66. Each of the undersigned representatives certify that they are fully authorized to enter into the Settlement on behalf of such Parties, and to execute and to bind such Parties to the Settlement.

PELICAN REFINING COMPANY, L.L.C.

BY: *Don C. Nelson*
(Signature)

Don C. Nelson
(Print)

TITLE: ACTING GENERAL MANAGER

THUS DONE AND SIGNED in duplicate original before me this 5th day of March, 2015, at Houston, Texas.

[Signature]
NOTARY PUBLIC (ID # _____)



(Stamped or Printed)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Peggy M. Hatch, Secretary

BY: *D. Chance McNeely*
D. Chance McNeely, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 22 day of April, 2015, at Baton Rouge, Louisiana.

[Signature]
NOTARY PUBLIC (ID # 19181)

Perry Theriot
(Stamped or Printed)

Approved: *D. Chance McNeely* 2/3/15
D. Chance McNeely, Assistant Secretary