U.S. DISTRICT COURT
WESTERN DISTRICT OF LOUISIANA
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IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF LOUISIANA

UNITED STATES OF AMERICA,	§	
	§	
Plaintiff, and the	§	
	§	
STATE OF LOUISIANA,	§	
	§	
Co-Plaintiff,	§	Civil Action No. 2:08-cv-1215 PM KK
	§	
v.	§	
	§	
CALCASIEU REFINING COMPANY,	§	
	§	
Defendant.	§	
	§	

CONSENT DECREE

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CONSENT DECREE

WHEREAS, plaintiff, the United States of America ("Plaintiff" or "the United States"), by the authority of the Attorney General of the United States through its undersigned counsel, acting at the request and on behalf of the United States Environmental Protection Agency ("EPA"), and co-plaintiff, the State of Louisiana ("Co-Plaintiff" or "State of Louisiana" or "LDEQ"), have simultaneously filed a Complaint and lodged this Consent Decree against Calcasieu Refining Company ("Calcasieu"), for alleged environmental violations at Calcasieu's petroleum refinery in Lake Charles, Louisiana;

WHEREAS, the United States alleges that Calcasieu has violated or continues to violate the following statutory and regulatory provisions:

1) New Source Performance Standards ("NSPS") found at 40 C.F.R. Part 60, Subparts A and J, promulgated under Section 111 of the Clean Air Act, 42 U.S.C. § 7411 ("Refinery NSPS Regulations"), for fuel gas combustion devices; and

2) Leak Detection and Repair ("LDAR") requirements promulgated pursuant to Sections 111 and 112 of the Clean Air Act, and found at 40 C.F.R. Part 60 Subparts VV and GGG; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC ("LDAR Regulations"); and

3) Prevention of Significant Deterioration ("PSD") requirements found at Part C of Subchapter I of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7475 and the regulations promulgated thereunder at 40 C.F.R. § 52.21 (the "PSD Rules"); and "Plan Requirements for Non Attainment Areas" at Part D of subchapter I of the Act, 42 U.S.C. § 7502-7503 and the regulations promulgated thereunder at 40 C.F.R. § 51.165(a) and (b) and at Title 40, Part 51,

Appendix S and at 40 C.F.R. § 52.24 ("PSD/NSR Regulations"), for heaters and boilers for nitrogen oxide ("NO_x") and sulfur dioxide ("SO_2"); and

4) National Emission Standards for Hazardous Air Pollutants ("NESHAP") for Benzene Waste Operations promulgated pursuant to Section 112(e) of the Act, and found at 40 C.F.R. Part 61, Subpart FF ("Benzene Waste Operations NESHAP Regulations");

WHEREAS, the United States also specifically alleges that, upon information and belief, Calcasieu has been or continues to be in violation of the Louisiana state implementation plan ("SIP") and other state rules and regulations adopted by the state to the extent that such plans, rules, or regulations implement, adopt, or incorporate the above-described federal requirements;

WHEREAS, the State of Louisiana has joined in this matter alleging violations of Louisiana state implementation plan (SIP) provisions and other state rules incorporating and implementing the foregoing federal requirements;

WHEREAS, Calcasieu denies that it has violated and/or continues to violate the foregoing statutory, regulatory, SIP provisions, and other state rules incorporating and implementing the foregoing federal requirements, and maintains that it has been and remains in compliance with all applicable statutes, regulations, and permits and is not liable for civil penalties and injunctive relief as alleged in the Complaint;

WHEREAS, the United States is engaged in a federal strategy for achieving cooperative agreements with United States petroleum refineries to achieve across-the-board reductions in emissions ("Global Settlement Strategy");

WHEREAS, Calcasieu consents to the simultaneous filing of the Complaint and lodging of this Consent Decree against Calcasieu despite its denial of the allegations in the Complaint to accomplish its objective of cooperatively reconciling the goals of the United States, Calcasieu, and the State of Louisiana under the Clean Air Act and the corollary state statutes, and therefore

has undertaken and agrees to undertake the installation of air pollution control equipment and enhancements to its air pollution management practices at the Calcasieu refinery to reduce air emissions by participating in the Global Settlement Strategy;

WHEREAS, Calcasieu has no fluidized catalytic cracking unit, no sulfur recovery unit, no tail gas unit, no sour water stripper, and no amine unit;

WHEREAS, EPA recognizes that "Malfunctions," as defined in Paragraph 10 of this Consent Decree and 40 C.F.R. § 60.2, may result in "Hydrocarbon Flaring" on occasion, as those terms are defined herein, and that such flaring does not violate 40 C.F.R. § 60.11(d) if the owner or operator, to the extent practicable, maintains and operates such units in a manner consistent with good air pollution control practice for minimizing emissions during these periods;

WHEREAS, Calcasieu maintains that it has never experienced a Hydrocarbon Flaring Incident as defined in this Consent Decree;

WHEREAS, by entering into this Consent Decree, Calcasieu is committed to pro-actively resolving environmental concerns related to its past operations;

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

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

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

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

NOW THEREFORE, before the taking of any testimony, without adjudication of any issue of fact or law, and upon the consent and agreement of the Parties to the Consent Decree, it is hereby ORDERED, ADJUDGED and DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action and over the Parties pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367. In addition, this Court has jurisdiction over the subject matter of this action pursuant to Sections 113(b) and 167 of the Clean Air Act, 42 U.S.C. §§ 7413(b) and 7477. The United States' complaint states a claim upon which relief may be granted for injunctive relief and civil penalties against Calcasieu under the Clean Air Act. Authority to bring this suit is vested in the United States Department of Justice. See, e.g., 28 U.S.C. §§ 516 and 519, and Section 305 of the Clean Air Act, 42 U.S.C. § 7605.

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

3. Notice of the commencement of this action has been given to the State of Louisiana under Section 113(a)(1) and 113(b) of the Clean Air Act, 42 U.S.C. §§ 7413(a)(1) and 7413(b).

II. APPLICABILITY AND BINDING EFFECT

4. The provisions of the Consent Decree shall apply to Calcasieu. The provisions of the Consent Decree shall be binding upon the United States, the State of Louisiana, and Calcasieu and its successors and assigns and other persons or entities bound by law.

5. Calcasieu agrees not to contest the validity of the Consent Decree in any subsequent proceeding to implement or enforce its terms.

6. Effective from the Date of Entry of the Consent Decree until the Date of Termination of the Consent Decree, Calcasieu agrees that its refinery at Lake Charles is covered by this Consent Decree. Effective from the Date of Lodging of the Consent Decree, Calcasieu shall give written notice of the Consent Decree to any successors in interest prior to the transfer of ownership or operation of any portion of its refinery at Lake Charles and shall provide a copy of the Consent Decree to any successor in interest. Calcasieu shall notify the United States and the State of Louisiana, in accordance with the notice provisions set forth in Paragraph 182 (Notice), of any successor in interest at least thirty (30) days prior to any such transfer.

7. Calcasieu 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, its refinery at Lake Charles upon the execution by the transferee of a modification to the Consent Decree which makes the terms and conditions of the Consent Decree that apply to Calcasieu applicable to the transferee. As soon as possible prior to the transfer, Calcasieu will notify the United States and the State of Louisiana of the proposed transfer and of the specific Consent Decree provisions that the transferee is assuming. Simultaneously, Calcasieu will provide a certification from the transferee that the transferee has the financial and technical ability to assume the obligations and liabilities under this Consent Decree that are related to the transfer. By no later than sixty (60) days after the transferee executes a document agreeing to substitute itself for Calcasieu for all terms and conditions of this consent Decree, the United States, the State of Louisiana, Calcasieu, and the transferee will jointly file with the Court a motion requesting the court to substitute the transferee as the Defendant for those terms and conditions of this Consent Decree that apply to the transferee. If Calcasieu does not secure the

agreement of the United States and the State of Louisiana to a Joint Motion within sixty (60) days, then Calcasieu and the transferee may file a motion without the agreement of the United States and the State of Louisiana. The United States and the State of Louisiana thereafter may file an opposition to the motion. Calcasieu will not be released from the obligations and liabilities of any provision of this consent Decree unless and until the Court grants the motion substituting the transferee as the Defendant to those provisions.

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

III. OBJECTIVES

9. It is the purpose of the Parties to this Consent Decree to further the objectives of the federal Clean Air Act and the Louisiana Environmental Quality Act, LSA-R.S. 30:2001, *et seq.*

IV. DEFINITIONS

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

a) "Alternative Monitoring Plan approved by EPA in 1997" shall mean the procedure employed by Calcasieu, and approved by EPA in 1997 (and as subsequently revised) for determining Calcasieu's compliance with SO_2 emission limits for its fuel gas combustion devices, as defined at 40 CFR 60.101(g).

b) "Calendar quarter" shall mean a three month period ending on March 31st, June 30th, September 30th, or December 31st.

c) "Calcasieu" shall mean Calcasieu Refining Company, its successors and assigns and other persons or entities bound by law, located at 4359 Tank Farm Road, Lake Charles, Louisiana 70605.

d) "Consent Decree" or "Decree" shall mean this Consent Decree, including any and all appendices attached to the Consent Decree.

e) "Co-Plaintiff" shall mean the State of Louisiana.

f) "Covered Heaters and Boilers" shall mean the heaters and boilers with a heat input capacity greater than 40 mmBTU/hr (HHV). Emissions from Covered Heaters and Boilers will be restricted to .040 lb/mmBTU of NO_x on an aggregated 3-hour weighted average by December 31, 2010. The current covered heaters and boilers are listed in Appendix A, along with all of Calcasieu's other heaters and boilers.

g) "Date of Entry of the Consent Decree" shall mean the date the Consent Decree is approved or signed by the United States District Court Judge.

h) "Date of Lodging of the Consent Decree" shall mean the date the Consent Decree is lodged with the Clerk of the Court for the United States District Court for the Western District of Louisiana.

i) "Date of Termination of the Consent Decree" shall mean the date the Consent Decree terminates in accordance with the provisions of Section XXII.

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

k) "Flaring Device" shall mean ~~an~~ a HC Flaring Device.

l) "Fuel Oil" shall mean any liquid fossil fuel with sulfur content greater than 0.05%.

m) "Hydrocarbon Flaring" or "HC Flaring" shall mean the combustion of refinery-generated gases, except for acid gas and/or sour water stripper gas and/or tail gas, in a Hydrocarbon Flaring Device. "Hydrocarbon Flaring Device" or "HC Flaring Device" shall mean a flare device used to safely control (through combustion) any excess volume of a refinery-generated gas. The HC Flaring Devices currently in service at Calcasieu are identified in Appendix B to the Consent Decree. To the extent that, during the duration of the Consent Decree, Calcasieu utilizes HC Flaring Devices other than those specified in Appendix B for the purpose of combusting any excess of a refinery-generated gas, those HC Flaring Devices shall be covered under this Consent Decree.

n) "Hydrocarbon Flaring Incident" or "HC Flaring Incident" shall mean the continuous or intermittent Hydrocarbon Flaring 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.

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 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) "NO_x" shall mean all oxides of nitrogen.

s) "NO_x Control Technology" shall mean Next Generation ULNBs.

t) "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral.

u) "Parties" shall mean the United States, the State of Louisiana, and Calcasieu.

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

w) "Shutdown", as specified in 40 C.F.R. Part 60.2, shall mean the cessation of operation of equipment for any purpose.

x) "SO_2" shall mean sulfur dioxide.

y) "Startup," as specified in 40 C.F.R. Part 60.2, shall mean the setting in operation of equipment for any purpose.

V. NO_X AND SO_2 EMISSIONS REDUCTIONS FROM HEATERS AND BOILERS

NO_X EMISSIONS REDUCTIONS FROM HEATERS AND BOILERS

11. Program Summary. Calcasieu shall implement a program to reduce NO_x emissions from refinery heaters and boilers greater than 40 MMBTU/hr (HHV) and shall achieve an interim system-wide weighted average concentration emission limit for NO_x of 0.060 lbs./MMBTU, to be achieved by December 31, 2008, and a final system-wide weighted average concentration emission limit for NO_x of 0.040 lbs./MMBTU, by December 31, 2010.

12. Calcasieu shall implement various NO_x emission reduction measures and techniques to achieve system-wide NO_x emission levels for its Covered Heaters and Boilers. For purposes of this Consent Decree, "heaters and boilers" shall be defined to include any stationary combustion unit used to burn fossil fuel for the purpose of:

a) producing power, steam, or heat by heat transfer; or

b) heating a material for initiating or promoting a process or chemical reaction in which the material participates as a reactant or catalyst, but expressly excluding any turbine, internal combustion engine, duct burner, CO boiler, incinerator, or incinerator waste heat boiler.

A. Initial Inventory, Annual Update, and Compliance Plan for Calcasieu

13. Appendix A to this Consent Decree (the "Initial Inventory") provides an initial list of all of Calcasieu's heaters and boilers, including an identification of those heaters and boilers for which heat input capacity is greater than 40 MMBTU/hr (HHV).

14. The Initial Inventory lists Calcasieu's previously constructed heaters and boilers and specifically identifies Calcasieu's Covered Heaters and Boilers. The Initial Inventory also provides the following information concerning the Covered Heaters and Boilers:

a) Calcasieu's designations for each of the Covered Heaters and Boilers;

b) Identification of heat input capacity, and the source of such identification, for each of the Covered Heaters and Boilers. For purposes of this subparagraph, heat input capacity for each Covered Heater or Boiler shall equal the lesser of any applicable permit limit or Calcasieu's best then-current estimate of its maximum heat input capacity (hereinafter "Heat Input Capacity");

c) Identification of all applicable NO_x emission limitations, in pounds per million BTU, for each of the Covered Heaters and Boilers; and

d) Statement of whether a continuous emission monitoring system ("CEMS") for NO_x has been installed on the respective Covered Heater or Boiler.

15. Calcasieu shall submit to EPA and LDEQ an annual update to the Initial Inventory on or before March 31 of each calendar year from 2009 through 2012, inclusive (the "Annual Update Report"); provided, however, that Calcasieu shall not be obligated to submit any Annual Update Report after satisfying the provisions of Paragraphs 21 and 23 below. Calcasieu shall designate the final Annual Update Report. The Annual Update Report shall revise any information included in the Initial Inventory or most recent Annual Update Report to the extent appropriate based upon the construction of a Covered Heater or Boiler or any change during the prior year to any of the previously existing Covered Heaters and Boilers, including the date of installation of any CEMS installed during the prior year. The Annual Update Report shall also include for each Covered Heater and Boiler the estimated actual emission rate in pounds of NO_x per MMBTU heat input (HHV) and tons per year and the type of data used to derive the emission estimate (i.e., emission factor, stack test, or CEM data).

B. Interim Emission Reductions and Timeframes for Calcasieu

16. By no later than September 30, 2008, Calcasieu shall submit to EPA and LDEQ a compliance plan for attainment, by December 31, 2008, of an interim system-wide weighted average, as determined in accordance with Paragraph 25, for Covered Heaters and Boilers of 0.060 lbs.-NO_x/MMBTU (HHV) (the "Interim Compliance Plan"). The Interim Compliance Plan is intended to reflect Calcasieu's then-current strategy for satisfying the requirements of Paragraph 17. Calcasieu shall not be bound by the terms of the Interim Compliance Plan.

17. By no later than December 31, 2008, Calcasieu shall install NO_x Control Technologies on, or otherwise limit NO_x emissions from, certain Covered Heaters and Boilers such that the system-wide weighted average, as determined in accordance with Paragraph 25, for NO_x emissions from the Covered Heaters and Boilers is no greater than 0.060 lbs.-NO_x/MMBTU (HHV).

18. Calcasieu shall select from among the Covered Heaters and Boilers those units for which NO_x emissions shall be controlled or otherwise reduced so as to satisfy the requirements of Paragraph 17.

19. For the purposes of Paragraph 17 and in the event that Calcasieu permanently ceases operation of any Covered Heaters or Boilers on or before December 31, 2008, then Calcasieu may include each such shutdown unit in its demonstration of compliance with Paragraph 17, if Calcasieu notifies the appropriate permitting authority that such unit is no longer operational and requests the withdrawal or invalidation of any permit or permit provisions authorizing operation of such unit. For purposes of Calcasieu's demonstration under Paragraph 25 of compliance with Paragraph 17, the emissions of any such shutdown unit shall be equal to 0.000 lbs NO_x/MMBTU, and the heat input attributed to any shutdown Covered Heater or Boiler shall be its Heat Input Capacity prior to shutdown.

C. **Final Emission Reductions and Deadlines for Calcasieu**

20. On or before July 31, 2009, Calcasieu shall submit to EPA and LDEQ a compliance plan for attainment by December 31, 2010, of a system-wide weighted average for Covered Heaters and Boilers of 0.040 lbs.-NO_x/MMBTU (HHV) (the "Compliance Plan"), as determined in accordance with Paragraph 25. The Compliance Plan is intended to reflect Calcasieu's then-current strategy for satisfying the requirements of Paragraph 21. Calcasieu shall not be bound by the terms of the Compliance Plan.

21. By no later than December 31, 2010, Calcasieu shall install NO_x control technology on, or otherwise limit NO_x emissions from, certain Covered Heaters and Boilers such that the system-wide weighted average, as determined in accordance with Paragraph 25, for NO_x emissions from the Covered Heaters and Boilers is no greater than 0.040 lbs.-NO_x/MMBTU (HHV).

22. Calcasieu shall select from among the Covered Heaters and Boilers those units for which NO_x emissions shall be controlled or otherwise reduced so as to satisfy the requirements of Paragraph 21.

23. For the purposes of Paragraph 21, in the event that, on or before December 31, 2010, Calcasieu permanently ceases operation of any Covered Heaters or Boilers, then Calcasieu may include each such shutdown unit in its demonstration of compliance with Paragraph 21 if Calcasieu notifies the appropriate permitting authority that such unit is no longer operational and requests the withdrawal or invalidation of any permit or permit provisions authorizing operation of such unit. For purposes of Calcasieu's demonstration under Paragraph 25 of compliance with Paragraph 21, the emissions of any such shutdown unit shall be equal to 0.000 lbs NO_x/MMBTU, and the heat input attributed to any shutdown Covered Heater or Boiler shall be its Heat Input Capacity prior to shutdown.

D. Compliance Demonstration

24. By no later than March 31, 2009, Calcasieu shall submit to EPA and LDEQ a report demonstrating compliance with Paragraph 17. By no later than March 31, 2011, Calcasieu shall submit to EPA and LDEQ a report demonstrating compliance with Paragraph 21. The compliance reports submitted pursuant to this paragraph shall include the following information as applicable to Calcasieu's interim or final compliance demonstration:

a) The NO_x emission limit for each Covered Heater or Boiler which is the least of the following: (i) the NO_x emission limit, in pounds per MMBTU at HHV (as a 365-day rolling average if based on CEMS or, otherwise, no longer than the averaging period of the reference test method if based on stack tests) based upon any existing federally enforceable permit condition, including such a condition as may be reflected in a consolidated permit (where applicable), of the Covered Heater or Boiler, or (ii) the NO_x emission limit, in pounds per MMBTU at HHV, reflected in any permit application for a federally enforceable permit, including a consolidated permit where such limit would also be permanent, submitted by Calcasieu for such Covered Heater or Boiler prior to the date of submittal of the Compliance Report. In the event that Calcasieu identifies a NO_x emission limit, in pounds per MMBTU at HHV, for a Covered Heater or Boiler pursuant to this paragraph based on a NO_x emission limit then reflected in a pending permit application, Calcasieu shall not withdraw such application nor may Calcasieu seek to modify that application to increase the NO_x emission limit reflected in such application without prior EPA and LDEQ approval.

b) Heat Input Capacity, in MMBTU/hr at HHV, for each Covered Heater and Boiler, including an explanation of any change relative to that reported in the most recent Annual Update.

c) A demonstration of compliance with Paragraph 17 or 21, as applicable, performed in accordance with Paragraph 25.

25. Calcasieu shall demonstrate compliance with the provisions of Paragraph 17 by the following inequality: $0.060 \geq \sum_{i}^{n} (EL_i \times HIR_i) / \sum_{i}^{n} HIR_i$.

Calcasieu shall demonstrate compliance with the provisions of Paragraph 21 by the following inequality: $0.040 \geq \sum_{i}^{n} (EL_i \times HIR_i) / \sum_{i}^{n} HIR_i$.

For purposes of this Paragraph 25:

EL_i = The relevant NO_x Emission Limit for Covered Heater or Boiler "i", in pounds per million BTU (HHV), as reported pursuant to Paragraph 24(a);

HIR_i = Heat Input Capacity of Covered Heater or Boiler "i", in million BTU (HHV) per hour, as reported pursuant to Paragraph 24(b);

n = The total number of Covered Heaters and Boilers subject to this Consent Decree.

E. Monitoring Requirements

26. By no later than July 31, 2009, for Covered Heaters and Boilers existing on the Date of Lodging for which Calcasieu takes an emission limit of <0.060 lbs/MMBTU (HHV) without adding additional controls to meet the requirement of Paragraph 21; and beginning no later than 180 days after installing controls on a Covered Heater and Boiler for purposes of

compliance with the requirement of Paragraphs 17 and 21, Calcasieu shall monitor each such Covered Heater or Boiler as follows:

a) For a Covered Heater or Boiler with a Heat Input Capacity of 150 MMBTU/hr (HHV) or greater, Calcasieu shall install or continue to operate a continuous emission monitoring system ("CEMS") for NO_x;

b) For a Covered Heater or Boiler with a Heat Input Capacity greater than 100 MMBTU/hr (HHV) but less than or equal to 150 MMBTU/hr (HHV), Calcasieu shall install or continue to operate a CEMS for NO_x, or monitor NO_x emissions with a predictive emissions monitoring system ("PEMS") developed and operated pursuant to the requirements of Appendix C of this Consent Decree;

c) For a Covered Heater or Boiler with a Heat Input Capacity of less than or equal to 100 MMBTU/hr (HHV), Calcasieu shall conduct an initial performance test and any periodic tests that may be required by EPA or by the applicable State or local permitting authority under the applicable regulatory authority. Calcasieu shall report the results of the initial performance testing to EPA and LDEQ. Calcasieu shall use Method 7E or an EPA- approved alternative test method to conduct initial performance testing for NO_x emissions required by this subparagraph (c).

Nothing in this Consent Decree shall preclude Calcasieu from converting a 3- hour rolling average limit to the same limit expressed as a 365-day rolling average limit if such demonstration of compliance is based upon CEMS or PEMS.

27. Calcasieu shall install, certify, calibrate, maintain, and operate all NO_x CEMS required by Paragraph 26 in accordance with the provisions of 40 C.F.R. Section 60.13 that are

applicable to CEMS (excluding those provisions applicable only to continuous opacity monitoring systems) and Part 60, Appendices A and F, and the applicable performance specification of 40 C.F.R. Part 60, Appendix A. With respect to 40 C.F.R. Part 60, Appendix F, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3, and 5.1.4., Calcasieu must conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS required by Paragraph 26 at least once every three (3) years. Calcasieu must also conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.

28. Nothing in this Consent Decree is intended to limit Calcasieu from satisfying any provisions of this section earlier than the applicable compliance date specified in this section.

SO_2 EMISSIONS REDUCTIONS FROM HEATERS AND BOILERS

28A. Control of SO_2 Emissions from, and NSPS Applicability to, Heaters and Boilers.

a) Effective on the Date of Entry of this Consent Decree, all heaters and boilers at the Refinery that are operated as fuel gas combustion devices (FGCDs) shall be "affected facilities," as that term is used in 40 C.F.R. Part 60, Subparts A and J, and therefore subject to, and required to comply with, the requirements of 40 C.F.R. Part 60, Subparts A and J. All FGCDs shall comply with the relevant monitoring requirements of this Consent Decree and shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8.

b) No later than the Date of Entry of this Consent Decree, Calcasieu shall not burn Fuel Oil in any combustion device at the Refinery, including any combustion device constructed after the Date of Entry.

c) Calcasieu shall complete installation of an H_2S continuous monitoring system (CMS) on fuel gas lines not later than December 24, 2009, and shall maintain the CMS in accordance with 40 CFR Part 60, Appendix F and Subpart A.

d) Effective on the Date of Entry of this Consent Decree, the Alternative Monitoring Plan approved by EPA in 1997 shall no longer be valid. From the Date of Entry of this Consent Decree until the completed installation of the CMS in (c) above, Calcasieu shall comply with the interim alternative monitoring plan described in Appendix D.

VI. NSPS APPLICABILITY OF AND COMPLIANCE FOR HC FLARING DEVICES.

29. Summary. Calcasieu currently owns and operates the HC Flaring Devices identified in Appendix B to this Consent Decree. The HC Flaring Devices in Appendix B are affected facilities, as that term is used in NSPS, 40 C.F.R. Part 60, and are subject to and are required to comply with the requirements of 40 C.F.R. Part 60, Subparts A and J for fuel gas combustion devices.

30. Continuous or Intermittent, Routinely-Generated Refinery Fuel Gases. For continuous or intermittent, routinely-generated refinery fuel gases that are combusted in any of the HC Flaring Devices identified in Appendix B, Calcasieu shall either take the HC 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) by the dates specified in Appendix B. If Calcasieu installs any new HC Flaring Devices, Calcasieu shall amend Appendix B and comply with the NSPS Subparts A and J requirements for each new HC Flaring Device by using one of the following methods: (a) Operate the new HC Flaring Device as a fuel gas combustion device and comply with NSPS monitoring requirements by use of a CEMS pursuant to 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); or (b) Operate and maintain a flare gas recovery system to prevent continuous or routine combustion in the new HC Flaring Device. (Use of a flare gas recovery system on a flare obviates the need to continuously monitor and maintain records of hydrogen sulfide in the gas as otherwise required by 40 C.F.R. §§ 60.105(a)(4) and 60.7.) Amendments to Appendix B under this Paragraph are non-material modifications to this Consent Decree for purposes of Paragraph 185.

31. Non-Routinely Generated Gases. The combustion of gases generated by the startup, shutdown, or Malfunction of a refinery process unit or released to a HC Flaring Device as a result of relief valve leakage or other emergency Malfunction are exempt from the above requirement to comply with 40 C.F.R. § 60.104(a)(1).

32. Good Air Pollution Control Practices. For all HC Flaring Devices identified in Appendix B, Calcasieu 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 emissions and HC Flaring Incidents.

33. Monitoring the HC Flaring Devices and Reporting. Calcasieu shall insure that all continuous or intermittent, routinely-generated refinery fuel gases that are combusted in any HC Flaring Device are monitored as required under NSPS J. Effective on the Date of Entry of this Consent Decree, the Alternative Monitoring Plan approved by EPA in 1997 shall no longer be valid. From the Date of Entry of this Consent Decree until the completed installation of the CMS in Paragraph 28A (c) above, Calcasieu shall comply with the interim alternative monitoring plan described in Appendix D. Calcasieu shall comply with the reporting requirements of 40 C.F.R. Part 60, Subpart J, for all such HC Flaring Devices. However, specifically with respect to vapors resulting from marine vessel loading that are incinerated in the

Marine Vapor Combustor (F-300). Calcasieu may utilize an alternative monitoring plan, pursuant to 40 C.F.R. 60.13, provided that any such Alternative Monitoring Plan include sampling of the gas inlet to the Marine Vapor Combustor.

34. Control of Hydrocarbon Flaring Incidents. Beginning no later than 90 days after the Date of Lodging of the Consent Decree, Calcasieu shall institute procedures to enable Calcasieu to identify the root causes of any HC Flaring Incidents and shall implement the necessary actions to minimize the number and duration of any HC Flaring Incidents. Thereafter, in the event Calcasieu experiences emissions from a hydrocarbon flare in excess of 500 pounds of SO_2 in any 24-hour period, Calcasieu shall investigate the cause of any future HC Flaring Incidents and correct the conditions that have caused or contributed to any such HC Flaring Incidents, to minimize HC Flaring Incidents. Calcasieu shall continue to follow the HC Flaring Incident investigation and corrective action procedures of this Subsection after the Date of Termination of the Consent Decree, but the reporting and stipulated penalty provisions of this Subsection shall not apply after the Date of Termination of the Consent Decree.

35. Investigation and Reporting. No later than forty-five (45) days following the end of an HC Flaring Incident, until the Date of Termination of the Consent Decree, Calcasieu shall submit to EPA and LDEQ a report that sets forth the following:

a) 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, Calcasieu shall set forth the starting and ending dates and times of each release;

b) An estimate of the quantity of sulfur dioxide that was emitted and the calculations that were used to determine that quantity;

c) The steps, if any, that Calcasieu took to limit the duration and/or quantity of sulfur dioxide emissions associated with the HC Flaring Incident;

d) A detailed analysis that sets forth the Root Cause and all contributing causes of that HC Flaring Incident, to the extent determinable;

e) 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 Calcasieu concludes that corrective action(s) is (are) required under Paragraph 36, 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 Calcasieu concludes that corrective action is not required under Paragraph 36, the report shall explain the basis for that conclusion;

f) 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 35 shall be submitted. Nothing in this Paragraph shall be deemed to excuse Calcasieu from its investigation, reporting, and corrective action obligations under this Section for any HC Flaring Incident which occurs after an HC Flaring Incident for which Calcasieu has requested an extension of time under this Paragraph 35.

g) To the extent that completion of the implementation of corrective action(s), if any, 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), Calcasieu shall submit a report identifying the corrective action(s) taken and the dates of commencement and completion of implementation.

36. Corrective Action. In response to any HC Flaring Incident, Calcasieu 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.

37. If EPA does not notify Calcasieu in writing within forty-five (45) days of receipt of the report(s) required by Paragraph 35 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 35 of this Decree. EPA does not, however, by its consent to the entry of this Consent Decree or by its failure to object to any corrective action that Calcasieu 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 Clean Air Act or its implementing regulations. Notwithstanding EPA's review of any plans, reports, corrective actions, or procedures under this Paragraph 37, Calcasieu shall remain solely responsible for non-compliance with the Clean Air Act and its implementing regulations. Nothing in this Paragraph 37 shall be construed as a waiver of EPA's rights under the Clean Air Act and its regulations for future violations of the Clean Air Act or its regulations.

38. If EPA 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 Calcasieu of that fact within forty-five (45) days following receipt of the report(s) required by Paragraph 35 above. If EPA and Calcasieu 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 XIX of the Consent Decree.

39. Nothing in Paragraph 38 shall be construed to limit the right of Calcasieu to take such corrective actions as it deems necessary and appropriate immediately following an HC Flaring Incident or in the period during preparation and review of any reports required under this Section.

40. Calculation of the Quantity of Sulfur Dioxide Emissions resulting from HC Flaring. For purposes of this Consent Decree, the quantity of SO_2 emissions resulting from HC Flaring shall be calculated by the following formula:

Tons of SO_2 = [FR][TD][ConcH_2S][8.44 x 10^{-5}].

The quantity of SO_2 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 SO_2 emitted shall be rounded to 10.1 tons.) For purposes of determining the occurrence of, or the total quantity of SO_2 emissions resulting from, a HC Flaring Incident that is comprised of intermittent HC Flaring, the quantity of SO_2 emitted shall be equal to the sum of the quantities of SO_2 flared during each such period of intermittent HC Flaring.

41. Calculation of the Rate of SO_2 Emissions During HC Flaring. For purposes of this Consent Decree, the rate of SO_2 emissions resulting from HC Flaring shall be expressed in terms of pounds per hour, and shall be calculated by the following formula:

$ER = [FR][Conc H_2S][0.169]$.

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 SO_2 per hour, the emission rate shall be rounded to 20.0 pounds of SO_2 per hour; for a calculation that results in an emission rate of 20.05 pounds of SO_2 per hour, the emission rate shall be rounded to 20.1.)

42. Meaning of Variables and Derivation of Multipliers used in the Equations in Paragraphs 40 and 41:

ER = Emission Rate in pounds of SO_2 per hour

FR = Average Flow Rate to Flaring Device(s) during Flaring, in standard cubic feet per hour

TD = Total Duration of Flaring in hours

$Conc H_2S$ = Average Concentration of Hydrogen Sulfide in gas during Flaring (or immediately prior to Flaring if all gas is being flared) expressed as a volume fraction (scf H_2S/scf gas)

8.44×10^{-5} = [lb mole H_2S/379 scf H_2S][64 lbs SO_2/lb mole H_2S][Ton/2000 lbs]

0.169 = [lb mole H_2S/379 scf H_2S][1.0 lb mole SO_2/1 lb mole H_2S][64 lb SO_2/1.0 lb mole SO_2]

Standard Conditions: 60 degrees F; 14.7 lb_{force}/sq.in. absolute.

The flow of gas to the HC Flaring Device(s) ("FR") shall be as measured by the relevant flow meter or reliable flow estimation parameters. Hydrogen sulfide concentration ("$Conc H_2S$") shall be determined from knowledge of the sulfur content of the process gas being flared, by direct measurement by tutwiler or draeger tube analysis or by any other method approved by EPA or the LDEQ. In the event that any of these data points is unavailable or inaccurate, the missing data point(s) shall be estimated according to best engineering judgment. The report required

under Paragraph 35 shall include the data used in the calculation and an explanation of the basis for any estimates of missing data points.

VII. BENZENE WASTE OPERATIONS NESHAP PROGRAM ENHANCEMENTS.

43. In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart FF ("Benzene Waste Operations NESHAP" or "Subpart FF"), Calcasieu agrees to undertake the measures set forth in Paragraphs 44 through 68 to ensure continuing compliance with Subpart FF and to minimize or eliminate fugitive benzene waste emissions.

44. Calcasieu 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"). At no time shall Calcasieu use the compliance option set forth at 40 C.F.R. § 61.342(c)(3)(ii).

45. One-Time Review and Verification of Calcasieu's TAB and Compliance with the Appropriate Compliance options.

a) Phase One of the Review and Verification Process. By no later than 180 days after entry of the Consent Decree, Calcasieu shall complete a review and verification of the total annual benzene quantity ("TAB"). The review and verification process shall include, but is not limited to:

(i) an identification of each waste stream that is required to be included in Calcasieu's TAB (e.g., vacuum truck waste 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 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 sixty (60) days following the completion of Phase One of the review and verification process, Calcasieu shall submit a Benzene Waste Operations NESHAP Compliance Review and Verification report ("BWON Compliance Review and Verification Report") to EPA and LDEQ that sets forth the results of Phase One, including but not limited to the items identified in (i) through (iv) of this Paragraph 45.

b) Phase Two of the Review and Verification Process. Based on EPA's review of the BWON Compliance Review and Verification Report(s), EPA may select up to 20 additional waste streams for sampling for benzene concentration. Calcasieu will conduct the required sampling and submit the results to EPA within ninety (90) days of receipt of EPA's request. Calcasieu will use the results of this additional sampling to recalculate the TAB and to amend the BWON Compliance Review and Verification Report, as needed. To the extent that EPA requires Calcasieu to re-sample a Phase One waste stream as part of this Phase Two review, Calcasieu may average the results of the two sampling events. Calcasieu shall submit an amended BWON 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 EPA.

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

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

47. Calcasieu shall submit to EPA and LDEQ by no later than 180 days after completion of the BWON Compliance Review and Verification Report, a plan that identifies with specificity the compliance strategy and schedule that Calcasieu will implement to ensure that Calcasieu complies with the 6 BQ compliance option as soon as practicable.

48. Review and Approval of Plans Submitted Pursuant to Paragraph 47. Any plan submitted pursuant to Paragraph 47 shall be subject to the approval of, disapproval of, or modification by EPA, which will act in consultation with LDEQ. Within sixty (60) days after receiving any notification of disapproval or request for modification from EPA, Calcasieu shall submit to EPA and LDEQ a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, Calcasieu shall implement the plan. Disputes arising under this Paragraph 48 shall be resolved in accordance with the dispute resolution provisions of this Decree.

49. 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 48 or pursuant to Paragraph 58 to come into compliance with the 6 BQ Compliance Option, Calcasieu shall submit a report to the EPA and LDEQ that Calcasieu complies with the Benzene Waste Operations NESHAP.

50. Annual Program. Calcasieu shall establish an annual program of reviewing process information including but not limited to construction projects, to ensure that all new benzene waste streams are included in Calcasieu's waste stream inventory.

51. Benzene Spills. Calcasieu shall review each spill to determine if benzene waste was generated. Calcasieu shall include benzene generated by such spills in the TAB.

B. Training

52. Within 180 days after the Date of Lodging of the Consent Decree, Calcasieu shall develop and begin implementation of annual (i.e., once each calendar year) training for all employees asked to draw benzene waste samples.

53. Calcasieu shall complete the development of standard operating procedures for all control equipment used to comply with the Benzene Waste Operations NESHAP. Calcasieu 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 once every 3-year basis. Calcasieu shall propose a schedule for the initial and refresher training at the same time that Calcasieu proposes a plan, pursuant to either Paragraph 47 or Paragraph 58, that identifies the compliance strategy and schedule that Calcasieu will implement to come into compliance with the 6 BQ compliance option.

54. As part of Calcasieu's training program, Calcasieu must ensure that the employees of any contractors hired to perform the requirements of Paragraph 53 are properly trained to implement all provisions of Paragraph 53.

55. Waste/Slop/Off-Spec Oil Management. By no later than 180 days after the Date of Lodging of the Consent Decree, Calcasieu shall submit to the EPA and LDEQ schematics for Calcasieu 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 Calcasieu and EPA 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 Calcasieu's TAB calculation. Calcasieu shall submit, if necessary, revised schematics that reflect the agreements between EPA and Calcasieu regarding the characterization of these oil streams and the appropriate control standards.

56. Organic Benzene Waste Streams. All waste management units handling "organic" benzene wastes, as defined in Subpart FF shall meet the applicable control standards of Subpart FF.

57. Aqueous Benzene Waste Streams. For purposes of calculating Calcasieu's TAB pursuant to the requirements of 40 C.F.R. § 61.342(a), Calcasieu 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). 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 mega-gram limit.

58. Plan to Quantify Uncontrolled Waste/Slop/Off-Spec Oil Streams. By no later than ninety (90) days after submitting the schematics required under Paragraph 55 to EPA, Calcasieu shall submit a plan(s) to quantify waste/slop/off-spec oil movements for all benzene waste streams which are not controlled. Calcasieu shall maintain records quantifying such movements.

59. End of Line Sampling. The provisions of this Paragraph 59 shall apply until the Date of Termination of the Consent Decree ("Applicability Dates for Paragraph 59").

a) By no later than sixty (60) days after the certification required by Paragraph 49, Calcasieu shall submit to EPA a plan for an "end of the line" ("EOL") determination of the benzene quantity in uncontrolled waste streams. A copy of this plan shall be submitted to the LDEQ. The proposed plan, as applicable, shall include, but not be limited to, a flow diagram indicating all wastewater streams including their control status; sampling locations; methods for flow calculations; and the assumed volatilization rate(s) to be used in calculating the uncontrolled benzene quantity. Any plan submitted pursuant to this Paragraph 59 shall be subject to the approval of, disapproval of, or modification by EPA, which will act in consultation with LDEQ. Any disputes regarding plan approval under this Paragraph 59 shall be resolved in accordance with the dispute resolution provisions of the Consent Decree.

b) If, during the Applicability Dates for this Paragraph 59, changes in processes, operations, or other factors lead Calcasieu to conclude that the control status of wastewater streams, approved sampling locations, approved methods for

determining flow calculations, and/or assumed volatilization rates no longer provide an accurate measure of Calcasieu's EOL benzene quantity, Calcasieu shall submit a revised plan to EPA. A copy of this revised plan also shall be provided to LDEQ.

c) On a monthly basis, Calcasieu shall conduct EOL sampling, commencing during the first month of the first full Calendar quarter after Calcasieu submits the written sampling plan to EPA. Calcasieu shall take, and have analyzed, three representative samples from each approved sampling location. Calcasieu 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, Calcasieu shall calculate the sum of the EOL benzene quantity for the three months contained within the respective quarter. Nothing in this Paragraph 59 shall preclude Calcasieu from taking representative samples more frequently within any calendar month, provided that Calcasieu identifies the basis for the additional samples. Such samples shall be included in calculating the average monthly EOL benzene quantity.

d) If the sum of the EOL benzene quantity for the three month period contained within a quarter equals or exceeds 1.2 Mg, Calcasieu 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 BWON Compliance Review and Verification Report; or

(ii) the most recently submitted TAB report (hereinafter "Sampling of >0.05 Streams"). Calcasieu shall undertake Sampling of >0.05 Streams for the purpose of trying to identify the cause or source of the potentially elevated benzene quantities.

e) Calcasieu 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 Calcasieu's EOL benzene quantity, prorated on a yearly basis, will be below 4.8 Mg/yr; or

(ii) Calcasieu discovers and corrects the cause of the potentially elevated benzene quantities and EPA concurs in the diagnosis and corrective measures of Calcasieu.

f) 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 Calcasieu has not discovered and corrected the cause of the potentially elevated benzene through the process of Sampling of >0.05 Streams, Calcasieu 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 BWON Compliance Review and Verification Report; or

(ii) most recently submitted TAB report (hereinafter "Sampling of > 0.03 Streams"). Calcasieu 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.

g) Sampling of >0.05 and/or >0.03 Streams shall not be required if Calcasieu advises EPA, and EPA 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, Calcasieu 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 Calcasieu shall submit to EPA for approval a plan that either:

(i) identifies with specificity the compliance strategy and schedule that Calcasieu will implement to ensure that Calcasieu does not exceed 6 Mg of uncontrolled benzene for the calendar year; or

(ii) if as a result of the quantity of benzene released during the event Calcasieu is unable to propose a plan to ensure that Calcasieu's uncontrolled benzene for the calendar year will be 6 Mg. or less, then Calcasieu shall identify the actions to be taken to minimize the uncontrolled benzene for the remainder of the year. A copy of this plan shall be submitted to LDEQ. Calcasieu shall submit this plan within thirty (30) days after the end of the quarter which resulted in a projection of greater than 6 Mg/yr of uncontrolled benzene. Sampling of >0.05 and/or >0.03 Streams shall not excuse Calcasieu from continuing to take monthly EOL samples.

h) If in three consecutive quarters, either:

(i) the sum of the benzene quantity indicates that the EOL benzene quantity, prorated on a yearly basis, will exceed 4.8 Mg, or

(ii) the sampling of >0.05 and/or >0.03 streams indicates that projected uncontrolled benzene for the calendar year will exceed 6 Mg, and Calcasieu has not discovered and corrected, with EPA'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, Calcasieu 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, Calcasieu shall submit a proposal to the EPA and 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 EPA receives this proposal, EPA disapproves or seeks modifications, Calcasieu shall authorize the contractor to commence work. By no later than thirty (30) days after Calcasieu receives the results of the Third-Party TAB Study and Compliance Review, Calcasieu shall submit the results to the EPA and LDEQ. By no later than one-hundred twenty (120) days after Calcasieu receives the results of the Third-Party TAB Study and Compliance Review, or such other time as Calcasieu and EPA may agree, Calcasieu shall submit to EPA a plan that addresses any deficiencies identified in the Third-Party TAB Study and Compliance Review and any deficiencies that EPA brought to the attention of Calcasieu as a result of the Third-Party TAB Study and Compliance Review. A copy of this plan shall be submitted to LDEQ. The review and approval of this Plan shall be done in accordance with Paragraph 48 of this

Decree. Certification of Compliance shall be done in accordance with Paragraph 49.

60. Intentionally Blank.

61. The provisions of this Paragraph 61 shall apply until the Date of Termination of the Consent Decree. Calcasieu shall:

a) Conduct monthly visual inspections of all water traps within Calcasieu's individual drain systems; and

b) On a weekly basis, visually inspect all conservation vents or indicators 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, Calcasieu may submit a request to the applicable EPA Region to modify the frequency of the inspections. EPA shall not unreasonably withhold its consent. Nothing in this Paragraph 61 shall require Calcasieu to monitor conservation vents on fixed roof tanks.

62. Calcasieu shall identify and mark all area drains that are segregated stormwater drains.

63. Intentionally Blank.

64. Recordkeeping and Reporting Requirements for this Section. Outside of the Reports Required under 40 C.F.R. § 61.357 and under the Progress Report Procedures of Section XIII (Reporting and Recordkeeping), at the times specified in the applicable provisions of this Paragraph, Calcasieu shall submit, as and to the extent required, the following reports to the EPA and LDEQ:

a) BWON Compliance Review and Verification Report (Paragraph 45(a)), as amended, if necessary (Paragraph 45(b));

b) Amended TAB Report, if necessary (Paragraph 46);

c) Third-Party TAB Study and Compliance Review that may result from EOL sampling (Paragraph 59(h));

d) Compliance certification, if necessary (Paragraph 49);

e) Schematics of waste/slop/off-spec oil movements (Paragraph 55), as revised, if necessary (Paragraph 55);

f) Schedule to complete implementation of controls on waste management units handling organic benzene waste, if necessary (Paragraph 56);

g) Plan to quantify uncontrolled waste/slop/off-spec oil movements (Paragraph 58);

h) EOL Sampling Plans (Paragraph 59), and revised EOL Sampling Plans, if necessary (Paragraph 59);

i) Proposal for a Third-Party TAB Study and Compliance Review, if necessary (Paragraph 59(h)(ii));

j) Third-Party TAB Study and Compliance Review, if necessary (Paragraph 59(h)(ii)); and

k) Plan to implement the results of the Third-Party TAB Study and Compliance Review, if necessary (Paragraph 59(h)(ii)).

65. As part of the reports required under Section XIII (Reporting and Recordkeeping), Calcasieu shall submit:

a) A description of the measures that it took to comply with the training provisions of Paragraphs 52 and 53; and

b) The non-EOL sampling required pursuant to the requirements of Paragraph 45(b) (this information shall be submitted in the first progress report for the first Calendar half-year of each year);

66. Within 30 days of the end of each calendar quarter, Calcasieu shall submit the following information until the Date of Termination of the Consent Decree:

a) A description of the measures that it took to comply with the training provisions of Paragraphs 52 and 53;

b) The results of the three months of monthly EOL sampling undertaken pursuant to Paragraph 59(c) 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;

c) If the quarter is one in which Calcasieu is required to undertake Sampling of >0.05 Streams or Sampling of >0.03 Streams , Calcasieu also shall:

i) Submit the results of those sampling events;

ii) describe the actions that Calcasieu is taking to identify and correct the source of the potentially elevated benzene quantities; and

iii) to the extent that Calcasieu identifies actions to correct the potentially elevated benzene quantities, specifically seek EPA's concurrence with the proposal of Calcasieu.

67. [Intentionally Blank]

68. Agencies to Receive Reports, Plans and Certifications Required in Section VII; Number of Copies. Calcasieu shall submit all reports, plans and certifications required to be submitted under this Section VII to the EPA and to LDEQ, as provided in Paragraph 182 below.

In addition, for each submission under this Section, Calcasieu shall submit two copies to EPA Headquarters, to EPA Region 6, and a single copy to LDEQ.

VIII. LEAK DETECTION AND REPAIR ("LDAR") PROGRAM ENHANCEMENTS.

69. 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, Calcasieu shall undertake the enhancements at Paragraph 70 through Paragraph 94.

70. For purposes of this Section, "Equipment" shall mean pumps and valves in light liquid or gaseous service. The terms "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; Part 63, Subparts F, H ("HON") and CC ("Refinery MACT"); and applicable state LDAR regulations.

71. For purposes of this Section, "Chronic Leaker" shall mean a valve that leaks above 5,000 ppm twice in any consecutive four calendar quarters, after the Date of Entry of the Consent Decree, unless the valve has not leaked in any four (4) consecutive calendar quarters prior to the relevant process unit turnaround.

72. Written Refinery-Wide LDAR Program. By no later than ninety (90) days after the Date of Entry of the Consent Decree, Calcasieu shall develop and maintain a written Refinery program for compliance with all applicable federal and state LDAR regulations and the requirements of this Consent Decree. Until the Date of Termination of the Consent Decree, Calcasieu shall implement this program and shall update Calcasieu's program as necessary to ensure continuing compliance. The Refinery program shall include at a minimum:

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

b) An identification of all Equipment that has the potential to leak VOCs, HAPs, VHAPs, and benzene within Calcasieu's process units;

c) Procedures for identifying leaking Equipment within Calcasieu's process units;

d) Procedures for repairing and keeping track of leaking Equipment;

e) Procedures for identifying and including in the LDAR program new Equipment; and

f) A process for evaluating new and replacement Equipment to promote consideration and installation of Equipment that will minimize leaks and/or eliminate Chronic Leakers.

73. Training. By no later than ninety (90) days after the Date of Entry of the Consent Decree , Calcasieu shall implement the following training programs at the Refinery:

a) For personnel newly-assigned to LDAR responsibilities, Calcasieu shall require LDAR training prior to each employee beginning such work;

b) For all personnel assigned LDAR responsibilities, Calcasieu shall provide and require completion of annual LDAR training; and

c) For all other Refinery operations and maintenance personnel (including contract personnel), Calcasieu 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 the Date of Termination of the Consent Decree, "refresher" training in LDAR shall be performed on a three year cycle.

74. LDAR Audits. Commencing upon the Date of Lodging of the Consent Decree, Calcasieu shall implement the Refinery audits set forth in Paragraphs 75 and 76, to ensure Calcasieu's compliance with all LDAR requirements. LDAR audits shall include comparative

monitoring of valves and pumps, records review to ensure monitoring and repairs for valves and pumps were completed as required, tagging review, data management review, and observation of the LDAR technicians' calibration and monitoring techniques.

75. Third-Party Audits. Calcasieu shall retain a contractor(s) to perform a third-party audit of the Refinery's LDAR program at least once every four years. The first third-party audit for Calcasieu shall be completed no later than July 31, 2009.

76. Internal Audits. Calcasieu shall conduct internal audits of Calcasieu's LDAR program. Calcasieu shall complete the first round of these internal LDAR audits by no later than two years from the date of the completion of the third-party audits required in Paragraph 75. An internal audit of Calcasieu shall be held every four years thereafter for the life of this Consent Decree.

77. To ensure that an LDAR audit at Calcasieu occurs every two years, third-party and internal audits shall be separated by two years.

78. Alternative. As an alternative to the internal audit required by Paragraph 76, Calcasieu may elect to retain third-parties to undertake the internal audit, provided that an LDAR audit of Calcasieu occurs at least every two (2) years.

79. Implementation of Actions Necessary to Correct Non-Compliance. If the results of any of the audits conducted pursuant to Paragraph 74 at Calcasieu identify any areas of non-compliance, Calcasieu 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 the Date of Termination of the Consent Decree, Calcasieu shall retain the audit reports generated pursuant to Paragraphs 75 and 76 and shall maintain a written record of the corrective actions that Calcasieu takes in response to any deficiencies identified in any LDAR audits. In the combined semi-annual compilation submitted pursuant to the provisions of

Section XIII of this Consent Decree (Reporting and Recordkeeping), Calcasieu shall submit the audit reports and corrective action records for audits performed and actions taken during the previous calendar year. Such submission shall be made no later than July 31. In the Semi-annual LDAR progress report submitted pursuant to the provisions of Section XIII (Reporting and Recordkeeping) covering the period when an LDAR audit was conducted, Calcasieu, shall certify to EPA that the LDAR audit has been completed and that the refinery is in compliance or on a compliance schedule.

80. Internal Leak Definition for Valves and Pumps. Calcasieu 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.

a) Leak Definition for Valves. By no later than the Date of Entry of the Consent Decree, Calcasieu shall utilize an internal leak definition of 500 ppm VOCs for the Refinery's valves, excluding pressure relief devices.

b) Leak Definition for Pumps. Calcasieu shall utilize an internal leak definition of 2000 ppm VOCs for the Refinery's pumps by the following dates:

i) By no later than the Date of Entry of the Consent Decree, Calcasieu shall utilize this definition for 50% of the total number of its pumps;

ii) By no later than one (1) year after the Date of Entry of the Consent Decree, Calcasieu shall utilize this definition for all of its pumps;

iii) By no later than the internal leak definitions under this paragraph 80(b), Calcasieu shall monitor pumps qualifying as Equipment using the lower leak definition established by paragraph 80(b) on a monthly basis,

unless more frequent monitoring is required by a federal, state, or local regulation.

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

81. Reporting. For regulatory reporting purposes, Calcasieu may continue to report leak rates in valves and pumps against the regulatory leak definition, or may use the lower, internal leak definitions specified in Paragraph 80.

82. Recording, Tracking, Repairing, and Remonitoring Leaks. Calcasieu shall record, track, repair, and re-monitor all leaks in excess of the internal leak definitions of Paragraph 80 (in accordance with provisions of the LDAR Regulations), except that Calcasieu shall have five (5) days to make an initial attempt at repair and thirty (30) days either to make final repairs and remonitor leaks that are greater than the internal leak definitions but less than the regulatory leak definitions or to place the valve or pump on the delay of repair list according to paragraph 90.

83. Initial Attempt at Repair on Valves.

a) Beginning no later than ninety (90) days after the Date of Entry of the Consent Decree, Calcasieu, as applicable, shall make an "initial attempt" at repair on any valve qualifying as Equipment, under Paragraph 70, that has a reading greater than 200 ppm of VOCs, for the life of the Consent Decree, excluding control valves, orbit valves, and other valves that LDAR personnel are not authorized to repair. Calcasieu or its designated contractor, as applicable, shall make this "initial attempt" and re-monitor such valves within five (5) calendar days of identification. Unless the re-monitored leak rate is greater than the leak definition, no further action will be necessary.

b) Valves. When the lower leak definition for valves becomes applicable pursuant to Paragraph 80, Calcasieu shall monitor valves qualifying as Equipment, under Paragraph 70, in accordance with one of the following options on a process unit-by-process unit basis:

i) Quarterly monitoring with no ability to skip periods. This option cannot be chosen for process units subject to the HON or the modified-HON option in the Refinery MACT; or

ii) Sustainable skip period program. If used, sustainable skip period program monitoring will be in accordance with applicable regulations for each process unit. Previous process unit monitoring results may be used to determine the initial skip period interval provided that each valve has been monitored using the 500 ppm leak definition. Process units monitored in the skip period alternative method may not revert to quarterly monitoring if the most recent monitoring period demonstrates that more than two percent of the valves were found leaking under the internal leak definition.

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

84. Electronic Storing and Reporting of LDAR Data. Calcasieu has maintained and will continue to maintain an electronic database for storing and reporting LDAR data. By no later than ninety (90) days after the Date of Entry of the Consent Decree, 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.

85. Electronic Data Collection During LDAR Monitoring and Transfer Thereafter. By no later than ninety (90) days after the Date of Entry of the Consent Decree, Calcasieu shall

submit to EPA and LDEQ operational specifications for the data logger, software, and monitoring equipment. Calcasieu shall use dataloggers and/or electronic data collection devices during all LDAR monitoring starting ninety (90) days after the Date of Entry of the Consent Decree. Calcasieu, or its designated contractor, shall use its best efforts to transfer, by the end of the next business day, electronic data from electronic data logging devices to the electronic database of Paragraph 84. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp. Calcasieu may use paper logs where necessary or more feasible (e.g., small rounds, re-monitoring, or when data loggers 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. Calcasieu shall use its best efforts to transfer any manually recorded monitoring data to the electronic database of Paragraph 84 within seven days of monitoring. "Small rounds" shall be defined as those rounds during which 100 or less components are monitored.

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

87. LDAR Personnel. Calcasieu has established a program that holds LDAR personnel accountable for LDAR performance. Calcasieu shall continue to maintain a position at

its refinery that is responsible for LDAR management, with the authority to implement improvements.

88. Adding New Valves and Pumps. By no later than ninety (90) days after the Date of Entry of the Consent Decree, Calcasieu 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 are integrated into the LDAR program.

89. Calibration/Calibration Drift Assessment.

a) Calibration. At the beginning of each day's activities, Calcasieu shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas, in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21.

b) Calibration Drift Assessment. Beginning no later than the Date of Lodging of the Consent Decree, Calcasieu shall conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift, at a minimum. Calcasieu 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, Calcasieu shall re-monitor all valves that were monitored since the last valve that had a reading greater than 100 ppm and shall re-monitor all pumps that were monitored since the last pump that had a reading greater than 500 ppm.

90. Delay of Repair. Beginning no later than the Date of Lodging of the Consent Decree, for any Equipment for which Calcasieu is allowed, under the applicable regulations, to place on the "delay of repair" list, Calcasieu shall:

a) Require sign-off by the unit supervisor, within thirty (30) days of identifying that a piece of Equipment is leaking at a rate greater than the applicable leak definition and that such Equipment qualifies for delayed repair under applicable regulations;

b) Include Equipment that is placed on the "delay of repair" list in Calcasieu's regular LDAR monitoring;

c) For valves (other than control valves and pressure relief devices) leaking at a rate of 10,000 ppm or greater, Calcasieu shall continue to use its "drill and tap" method for fixing such leaking valves, rather than placing the valve on the "delay of repair" list, unless Calcasieu 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, Calcasieu may place the leaking valve on its "delay of repair" list. If a new method develops for repairing such valves, Calcasieu will advise EPA and LDEQ prior to implementing such new method;

d) For pumps leaking at a rate of 2000 ppm or greater, Calcasieu shall use its best efforts to isolate and repair such pumps within fifteen (15) days.

91. Monitoring after turnaround or maintenance. Calcasieu will have the option of monitoring affected valves and pumps within process unit(s) after completing a documented maintenance, startup, or shutdown activity without having the results of the monitoring count as a scheduled monitoring activity, provided Calcasieu monitors according to the following schedule:

a) For events involving 1000 or fewer valves and pumps, monitor within one week of the documented maintenance, startup or shutdown activity;

b) For events involving greater than 1000 but fewer than 5000 valves and pumps, monitor within two (2) weeks of the documented maintenance, startup, or shutdown activity;

c) For events involving greater than 5000 valves and pumps, monitor within four (4) weeks of the documented maintenance, startup, or shutdown activity.

92. Chronic Leakers. Following the identification of a Chronic Leaker, as defined in Paragraph 71 above, Calcasieu will replace, repack, or perform similarly effective repairs on the Chronic Leaker during the next process unit turnaround. After the Date of Entry of the Consent Decree, Calcasieu and EPA, in consultation with LDEQ, may agree in writing to modifications of the chronic leaker requirements of this Paragraph 92 and any such modifications will be considered non-material under Paragraph 185.

C. Recordkeeping and Reporting Requirements for this Section.

93. Outside of the Reports Required under 40 C.F.R. § 63.654 and the progress report procedures of Section XIII (Reporting and Recordkeeping), Calcasieu shall also submit the following:

a) Written Refinery-Wide LDAR Program. No later than thirty (30) days after completion of the development of the written refinery-wide LDAR programs that Calcasieu develops pursuant to Paragraph 72, Calcasieu shall submit a copy of Calcasieu's Program to EPA and LDEQ.

b) Submission of Operational Specifications for Electronic Data Collection for LDAR Monitoring and Certification of Use of Electronic Data Collection for LDAR Monitoring. By no later than ninety (90) days after the Date of Entry of

the Consent Decree, Calcasieu shall submit to EPA and 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.

94. As part of either the Reports Required under 40 C.F.R. § 63.654 or the semi-annual progress report procedures of Section XIII (Reporting and Recordkeeping), and consistent with the requirements of Section XIII (Reporting and Recordkeeping), Calcasieu shall include the following information, at the following times, in its semi-annual progress reports:

a) First Semi-Annual Progress Report Due under the Consent Decree. At the later of: (1) the first semi-annual progress report due under the Consent Decree; or (2) the first semi-annual progress report following the semi-annual period in which one of the following certifications or identifications becomes due, Calcasieu shall include the following:

(i) A certification of the implementation of the "initial attempt at repair" program of Paragraph 83

(ii) A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 86;

(iii) An identification of the individual at the Refinery responsible for LDAR performance as required by Paragraph 87;

(iv) A certification of the development of a tracking program for new valves and pumps added during maintenance and construction as required by Paragraph 88;

(v) A certification of the implementation of the calibration drift assessment procedures of Paragraph 89; and

(vi) A certification of the implementation of the "delay of repair" procedures of Paragraph 90.

b) Progress Report Due in the First Six Months of Each Year. Until the Date of Termination of the Consent Decree, in the semi-annual progress report that Calcasieu submits, pursuant to Section XIII in the first six months of each year, Calcasieu shall include an identification of each audit that was conducted pursuant to the requirements of Paragraph 74 in the previous calendar year including an identification of the auditors, a summary of the audit results, and a summary of the actions that Calcasieu took or intends to take to correct all deficiencies identified in the audits.

c) In each report due under 40 C.F.R. § 63.654, Calcasieu shall include:

(i) Training. Information identifying the measures that Calcasieu took to comply with the provisions of Paragraph 73; and

(ii) Monitoring. The following information on LDAR monitoring: (a) a list of the process units monitored during the relevant six month period; (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.

95. [Intentionally Blank]

96. Agencies to Receive Reports, Plans and Certifications Required in this Paragraph; Number of Copies. Calcasieu shall submit all reports, plans, and certifications required to be submitted under this Paragraph as provided in Paragraph 182 below.

IX. FEDERALLY ENFORCEABLE PERMITS.

97. Construction. Calcasieu agrees to apply for and use best efforts to obtain all appropriate federally enforceable permits (or construction permit waivers) for the construction of the pollution control technology or the installation of equipment necessary to implement the affirmative relief and environmental projects required by this Consent Decree. To the extent that Calcasieu must submit permit applications for construction or installation to an applicable state or local agency, Calcasieu shall cooperate with the applicable state or local agency by promptly submitting to the applicable state or local agency all available information that the applicable state or local agency seeks following its receipt of the permit application.

98. Obtaining Permit Limits for Consent Decree Emission Limits and Standards That Are Effective Upon the Date of Entry of the Consent Decree. By no later than 60 days after the Date of Entry of the Consent Decree, Calcasieu shall submit applications to the appropriate permitting authority to incorporate the emission limits and standards required by the Consent Decree that are effective as of the Date of Entry of the Consent Decree into federally enforceable

minor or major new source review permits or other permits (other than Title V permits) which are federally enforceable. Following submission of the permit application, Calcasieu shall cooperate with the appropriate permitting authority by promptly submitting all information that such permitting authority seeks following its receipt of the permit application. Upon issuance of such permits or in conjunction with such permitting, Calcasieu, shall file any applications necessary to incorporate the requirements of those permits into its Title V permit. Nothing in this Consent Decree is intended nor shall it be construed to require the establishment of emission limits (e.g. pounds per hour or tons per year) other than those concentration or rate based limits expressly prescribed in this Consent Decree.

99. Obtaining Permit Limits For Consent Decree Emission Limits That Become Effective After the Date of Entry of the Consent Decree. As soon as practicable, but in no event later than sixty (60) days after the effective date or establishment of any emission limits and standards required by or under this Consent Decree that become effective or are established after the Date of Entry of the Consent Decree, Calcasieu shall submit applications to the appropriate permitting authority to incorporate those emission limits and standards into federally enforceable minor or major new source review permits or other permits (other than Title V permits) which are federally enforceable. Following submission of the permit application, Calcasieu shall cooperate with the appropriate permitting authority by promptly submitting all information that such permitting authority seeks following its receipt of the permit application. Upon issuance of such permit or in conjunction with such permitting, Calcasieu shall file any applications necessary to incorporate the requirements of that permit into the Title V permit of the appropriate refinery.

100. Mechanism for Title V Incorporation. The Parties agree that the incorporation of any emission limits or other standards into the Title V permits for the Calcasieu Refinery as required by Paragraph 98 and 99, shall be in accordance with the state or local Title V rules.

X. EMISSION CREDIT GENERATION

101. **Summary.** This Section addresses the use of emissions reductions that will result from the installation and operation of the controls required by this Consent Decree ("CD Emissions Reductions") for the purpose of emissions netting or emissions offsets.

102. **General Prohibition.** Calcasieu shall not generate or use any emissions reductions, or apply for and obtain any emission reduction credits, that result from any projects conducted or controls required pursuant to this Consent Decree as netting reductions or emissions offsets in any PSD, major non-attainment and/or synthetic minor New Source Review ("NSR") permit or permit proceeding.

103. [Intentionally Blank]

104. [Intentionally Blank]

105. **Outside the Scope of the General Prohibition.** Nothing in this Consent Decree is intended to prohibit Calcasieu from seeking to:

a) utilize or generate netting reductions or emission offset credits from refinery units that are covered by this Consent Decree to the extent that the proposed netting reductions or emission offset credits represent the difference between the emissions limitations set forth in or established pursuant to this Consent Decree for these refinery units and the more stringent emissions limitations that Calcasieu may elect to accept for these refinery units in a permitting process;

b) utilize or generate netting reductions or emission offset credits for refinery units that are not subject to an emission limitation pursuant to this Consent Decree;

c) utilize emissions reductions from the installation of controls required by this Consent Decree in determining whether a project that includes both the installation of controls under this Consent Decree and other construction that occurs at the same time and is permitted as a single project triggers major New Source Review requirements.

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XII. OTHER COMPLIANCE MEASURES

110. Plan to Comply with NSPS Subpart QQQ. Portions of Calcasieu's oily water sewer are currently subject to QQQ requirements. Calcasieu has agreed, by virtue of this Consent Decree, that not later than December 31, 2008, Calcasieu shall modify all existing process area individual drain systems to comply with the New Source Performance Standards, Subpart QQQ. Calcasieu further agrees that all new equipment installed will be designed and constructed to comply with NSPS, Subpart QQQ. An NSPS Subpart QQQ compliance review will be included in the first quarterly report required by Section XIII (Reporting and Recordkeeping).

111. Inspection and Seal Replacement for Internal Floating Roof for Tank 312. Calcasieu shall visually inspect the internal floating roof and the secondary seal through the manholes and roof hatches on the fixed roof of Tank 312 by no later than thirty (30) days after

the Date of Entry of the Consent Decree and at least once every 180 days thereafter and take corrective measures as required by 40 CFR 60.113b(a)(2). Calcasieu shall notify the LDEQ Southwest Regional Office manager by e-mail at least seven (7) days prior to each inspection and coordinate with LDEQ to allow LDEQ to participate in such inspections. Calcasieu shall submit the inspection results as part of the applicable progress report. Calcasieu shall empty and degass Tank 312 by no later than February 28, 2011. Calcasieu shall replace and upgrade the seals on the internal floating roof of Tank 312 to the best available technology, or at a minimum to a mechanical shoe seal, in an effort to reduce emissions of VOCs prior to Tank 312 being returned to service. Calcasieu will replace and upgrade the seals on Tank 312 in accordance with this paragraph prior to the tank being returned to service for a liquid with a maximum true vapor pressure greater than 0.5 psia.

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XIII. REPORTING AND RECORDKEEPING

116. On January 31, 2009, and semi-annually on July 31 and January 31 thereafter until the Date of Termination of the Consent Decree, Calcasieu shall submit to EPA and LDEQ a progress report for Calcasieu. This report shall reference all reports, notifications, identifications, and certifications required by and submitted under this Consent Decree in the previous reporting period; and any such additional matters as Calcasieu believes should be brought to the attention of EPA and LDEQ. The report shall be certified by either the person responsible for environmental management or by a person responsible for overseeing Calcasieu's implementation of this Decree 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.

XIV. CIVIL PENALTY.

117. Within thirty (30) days of the Date of Entry of the Consent Decree, Calcasieu shall pay a civil penalty of $ 612,500 as follows:

a) $ 306,250 to the United States; and

b) $ 306,250 to LDEQ.

118. Payment of monies to the United States shall be made by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures referencing DOJ Case Number 90-5-2-1-08556, and the civil action case name and case number of this action in the Western District of Louisiana. The costs of such EFT shall be the responsibility of Calcasieu. Payment shall be made in accordance with instructions provided to Calcasieu by the Financial Litigation Unit of the U.S. Attorney's Office for the Western District of Louisiana. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. Calcasieu shall provide notice of payment, referencing DOJ Case Number 90-5-2-1-08556, and the civil action case name and case number to the Department of Justice and to EPA, as provided in Paragraph 182 (Notice).

119. Payment of the civil penalty owed to LDEQ under this Paragraph shall be made by certified or corporate check made payable to the Louisiana Department of Environmental Quality and sent to the following address:

Darryl Serio, Fiscal Director
Office of Management and Finance, LDEQ
PO Box 4303

Baton Rouge, LA 70821-4303.

120. Calcasieu shall not treat these penalty payments as tax deductible for purposes of federal, state, or local law.

121. Upon the Date of Entry of the Consent Decree, the Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Federal Rule of Civil Procedure 69, the Federal Debt Collection Procedure Act, 28 U.S.C. §§ 3001-3308, and other applicable federal authority. The United States and the State of Louisiana shall be deemed judgment creditors for purposes of collecting any unpaid amounts of the civil and stipulated penalties and interest.

XV. STIPULATED PENALTIES

122. Calcasieu shall pay stipulated penalties for each failure by Calcasieu to comply with the terms of this Consent Decree as provided herein. Stipulated penalties shall be calculated in the amounts specified in Paragraphs 123 through 132.

123. **Section V – Requirements for NO_x Emission Reductions from Heaters and Boilers**.

a) For failure to install, certify, calibrate, maintain, or operate a CEMS on a Controlled Heater or Boiler, as required by Paragraphs 26 and 27 above, by the required deadline, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 500
31st through 60th day after deadline	$ 1,000
Beyond 60th day after deadline	$ 2,000.

b) For failure to achieve the interim emission reduction goals in accordance with Section V.B.:

Period of Delay	Penalty per day

1st through 30th day after deadline	$ 625
31st through 60th day after deadline	$ 1,500
Beyond 60th day after deadline	$ 2,500 or an amount equal to 1.2 times the economic benefit of delayed compliance whichever is greater.

c) For failure to achieve the final emission reduction goals in accordance with Section V.C.:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 625
31st through 60th day after deadline	$ 1,500
Beyond 60th day after deadline	$ 2,500 or an amount equal to 1.2 times the economic benefit of delayed compliance whichever is greater.

d) For failure to demonstrate compliance in accordance with Paragraph 24 and for failure to submit the written deliverables required by Paragraph 26, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 500
31st through 60th day after deadline	$ 1,000
Beyond 60th day after deadline	$ 2,000.

123A. Non-Compliance with Requirements for Control of SO_2 Emissions from Covered Heaters and Boilers.

a) For burning any fuel gas that contains H2S in excess of the applicable requirements of NSPS Subparts A and J in one or more covered heaters or boilers listed in Appendix A, in violation of Paragraph 28A(a), per event, per day:

Period of Non-Compliance	Penalty per day
1st through 30th day	$2,500
Beyond 31st day	$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

b) For burning Fuel Oil in any combustion unit at the Refinery, in violation of Paragraph 28A(b), per event, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1,750
Beyond 31st day after deadline	$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

c) For failure to complete installation of the H_2S CMS by December 24, 2009, or failure to comply with the interim alternative monitoring plan in Appendix D, in violation of Paragraph 28A(c) and (d), per day:

Period of Delay	Penalty per day
1st through 30th day	$2,500
Beyond 31st day	$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

124. **Paragraphs 30 and 33 – Requirements for NSPS Applicability of Flaring Devices**.

For failure to comply with Paragraph 30 (Continuous or Intermittent, Routinely-Generated Refinery Fuel Gases) or Paragraph 33 (Monitoring the Flaring Devices and Reporting), per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 500
31st through 60th day after deadline	$ 1,500
Beyond 60th day after deadline	$ 2,000.

125. **Paragraph 35 - 37 – Requirements for Control of Hydrocarbon Flaring Incidents**.

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

Period of Delay or Non-Compliance	Penalty per day per Incident
1st through 30th day after deadline	$ 500
31st through 60th day after deadline	$ 1,500
Beyond 60th day	$ 3,000.

126. **Section VII -- Requirements for Benzene Waste Operations NESHAP Program Enhancements**. For each violation in which a frequency is specified in Section VII, 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 Reports, as required by Paragraph 45(a): $ 7,500 per month.

b) For failure to submit an amended BWON Compliance review and Verification Report, if Phase Two sampling is required by EPA, as required by Paragraph 45 (b): $7,500 per month.

c) For failure to submit a compliance plan, as required by Paragraph 47: $ 7,500 per month.

d) For failure to implement the actions necessary to correct non-compliance as required by Section VII, Paragraph 48:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 1,250

31st through 60th day after deadline	$ 3,000
Beyond 60th day	$ 5,000.

e) For failure to implement the training requirements of Section VII, Subsection B: $ 10,000 per quarter.

f) For failure to submit or maintain any records or materials required by Section VII of this Consent Decree, $ 2,000 per record or submission.

g) For failure to install controls on waste management units handling organic wastes as required by Paragraph 56, $ 7,500 per month per waste management unit.

h) For failure to conduct sampling in accordance with the sampling plans required by Paragraph 59:

$ 2,500 per week, per stream, or $ 30,000 per quarter, per stream, whichever is greater, but not to exceed $ 150,000 per quarter.

i) For failure to retain the third-party contractor required by Paragraph 59, $ 7,500 per month.

j) For failure to comply with the compliance measures set forth in Paragraph 61, as follows:

monthly visual inspections: $ 500 per drain not inspected;

weekly monitoring of vents: $ 500 per vent not monitored;

k) For failure to identify/mark segregated stormwater drains, as required in Paragraph 62: $ 1,000 per week per drain;

l) If it is determined through federal, state, or local investigation that Calcasieu has failed to include all benzene containing waste streams in its TAB calculation submitted pursuant to Paragraph 45, Calcasieu shall pay the following:

Waste Stream	Penalty
for waste streams ≤0.03 Mg/yr	$1,500
for waste streams >0.03 but ≤0.1 Mg/yr	$2,500
for waste streams >0.1 but ≤ 0.5 Mg/yr	$4,500
for waste streams > 0.5 Mg/yr	$7,500.

127. **Section VIII – Requirements for Leak Detection and Repair Program Enhancements**. For each violation in which a frequency is specified in Section VIII, 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 73:

$ 10,000 per month.

b) For failure to conduct any of the audits described in Paragraph 74:

$ 5,000 per month, per audit.

c) For failure to implement any actions necessary to correct non-compliance as required in Paragraph 79:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 1,250
31st through 60th day after deadline	$ 3,000
Beyond 60th day	$ 5,000.

d) For failure to use an internal leak rate definition as specified in Paragraph 80:

$ 12,000 per month per process unit.

e) For failure to implement the first attempt repair program in Paragraph 83 or for failure to implement the QA/QC procedures described in Paragraph 86:

$ 10,000 per month.

f) For failure to designate an individual as accountable for LDAR performance as required in Paragraph 87, or for failure to implement the maintenance tracking program in Paragraph 88, or for failure to write a LDAR program that meets the requirements of Paragraph 72:

$ 3,500 per week.

g) For failure to record, track, repair and remonitor all leaks in excess of the internal leak definitions of Paragraph 80, as required by Paragraph 82:

$ 100 per component, but not greater than $ 10,000.

h) For failure to submit operational specifications for the data logger, software, and monitoring equipment and failure to use dataloggers or maintain electronic data as required by Paragraphs 84 and 85:

$ 5,000 per month.

i) For failure to conduct the calibrations or calibration drift assessments or remonitor valves and pumps based on calibration drift assessments in Paragraph 89:

$ 100 per missed event.

j) For failure to comply with the requirements for repair set forth at Paragraphs 90 and 92:

$ 5,000 per valve or pump, per incident of non-compliance.

k) For failure to submit the written deliverables required by Paragraphs 93 and/or 94:

$ 500 per week per deliverable.

l) If it is determined through a federal, state, or local investigation that Calcasieu has failed to include all valves and pumps in its LDAR program, Calcasieu shall pay $ 175 per component that it failed to include.

128. Paragraph 111 – Requirements for Tank 312

For failure to complete the actions described in Paragraph 111:

$2,500 per week for every week

129. **Section IX – Requirements to Incorporate Consent Decree Requirements into Federally-Enforceable Permits.**

For each failure to submit an application as required by Section IX:

Period of Delay	Penalty per day
Days 1-30	$ 750
Days 31-60	$ 1,500
Over 60 Days	$ 3,000.

130. Paragraphs 15 and 116 -- Requirements for Reporting and Recordkeeping.

For failure to submit reports as required by Paragraphs 15 and 116:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 300
31st through 60th day after deadline	$ 1,000
Beyond 60th day	$ 2,000.

131. **Paragraph 117 -- Requirements for Payment of Civil Penalties**. For Calcasieu's failure to pay the civil penalties as specified in Paragraph 117 of this Consent Decree, Calcasieu shall be liable for $ 15,000 per day plus interest on the amount overdue at the rate specified in 28 U.S.C § 1961(a).

132. **Paragraph 134 – Requirement to Escrow Stipulated Penalties**. For failure to escrow stipulated penalties as required by Paragraph 134 of this Consent Decree, Calcasieu shall be liable for $ 2,500 per day, and interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a).

133. Payment of Stipulated Penalties. Calcasieu shall pay stipulated penalties upon written demand by the United States, or LDEQ, no later than sixty (60) days after Calcasieu receives such demand. Demand from one agency shall be deemed a demand from all applicable agencies, but the agencies shall consult with each other prior to making a demand. Stipulated penalties owed by Calcasieu shall be paid 50% to the United States and 50% to the State of Louisiana. Stipulated penalties shall be paid to the United States and the State of Louisiana in the manner set forth in Section XIV (Civil Penalty) of this Consent Decree. A demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount the EPA or 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.

134. Stipulated Penalties Dispute. Should Calcasieu dispute the United States' and/or LDEQ's demand for all or part of a stipulated penalty, it may avoid the imposition of a stipulated penalty for failure to pay a stipulated penalty under Paragraph 132 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 XIX within the time provided in

Paragraph 133 for payment of stipulated penalties. If the dispute is thereafter resolved in Calcasieu's favor, the escrowed amount plus accrued interest shall be returned to Calcasieu; otherwise, the EPA and LDEQ shall be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount. The United States and LDEQ reserve the right to pursue any other non-monetary remedies to which they are legally entitled, including but not limited to, injunctive relief for Calcasieu's violations of this Consent Decree.

XVI. INTEREST

135. Calcasieu shall be liable for interest on the unpaid balance of the civil penalty specified in Section XIV, and for interest on any unpaid balance of stipulated penalties to be paid in accordance with Section XV. All such interest shall accrue at the rate established pursuant to 28 U.S.C. § 1961(a) -- i.e., a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of the Consent Decree. Interest shall be computed daily and compounded annually. Interest shall be calculated from the date payment is due under the Consent Decree through the date of actual payment. For purposes of this Paragraph 135, 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 134 of the Consent Decree. Monies timely paid into escrow shall not be considered to be an unpaid balance under this Section.

XVII. RIGHT OF ENTRY

136. Any authorized representative of EPA or LDEQ, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of Calcasieu's refining facilities, at any reasonable time for the purpose of monitoring compliance

with the provisions of this Consent Decree, including inspecting plant equipment, and inspecting and copying all records maintained by Calcasieu required by this Consent Decree. Calcasieu shall retain such records for the period of the Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA or LDEQ to conduct tests, inspections, or other activities under any statutory or regulatory provision.

XVIII. FORCE MAJEURE

137. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, Calcasieu shall notify EPA and LDEQ in writing as soon as practicable, but in any event within ten (10) business days of the date when Calcasieu first knew of the event or should have known of the event by the exercise of due diligence. In this notice, Calcasieu shall specifically reference this Paragraph 137 of this Consent Decree 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 Calcasieu to prevent or minimize the delay and the schedule by which those measures shall be implemented. Calcasieu shall take all reasonable steps 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 EPA Region 6, as specified in Paragraph 182 (Notice).

138. Failure by Calcasieu to substantially comply with the notice requirements of Paragraph 137 as specified above shall render this Section XVIII (Force Majeure) voidable by the United States, in consultation with LDEQ, as to the specific event for which Calcasieu has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

139. The United States, after consultation with LDEQ, shall notify Calcasieu 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 137.

140. If the United States, after consultation with LDEQ, agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Calcasieu, including any entity controlled by Calcasieu, and that Calcasieu could not have prevented the delay, the Parties shall stipulate in writing 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 treated as a non-material modification to the Consent Decree pursuant to the modification procedures established in this Consent Decree. Calcasieu shall not be liable for stipulated penalties for the period of any such delay.

141. If the United States, after consultation with LDEQ, does not accept Calcasieu's claim of a delay or impediment to performance, Calcasieu must submit the matter to the Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with the Court. Once Calcasieu has submitted this matter to the Court, the United States and LDEQ shall have twenty (20) business days to file their responses to the petition. If the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Calcasieu, including any entity controlled by Calcasieu, and that the delay could not have been prevented by Calcasieu by the exercise of due diligence, Calcasieu 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.

142. Calcasieu shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree 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. Calcasieu 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.

143. Unanticipated or increased costs or expenses associated with the performance of Calcasieu's obligations under this Consent Decree shall not constitute circumstances beyond its control, or serve as the basis for an extension of time under this Section XVIII.

144. Notwithstanding any other provision of this Consent Decree, the Parties do not intend that Calcasieu's serving of a *force majeure* notice or the Parties' inability to reach agreement will cause this Court to draw any inferences nor establish any presumptions adverse to any Party.

145. As part of the resolution of any matter submitted to this Court under this Section XVIII, the appropriate Parties, by agreement, or the Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under the Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. Calcasieu will be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XIX. RETENTION OF JURISDICTION/DISPUTE RESOLUTION

146. This court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the Consent Decree and for the purpose of adjudicating all disputes among the parties that may arise under the provisions of the Consent Decree, until the Consent Decree terminates in accordance with Paragraph 186 of this Consent Decree (termination).

147. Except as expressly provided in Section XVIII, regarding force majeure, the dispute resolution procedure set forth in this Section XIX shall be available to resolve any and all disputes arising under this Consent Decree, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Party.

148. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the Parties to this Consent Decree to another advising the other Party of a dispute pursuant to this Section XIX. 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 or conference call to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.

149. 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.

150. In the event that the Parties are unable to reach agreement during such informal negotiation period, the United States or LDEQ, as applicable, shall provide Calcasieu with a

written summary of its position regarding the dispute. The position advanced by the United States or LDEQ, as applicable, shall be considered binding unless, within forty-five (45) calendar days of Calcasieu's receipt of the written summary of the United States' or LDEQ's position, Calcasieu files with the Court a petition which describes the nature of the dispute. The United States or LDEQ shall respond to the petition within forty-five (45) calendar days of filing. In the event that the United States and LDEQ make differing determinations or take differing actions that affect Calcasieu's rights or obligations under this Consent Decree, the final decisions of the United States shall control.

151. 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 XIX may be shortened upon motion of one of the Parties to the dispute.

152. The Parties do not intend that the invocation of this Section XIX by a Party will cause the Court to draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Section.

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

XX. EFFECT OF SETTLEMENT

154. The effect of settlement of this action is governed by this Section.

155. Definitions. For purposes of this Section, the following definitions apply:

a) "Applicable NSR/PSD Requirements" shall mean:

i) PSD requirements at Part C of Subchapter I of the Clean Air Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21;

ii) Any Title V regulations that implement, adopt or incorporate the specific regulatory requirements identified above; and

iii) Any applicable state regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above.

b) "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 at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart J.

c) "Benzene Waste NESHAP Requirements" shall mean the requirements imposed by the National Emission Standard for Benzene Waste Operations, 40 C.F.R. Part 61, Subpart FF, and any applicable state, regional, or local regulations that implement, adopt or incorporate the Benzene Waste NESHAP.

d) "LDAR Requirements" shall mean the requirements relating to equipment in light liquid service and gas and/or vapor service set forth at 40 C.F.R. Part 60, Subpart GGG; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC; and any applicable state, regional, or local regulations or State Implementation Plan requirements that implement, adopt or incorporate those federal regulations.

e) "Post-Lodging Compliance Dates" shall mean any dates in this Section after the Date of Lodging of the Consent Decree. Post-Lodging Compliance Dates include dates certain (e.g., "December 31, 2008"), dates after Lodging represented in terms of "months after Lodging" (e.g., "Twelve Months after the Date of Lodging of the Consent Decree"), and dates on or after Lodging represented by actions taken (e.g., "Date of Certification"). The Post-Lodging 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 Consent Decree.

A. New Source Review/Prevention of Significant Deterioration.

156. Liability Resolution regarding the Applicable NSR/PSD Requirements. With respect to emissions of NO_x from the heaters and boilers listed in Appendix A, entry of this Consent Decree shall resolve all civil liability of Calcasieu to the United States and the State of Louisiana for violations of the Applicable NSR/PSD Requirements resulting from construction or modification that occurred prior to the Date of Lodging of the Consent Decree up to December 31, 2010.

156A. Liability Resolution regarding VOC emissions under the applicable NSR/PSD Requirements. With respect to emissions of VOCs from the operation of the No. 5 Atmospheric Distillation Unit Expansion Project, if by no later than December 31, 2008, Calcasieu utilizes an LDAR internal leak definition of 2000 PPM for all of its pumps at the Refinery and submits an application to LDEQ to incorporate the internal leak definitions of 2000 PPM for pumps and 500 PPM for valves into its Title V permit and permits incorporated into the Title V permit, then entry of this Consent Decree shall resolve all civil liability of Calcasieu to the United States and the State of Louisiana for violations of the Applicable NSR/PSD

Requirements resulting from construction or modification that occurred prior to the Date of Lodging of the Consent Decree up to December 31, 2008.

157. Reservation of Rights: Resolution for NSR/PSD Violations Continuing After the Date of Lodging of the Consent Decree Can be Rendered Void. Notwithstanding the resolution of liability in Paragraphs 156 and 156A, the resolution of liability to the United States and LDEQ for Calcasieu's violations of the Applicable NSR/PSD Requirements during the period between the Date of Lodging of the Consent Decree and the Post-Lodging Compliance Dates shall be rendered void if Calcasieu materially fails to comply with the obligations and requirement of Paragraphs 11- 28; provided, however, that the resolution in Paragraph 156 shall not be rendered void if Calcasieu remedies such material failure and pays any stipulated penalties due as a result of such material failure.

158. Exclusions from Resolution Coverage: Construction and/or Modification Not Covered by Paragraphs 156 and 156A. Notwithstanding the resolution of liability in Paragraphs 156 and 156A, nothing in this Consent Decree precludes the United States and/or LDEQ from seeking from Calcasieu injunctive relief, penalties, or other appropriate relief for violations by Calcasieu of the Applicable NSR/PSD Requirements resulting from construction or modification that:

a) commenced prior to or commences after the Date of Lodging of the Consent Decree for pollutants or units not covered by the Consent Decree; or

b) commences after the Date of Lodging of the Consent Decree, except for construction and/or modification required by this Consent Decree.

159. Evaluation of Applicable PSD/NSR Requirements Must Occur. Increases in emissions from units covered by this Consent Decree, where the increases result

from the Post-Lodging construction or modification of any units within Calcasieu are beyond the scope of the resolution in Paragraphs 156 and 156A, and Calcasieu must evaluate any such increases in accordance with the Applicable PSD/NSR Requirements.

B. New Source Performance Standards Subparts A and J.

160. Resolution of Liability. With respect to SO_2 emissions from covered Heaters and Boilers listed in Appendix A, and HC Flaring Devices listed in Appendix B, or any amendment thereto, entry of this Consent Decree shall resolve all civil liability of Calcasieu for violations of the Applicable NSPS Subparts A and J Requirements, including without limitation, sampling for H_2S, the H_2S limit, H_2S reporting, and H_2S recordkeeping requirements set forth in Calcasieu's Alternative Monitoring Plan approved by EPA on April 18, 1997, and as incorporated in Calcasieu's Title V permit, from the date that the pre-lodging claims of the United States and the State accrued through the Date of Lodging of the Consent Decree or the Date in Appendix B, if other than the Date of Lodging of the Consent Decree.

161. Reservation of Rights: Resolution for NSPS Violations Occurring After the Date of Lodging of the Consent Decree Can be Rendered Void. Notwithstanding the resolution of liability in Paragraph 160, the resolution of liability to the United States and the State for Calcasieu's violations of any Applicable NSPS Subparts A and J Requirements that occurred between the Date of Lodging of the Consent Decree and the dates in Appendix B, if other than Date of Lodging of the Consent Decree, shall be rendered void if Calcasieu materially fails to comply with the obligations and requirements of Paragraphs 29 - 42; provided however, that the resolution in Paragraph 160 shall not be rendered void if Calcasieu remedies such material failure and pays any stipulated penalties due as a result of such material failure.

162. Prior NSPS Applicability Determinations. Nothing in this Consent Decree 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.

C. LDAR and Benzene Waste Operations NESHAP.

163. Resolution of Liability Regarding Benzene Waste Operations NESHAP requirements. Entry of this Consent Decree shall resolve all civil liability of Calcasieu to the United States and the State for alleged violations of Benzene Waste Operations NESHAP Requirements at the Calcasieu Refinery that either:

a) commenced and ceased prior to the Date of Entry of the Consent Decree; or

b) are based on events identified in the BWON Compliance Review and Verification Report required under Paragraph 45 and, if required to be corrected, are corrected pursuant to the requirements of Paragraph 48.

164. Resolution of Liability Regarding LDAR Requirements. Entry of this Consent Decree shall resolve the civil liability of Calcasieu to the United States and the State for alleged violations of LDAR Requirements at the Calcasieu Refinery that either:

a) commenced and ceased prior to the Date of Entry of the Consent Decree Entry Date; or

b) are based on events that are identified in the LDAR Initial Audit Report required under Subparagraph 75 and, if required to be corrected, are corrected pursuant to the requirements of Paragraph 79.

165. Resolution of Liability Regarding NSPS Subpart QQQ Requirements. Entry of this Consent Decree shall resolve all civil liability of Calcasieu to the United States and the State for any violations of Subpart QQQ Requirements at the Calcasieu Refinery that:

a) commenced and ceased prior to the Date of Entry of the Consent Decree Entry Date; and/or

b) are based on events that are identified in the Subpart QQQ Compliance Review Report and, if required by EPA to be corrected, are corrected pursuant to the requirements of Paragraph 110.

166. Reservation of Rights. Except as specifically provided in this Paragraph 166, and notwithstanding the resolution of liability in Paragraphs 163, 164, and 165, nothing in this Consent Decree precludes the United States and/or the State of Louisiana from seeking from Calcasieu civil penalties and/or injunctive relief and/or other equitable relief for violations of Benzene Waste Operations NESHAP and/or LDAR Requirements and/or NSPS Subpart QQQ Requirements that

a) commenced prior to the Date of Entry of this Consent Decree and continued after the Date of Entry if such violations are not identified by Calcasieu under Paragraphs 45, 74, and 110; or

b) commenced after the Date of Entry of the Consent Decree.

167. [Intentionally Blank]

D. Other Matters.

168. Intentionally Blank.

169. Calcasieu's HC Flaring Devices. Entry of this Consent Decree shall resolve all civil liability of Calcasieu to the State of Louisiana for violations arising from

Calcasieu's use of flares from the date the claims accrued through the Date of Entry of the Consent Decree.

170. Additional LDEQ Matters. Entry of this Consent Decree shall resolve all civil liability of Calcasieu to the State of Louisiana for any violations of Calcasieu's LDEQ Air Permit Number 0520-00050 V6, issued on April 16, 2007, and all previous versions thereof (i.e. 0520-00050-V0, issued on June 7, 2000; 0520-00050-V1, issued on October 25, 2001; 0520-00050-V2, issued on March 30, 2004; 0520-00050-V3, issued on November 29, 2004; 0520-00050-V4, issued on June 15, 2005; and 0520-00050-V5, issued on January 25, 2007), and their underlying statutory or regulatory requirements for the alleged past violations specified in Appendix E except for the areas of concern regarding Tank 312 which shall be resolved upon completion of the other compliance measures as required by Paragraph 111 of this Consent Decree.

171. Where a violation of this Consent Decree is also a violation of the Clean Air Act, the United States will not seek civil penalties under the Clean Air Act if the United States has demanded and been paid stipulated penalties under the Consent Decree for such violation, nor will the United States demand stipulated penalties for a Consent Decree violation if the United States has commenced litigation seeking penalties under the Clean Air Act for such violation. Notwithstanding the foregoing, the United States reserves all its rights to pursue, under the Consent Decree and/or outside of it, any non-monetary remedies to which it is legally entitled, including but not limited to injunctive relief for violations of the Consent Decree.

171A. **Audit Policy.** Nothing in this Consent Decree is intended to limit or disqualify Calcasieu, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply EPA's Audit Policy or any Louisiana audit policy to any

violations or non-compliance that Calcasieu discovers during the course of any investigation, audit, or enhanced monitoring that Calcasieu is required to undertake pursuant to this Consent Decree.

172. Claim/Issue Preclusion. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, penalties, or other appropriate relief relating to Calcasieu for alleged violations of the PSD/NSR, NSPS, NESHAP, and/or LDAR requirements, not identified in this Section XX of the Consent Decree and/or the Complaint:

a) Calcasieu 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 Calcasieu assert, or maintain, any other defenses based upon any contention that the claims raised by the United States or the State 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 Calcasieu to assert that the claims are deemed resolved by virtue of this Section XX of the Consent Decree.

b) The United States and the State of Louisiana may not assert or maintain that this Consent Decree constitutes a waiver or determination of, or otherwise obviates, any claim or defense whatsoever, or that this Consent Decree constitutes acceptance by Calcasieu of any interpretation or guidance issued by EPA related to the matters addressed in this Consent Decree.

173. Imminent and Substantial Endangerment. Nothing in this Consent Decree shall be construed to limit the authority of the United States and LDEQ to undertake any

action against any person, including Calcasieu, to abate or correct conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

XXI. GENERAL PROVISIONS

174. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Calcasieu of its obligations to comply with all applicable federal, state, and local laws and regulations. Subject to Paragraphs 154 - 173, nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States or the State of Louisiana to seek or obtain other remedies or sanctions available under other federal, state, or local statutes or regulations, by virtue of Calcasieu's violation of the Consent Decree or of the statutes and regulations upon which the Consent Decree is based, or for Calcasieu's violations of any applicable provision of law, other than the specific matters resolved herein. This shall include the right of the United States or LDEQ to invoke the authority of the Court to order Calcasieu's compliance with this Consent Decree in a subsequent contempt proceeding.

175. Permit Violations. Nothing in this Consent Decree shall be construed to prevent or limit the right of the United States or the State of Louisiana to seek injunctive or monetary relief for violations of permits issued as a result of the procedure required under Paragraphs 98 and 99 of this Decree; provided however, that with respect to monetary relief, the United States and the State of Louisiana must elect between filing a new action for such monetary relief or seeking stipulated penalties under this Consent Decree, if stipulated penalties also are available for the alleged violation(s).

176. Failure of Compliance. The United States and the State of Louisiana do not, by their consent to the entry of the Consent Decree, warrant or aver in any manner that

Calcasieu's complete compliance with the Consent Decree will result in compliance with the provisions of the Clean Air Act or the Louisiana Environmental Quality Act. Notwithstanding the review or approval by EPA or LDEQ of any plans, reports, policies, or procedures formulated pursuant to the Consent Decree, Calcasieu shall remain solely responsible for compliance with the terms of the Consent Decree, all applicable permits, and all applicable federal, state and local laws and regulations, except as provided in Section XVIII (Force Majeure).

177. Service of Process. Calcasieu hereby agrees to accept service of process by mail with respect to all matters arising under or relating to the Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to, service of a summons. The persons identified by Calcasieu at Paragraph 182 (Notice) are authorized to accept service of process with respect to all matters arising under or relating to the Consent Decree.

178. Post-Lodging/Pre-Entry Obligations. Obligations of Calcasieu under this Consent Decree to perform duties scheduled to occur after the Date of Lodging of the Consent Decree, but prior to the Date of Entry of the Consent Decree, shall be legally enforceable on and after the Date of Entry of the Consent Decree. Liability for stipulated penalties, if applicable, shall accrue for violation of such obligations and payment of such stipulated penalties may be demanded by the United States or the State of Louisiana as provided in this Consent Decree, provided that stipulated penalties that may have accrued between the Date of Lodging of the Consent Decree and the Date of Entry of the Consent Decree may not be collected unless and until this Consent Decree is entered by the Court.

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

180. Public Documents. All information and documents submitted by Calcasieu to EPA and LDEQ pursuant to this Consent Decree shall be subject to public inspection in accordance with the respective statutes and regulations that are applicable to EPA and LDEQ, unless subject to legal privileges or protection or identified and supported as business confidential in accordance with the respective state or federal statutes or regulations.

181. Public Notice and Comment.

a) The Parties agree to the Consent Decree and agree that the Consent Decree may be entered upon compliance with the public notice procedures set forth at 28 C.F.R. § 50.7, and upon notice to this Court from the United States Department of Justice requesting entry of the Consent Decree. The United States reserves the right to withdraw or withhold its consent to the Consent Decree if public comments disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Calcasieu consents to entry of this Consent decree without further notice.

b) The Parties agree and acknowledge that final approval by Plaintiff the State of Louisiana, Department of Environmental Quality, and entry of this Consent Decree is subject to the requirements of La. R.S. 30:2050.7, which provides for public notice of this Consent Decree in newspapers of general circulation and the official journals of the Parish of Calcasieu, and 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 its consent to the Consent Decree if public comments disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate.

182. 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 XVIII (Force Majeure) and Section XIX (Retention of Jurisdiction/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 Calcasieu shall be submitted as specified in this Consent Decree, with copies to EPA Headquarters, EPA Region VI, and LDEQ. If the date for submission of a report, study, notification, or other communication falls on a Saturday, Sunday, or legal holiday, the report, study, notification, or other communication will be deemed timely if it is submitted the next business day. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this Consent Decree to be submitted or delivered to the United States, EPA, the State of Louisiana, and Calcasieu shall be addressed as follows:

As to the United States:

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611
Reference Case No. 90-5-2-1-08556

As to EPA:

Director, Air Enforcement Division
Office of Civil Enforcement
U.S. Environmental Protection Agency
Mail Code 2242-A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460-0001

with a hard copy to

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

and an electronic copy to

csullivan@matrixneworld.com

Chief
Air, Toxics, and Inspections Coordination Branch
Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

As to The State of Louisiana:

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

As to Calcasieu:

Russ Willmon
Calcasieu Refining Company
4359 Tank Farm Road
Lake Charles, LA 70605

Michael M. Gibson, Esquire
Jones Day
717 Texas, Suite 3300
Houston, TX 77002

Charles Wehland
Jones Day
77 West Wacker Drive
Chicago, IL 60601

183. 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.

184. Approvals. All EPA approvals or comments required under this Decree shall be made in writing. All State approvals shall be sent from the offices identified in Paragraph 182.

185. Modification/Integration. This Consent Decree 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 Consent Decree shall not be used in any action involving the interpretation or enforcement of the Consent Decree. Non-material modifications to this Consent Decree shall be in writing and signed by the United States, the State of Louisiana, and Calcasieu. The United States will file non-material modifications with the Court on a periodic basis. For the purpose of this Paragraph, non-material modifications include modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment. Material modifications to this

Consent Decree shall be in writing, signed by the United States, the State of Louisiana and Calcasieu, and shall be effective upon approval by the Court.

XXII. TERMINATION

186. On or after the date that Calcasieu has conducted the second Third-Party Audit pursuant to Paragraph 75 and implemented corrective action and submitted the required reports and certifications pursuant to Paragraph 79, provisions of this Consent Decree relating to Calcasieu shall be subject to termination upon motion by the United States, in consultation with the State of Louisiana, or Calcasieu (under the conditions identified in this Paragraph 186). Calcasieu must have satisfied and certified that it has satisfied all of the following requirements of this Consent Decree:

a) installation of control technology systems as specified in this Consent Decree;

b) compliance with all provisions contained in this Consent Decree;

c) payment of all penalties and other monetary obligations due under the terms of the Consent Decree; no penalties or other monetary obligations due hereunder can be outstanding or owed to the United States, or the State of Louisiana;

d) completion of the QQQ project set forth in Paragraph 110;

e) receipt of permits incorporating the surviving emission limits and standards established under Paragraphs 98 and 99;

f) receipt by EPA and LDEQ of the first calendar semi-annual progress report following the conclusion of the operation for at least one year of each unit in compliance with the emission limits established herein; and

g) Calcasieu's written certification of compliance and completion pursuant to Paragraphs 24 and 49, to the United States and LDEQ in writing.

187. Certification of Completion. Calcasieu may certify completion of one or more parts of the Consent Decree provided all of the related requirements have been satisfied, as follows:

a) Paragraphs 11 - 28 – Heaters and Boilers;

b) Paragraph 29 - 42 – HC Flaring Devices;

c) Paragraph 43 - 68 – Benzene NESHAP;

d) Paragraph 69 - 92 – Leak Detection and Repair

e) Paragraph 110 – NSPS QQQ Compliance Project.

Within 90 days after Calcasieu concludes that one or more parts of this Paragraph 187 (a)-(e) have been completed, Calcasieu may submit a written report to the Parties listed in Paragraph 182 (Notice) describing the activities undertaken and certifying that its obligations under the applicable Paragraphs have been completed in full satisfaction of the requirements of this Consent Decree, and that Calcasieu is in substantial and material compliance with all of the other requirements of the Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of Calcasieu:

> To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

188. Within 90 days after receipt of the certification in Paragraph 187, the United States, after reasonable opportunity to review and comment by the State, shall notify Calcasieu whether the requirements set forth in the applicable Paragraphs have been completed in accordance with this Consent Decree. The parties recognize that ongoing obligations under

such Paragraphs remain and necessarily continue (e.g. reporting, recordkeeping, training, auditing requirements), and that Calcasieu's certification is that it is in current compliance with all such obligations. If the United States concludes that the requirements have not been fully complied with, the United States shall notify Calcasieu as to the activities that must be undertaken to complete the applicable Paragraphs of the Consent Decree. Calcasieu shall perform all activities described in the notice, subject to its right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution). If the United States concludes that Calcasieu's obligations under the applicable Paragraphs have been completed in accordance with this Consent Decree, the United States will so certify in writing to Calcasieu. This certification shall constitute the certification of completion of Calcasieu's obligations under the applicable Paragraphs for purposes of this Consent Decree. Nothing in this Paragraph shall preclude the United States or LDEQ from seeking stipulated penalties for a violation of any of the requirements of the Consent Decree regardless of whether a Certification of Completion has been issued with respect to Paragraph 187(a) – (e) of the Consent Decree. In addition, nothing in this Paragraph shall permit Calcasieu to fail to implement any ongoing obligations under the Consent Decree regardless of whether a Certification of Completion has been issued with respect to Paragraph 187 (a) – (e) of the Consent Decree.

189. Unless, within 120 days of receipt of the certification required by Paragraph 186, either the United States or LDEQ objects in writing with specific reasons, the Court may upon motion by Calcasieu order that this Consent Decree be terminated. If either the United States or LDEQ objects to the certification by Calcasieu then the matter shall be submitted to the Court for resolution under Section XIX (Retention of Jurisdiction/Dispute Resolution) of this Consent Decree. In such case, Calcasieu shall bear the burden of proving that this Consent Decree should be terminated.

XXIII. SIGNATORIES

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

Dated and entered this 7 day of Jan, 2008.

UNITED STATES DISTRICT JUDGE

WE HEREBY CONSENT to the entry of the Consent Decree in United States, et al. v. Calcasieu, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

RONALD J. TENPAS
Assistant Attorney General
Environment and Natural Resources Division

Date: 8/5/08

BRUCE S. GELBER
Section Chief
Environmental Enforcement Section

Date: 8/5/08

ELLIOT M. ROCKLER
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P. O. Box 7611
Ben Franklin Station
Washington, D.C. 20044-7611
(202) 514-2653
elliot.rockler@usdoj.gov

WE HEREBY CONSENT to the entry of the Consent Decree in United States, et al. v. Calcasieu, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

DONALD WASHINGTON
United States Attorney
Western District of Louisiana

KATHERINE W. VINCENT (Bar No. 18717)
Assistant United States Attorney
United States Attorneys Office
Western District of Louisiana
800 Lafayette Street, Suite 220
Lafayette, Louisiana 70501
(337) 262-6618

WE HEREBY CONSENT to the entry of the Consent Decree in United States, et al. v. Calcasieu, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE U. S. ENVIRONMENTAL PROTECTION AGENCY:

Date: 8-5-08

GRANTA Y. NAKAYAMA
Assistant Administrator for
Enforcement and Compliance Assurance
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Date: 07-18-08

RICHARD E. GREENE
Regional Administrator
United States Environmental Protection Agency
Region VI

WE HEREBY CONSENT to the entry of the Consent Decree in United States of America and the State of Louisiana v. Calcasieu Refining Company, a civil action, subject to the public notice and comment requirements.

PRELIMINARY APPROVAL BY CO-PLAINTIFF, THE STATE OF LOUISIANA, THROUGH THE DEPARTMENT OF ENVIRONMENTAL QUALITY:

PEGGY M. HATCH
Assistant Secretary
Office of Environmental Compliance
Louisiana Department of Environmental Quality

TED R. BROYLES, II (Bar Roll #20456)
Attorney Supervisor
Office of the Secretary
Legal Affairs Division
Louisiana Department of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302
Telephone No. (225) 219-3985
Fax. No. (225) 219-4068

WE HEREBY CONSENT to the entry of the Consent Decree in United States, et al. v. Calcasieu .

FOR DEFENDANT CALCASIEU

Date: 6/27/08

RUSS WILLMON
Calcasieu Refining Company
4359 Tank Farm Road
Lake Charles, LA 70605
Telephone: (337) 478-2130
Facsimile: (337) 562-8505

Date: 6/30/08

MICHAEL M. GIBSON, Esquire
Jones Day
717 Texas, Suite 3300
Houston, TX 77002
Telephone: (832) 239-3939
Facsimile: (832) 239-3600; and

Date: 6/30/08

CHARLES WEHLAND, Esquire
Jones Day
77 West Wacker Drive
Chicago, IL 60601
Telephone: (312) 782-3939
Facsimile: (312) 782-8585

ATTORNEYS FOR CALCASIEU