

UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF OKLAHOMA

UNITED STATES OF AMERICA, )  
STATE OF ALABAMA and ALABAMA )  
DEPARTMENT OF ENVIRONMENTAL )  
MANAGEMENT, and )  
OKLAHOMA DEPARTMENT OF )  
ENVIRONMENTAL QUALITY, )

Plaintiffs, )

v. )

EL DORADO CHEMICAL CO., )  
CHEROKEE NITROGEN CO., and )  
PRYOR CHEMICAL CO., )

Defendants. )  
\_\_\_\_\_ )

Civil Action No. 5:14-cv-00271-F

**CONSENT DECREE**

TABLE OF CONTENTS

<b>I.</b>	<b>JURISDICTION AND VENUE.....</b>	<b>5</b>
<b>II.</b>	<b>APPLICABILITY .....</b>	<b>6</b>
<b>III.</b>	<b>DEFINITIONS .....</b>	<b>8</b>
<b>IV.</b>	<b>COMPLIANCE REQUIREMENTS.....</b>	<b>19</b>
A.	NO <sub>x</sub> Emissions Limits and Schedule of Compliance.....	19
B.	NSPS Applicability .....	21
C.	Emissions Monitoring .....	22
D.	Performance Testing .....	25
E.	Operation and Maintenance Plan .....	27
<b>V.</b>	<b>CIVIL PENALTY.....</b>	<b>29</b>
<b>VI.</b>	<b>ENVIRONMENTAL MITIGATION .....</b>	<b>31</b>
<b>VII.</b>	<b>PERMITS .....</b>	<b>32</b>
<b>VIII.</b>	<b>EMISSION CREDIT GENERATION.....</b>	<b>36</b>
<b>IX.</b>	<b>REPORTING REQUIREMENTS .....</b>	<b>37</b>
<b>X.</b>	<b>STIPULATED PENALTIES .....</b>	<b>41</b>
<b>XI.</b>	<b>FORCE MAJEURE.....</b>	<b>49</b>
<b>XII.</b>	<b>DISPUTE RESOLUTION .....</b>	<b>52</b>
<b>XIII.</b>	<b>INFORMATION COLLECTION AND RETENTION .....</b>	<b>55</b>
<b>XIV.</b>	<b>EFFECT OF SETTLEMENT / RESERVATION OF RIGHTS .....</b>	<b>57</b>
<b>XV.</b>	<b>COSTS .....</b>	<b>61</b>
<b>XVI.</b>	<b>NOTICES.....</b>	<b>62</b>
<b>XVII.</b>	<b>EFFECTIVE DATE.....</b>	<b>64</b>
<b>XVIII.</b>	<b>RETENTION OF JURISDICTION.....</b>	<b>64</b>

<b>XIX. MODIFICATION .....</b>	<b>64</b>
<b>XX. TERMINATION.....</b>	<b>65</b>
<b>XXI. PUBLIC PARTICIPATION .....</b>	<b>66</b>
<b>XXII. SIGNATORIES / SERVICE.....</b>	<b>67</b>
<b>XXIII. INTEGRATION.....</b>	<b>67</b>
<b>XXIV. APPENDICES .....</b>	<b>68</b>
<b>XXV. FINAL JUDGMENT .....</b>	<b>68</b>

Concurrently with the lodging of this Consent Decree, Plaintiffs the United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), the State of Alabama, on behalf of the Alabama Department of Environmental Management (“ADEM”), and the Oklahoma Department of Environmental Quality (“ODEQ”) (collectively referred to as “Plaintiffs”), have filed a Complaint in this action seeking civil penalties and injunctive relief from Defendants Cherokee Nitrogen Company (“CNC”), El Dorado Chemical Company (“EDCC”), and Pryor Chemical Company (“PCC”) (collectively referred to as “Defendants”) for alleged violations of the Clean Air Act (the “CAA”), 42 U.S.C. §7401 et seq., with respect to emissions of nitrogen oxides (“NO<sub>x</sub>”) at three nitric acid manufacturing facilities in Alabama, Arkansas, and Oklahoma.

WHEREAS, the Plaintiffs’ Complaint alleges that Defendants violated and/or continue to violate the Prevention of Significant Deterioration (“PSD”) provisions in Part C of Subchapter I of the CAA, 42 U.S.C. §§ 7470-7492, the Standards of Performance for New Stationary Sources (“NSPS”) provisions in Section 111 of the CAA, 42 U.S.C. § 7411, the permitting requirements of CAA Subchapter V (“Title V”), 42 U.S.C. §§ 7661-7661f, the federally-enforceable State Implementation Plans (“SIPs”) for Alabama, Arkansas, and Oklahoma, approved by EPA pursuant to Section 110 of the CAA, 42 U.S.C. § 7410, which incorporate and/or implement the above-listed federal requirements, and/or the compliance assurance monitoring provisions of 40 C.F.R. Part 64, all with respect to emissions of nitrogen oxide (“NO<sub>x</sub>”);

WHEREAS, the Complaint alleges that at all times relevant thereto, CNC and/or its predecessors in interest owned and operated nitric acid manufacturing facilities located in or near Cherokee, Alabama (“Cherokee Facility”), EDCC and/or its predecessors in interest owned and operated nitric acid manufacturing facilities located in or near El Dorado, Arkansas (“El Dorado

Facility”), and PCC and/or its predecessors in interest owned and operated nitric acid manufacturing facilities located in or near Pryor, Oklahoma (“Pryor Facility”), and that such facilities emit NO<sub>x</sub> into the atmosphere;

WHEREAS, the Complaint alleges that at all times relevant thereto PCC and/or its predecessors in interest also owned and operated two ammonia manufacturing plants, a liquid ammonium nitrate manufacturing plant, and two boilers located at portions of the PCC facility in Pryor, Oklahoma (therein described as the “Additional Portions of the PCC Facility”), and that such emit, *inter alia*, NO<sub>x</sub>, ammonia (“NH<sub>3</sub>”), carbon monoxide (“CO”), particulate matter (“PM”), volatile organic compounds (“VOCs”), and sulfur dioxide (“SO<sub>2</sub>”) into the atmosphere;

WHEREAS, the Complaint alleges that Defendants CNC and EDCC and/or their predecessors in interest constructed, modified, and operated the Cherokee Facility and the El Dorado Facility without obtaining the appropriate pre-construction and operating permits, and without installing the best available control technology (“BACT”), in violation of the CAA. The Complaint also alleges that Defendant EDCC has failed to comply with applicable emission limits at the El Dorado Facility, and that Defendants EDCC and PCC have failed to comply with ongoing requirements for emissions monitoring, recordkeeping, and reporting at the El Dorado Facility and the Pryor Facility, respectively, in violation of the CAA. The Complaint also alleges that Defendants CNC and EDCC failed to obtain valid Title V permits for operation of the Cherokee and El Dorado Facilities in violation of the CAA;

WHEREAS, the State of Alabama and the ODEQ (collectively, “the State Parties”) are co-Plaintiffs in this matter that respectively allege civil violations of the State of Alabama’s SIP and the State of Oklahoma’s SIP and/or other state rules and regulations incorporating and implementing the aforementioned federal CAA requirements;

WHEREAS, the Complaint additionally alleges that Defendant PCC violated and/or continues to violate applicable Oklahoma State law, OKLA. ADMIN. CODE 252:100-1-1 *et seq.*, and the permit terms applicable to the Additional Portions of the PCC Facility;

WHEREAS, Defendants have denied and continue to deny the violations alleged in the Complaint;

WHEREAS, from May 24, 1999 to present date, El Dorado Nitrogen, Limited Partnership (“EDN”) and/or its predecessors in interest have operated a nitric acid manufacturing facility located in or near Baytown, Texas (“Baytown Facility”), and from October 23, 2008 to present date, the owner of the Baytown Facility, Bayer MaterialScience, LLC (“BMS”), has engaged EDN as an operator of the Baytown Facility pursuant to a Nitric Acid Supply, Operating, and Maintenance Agreement by and Among EDN, EDCC, and BMS, dated October 23, 2008, and since amended (“Baytown Operating Agreement”);

WHEREAS, as of the date of signature of this Consent Decree by duly authorized representatives of EDN, EDN represents that the current term of the Baytown Operating Agreement is effective until June 30, 2021, absent additional renewal and absent an event of default or other authorized basis for termination of the Baytown Agreement under Section 19 of the Baytown Agreement, and the Plaintiffs expressly rely on this representation when entering into this Consent Decree;

WHEREAS, LSB Industries, Inc. (“LSB”) is the parent company of EDCC, CNC, PCC, and EDN, and the production of nitric acid by these four subsidiary entities comprises the nitric acid manufacturing portion of LSB’s chemical business;

WHEREAS, EDN and LSB are not parties to the concurrent Complaint, but Defendants and EDN and LSB enter into this Consent Decree jointly as settlors (hereinafter, collectively,

“Settling Defendants”) under this Consent Decree and all shall thus be bound by the terms and obligations of this Consent Decree;

WHEREAS, EDN and BMS entered into a letter agreement, executed December 12, 2013, in which EDN notified BMS of its obligations pursuant to this Consent Decree relative to the Baytown Facility, and BMS agreed that EDN may take such actions as may be necessary to fulfill its obligations pursuant to this Consent Decree relative to the Baytown Facility;

WHEREAS, EPA has selected nitric manufacturing facilities as a national CAA enforcement priority;

WHEREAS, as a result of a May 15, 2012, explosion of a nitric reactor at the Hoechst-UHDE Direct Strong Synthesis Nitric Acid Plant at the El Dorado Facility (herein, “El Dorado DSN”), El Dorado DSN sustained significant damage to associated process equipment and was shut down, and EDCC has determined that El Dorado DSN is beyond repair and will remain permanently shut down, such that EDCC permanently removed emissions sources associated with El Dorado DSN from Permit 0573-AOP-R14;

WHEREAS, as more specifically described in Section IV (Compliance Requirements) of this Consent Decree, Settling Defendants have agreed to install new, and/or enhance or maintain existing, selective catalytic reduction (“SCR”) and/or non-selective catalytic reduction (“NSCR”) control technology at all nine of Settling Defendants’ Operating Nitric Acid Plants in the United States to reduce emissions of NO<sub>x</sub> and to implement Best Practices, as described in Paragraph 14, to minimize air pollution at such Facilities;

WHEREAS, the Plaintiffs and Settling Defendants (hereinafter collectively, “Settling Parties”) recognize, and this Court by entering this Consent Decree finds, that this Consent

Decree has been negotiated by the Settling Parties in good faith, will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest;

WHEREAS, Settling Defendants do not admit any liability to the United States or the State Parties arising out of the transactions or occurrences alleged in the Complaint.

NOW, THEREFORE, before the taking of any testimony, without the adjudication of any issue of fact or law except as provided in Section I (Jurisdiction and Venue), and with the consent of the Settling Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

**I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and 1367, and Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and over the Parties. Pursuant to 28 U.S.C. § 1367, this Court has supplemental jurisdiction over the state law claims asserted by the State of Alabama and ODEQ, respectively. This Court has jurisdiction over EDN and EDN's obligations in this Consent Decree pursuant to the All Writs Act, 28 U.S.C. § 1651, and Fed. R. Civ. Proc. 19(a). Venue lies in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because Settling Defendants reside in and keep their headquarters and principle places of business located in this judicial district. For purposes of this Decree, or any action to enforce this Decree, Settling Defendants consent to this Court's jurisdiction over this Consent Decree and any action to enforce this Consent Decree, and to venue in this judicial district.

2. For purposes of this Consent Decree, Defendants agree that the Complaint states claims upon which relief may be granted pursuant to Sections 111, 113, 165, and 502 of the CAA, 42 U.S.C. §§ 7411, 7413, 7475, and 7661a, and/or pursuant to applicable state law.



3. At least 30 Days prior to the Date of Lodging of this Consent Decree, EPA notified the States of Arkansas, Alabama, and Oklahoma, and Defendants of the violations alleged in the Complaint, as required by Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1).

## II. APPLICABILITY

4. The obligations of this Consent Decree apply to and are binding upon the United States, the State of Alabama, the ODEQ, and upon Settling Defendants and any successors, assigns, or other entities or persons otherwise bound by law.

5. No transfer of ownership or operation of any of the Covered Nitric Acid Plants, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve the respective Settling Defendants of their obligations to ensure that the terms of this Consent Decree are implemented by them, unless (1) the transferee agrees to undertake the obligations required by Section IV (Compliance Requirements) of this Consent Decree and to be substituted for the respective Settling Defendants as a Party under the Decree and thus be bound by the terms thereof, and (2) the United States consents to relieve the respective Settling Defendant(s) of its obligations. The United States' decision to refuse to approve the substitution of transferee for the respective Settling Defendant shall not be subject to judicial review. With respect to the Baytown Facility only, which is operated by EDN but owned by BMS, this Paragraph applies only to the transfer of operation. At least 30 Days prior to a transfer of ownership and/or operation of any Covered Nitric Acid Plant(s) to any person that is less than fifty percent (50%) controlled by LSB, the respective Settling Defendants shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA Region 4 (for prospective transfers of any of the Covered Nitric Acid Plant(s) at the Cherokee Facility),

EPA Region 6 (for prospective transfers of any of the Covered Nitric Acid Plant(s) at the Baytown Facility, the El Dorado Facility, or the Pryor Facility), to ADEM (for prospective transfers of any of the Covered Nitric Acid Plant(s) at the Cherokee Facility), to ODEQ (for prospective transfers of any of the Covered Nitric Acid Plant(s) at the Pryor Facility), and to both the United States Attorney for the Western District of Oklahoma, and the United States Department of Justice (“DOJ”) (for any prospective transfers of any Covered Nitric Acid Plant(s) at any Facility), in accordance with Section XVI of this Consent Decree (Notices). Prior to partial termination of this Consent Decree as to the Baytown Facility, should BMS, the owner of the Baytown Facility, notify EDN of a transfer of ownership of the Baytown Facility and/or an optional termination of the Baytown Operating Agreement, EDN shall provide a copy of the same notification to Plaintiffs within 14 Days. Any attempt to transfer ownership or operation of the any Covered Nitric Acid Plant without complying with this Paragraph constitutes a violation of this Consent Decree. This provision does not apply to the transfer of the Covered Nitric Acid Plant(s) after Partial Termination of this Consent Decree, pursuant to Paragraph 107, as to the relevant Facility where such Covered Nitric Acid Plant(s) are located.

6. Settling Defendants shall provide a copy of this Consent Decree to all officers, employees, and agents of them whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to all vendors, suppliers, consultants, contractors, and any other company or organization retained to perform work required under this Consent Decree. Settling Defendants shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work under this Consent Decree, Settling Defendants

shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree.

7. In any action to enforce this Consent Decree, Settling Defendants shall not raise as a defense the failure by any of its respective officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree. With regard to the Baytown Facility only, Settling Defendant EDN shall not raise BMS's ownership of the Baytown Facility as a defense for EDN's failure to take any actions necessary to comply with the provisions of this Consent Decree.

### **III. DEFINITIONS**

8. Terms used in this Consent Decree that are defined in the CAA or in federal and state regulations promulgated pursuant to the CAA shall have the meaning assigned to them in the CAA or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Alabama" shall mean the State of Alabama, Alabama Department of Environmental Management ("ADEM"), or any successor department, agency, or entity;

b. "Applicable State Party" shall mean: (i) with respect to the Cherokee Facility and/or obligations under this Consent Decree relating to the Cherokee Facility, Alabama and (ii) with respect to the Pryor Facility, and/or obligations under this Consent Decree relating to the Pryor Facility, the ODEQ; however, where a particular provision of this Consent Decree concerns the El Dorado Facility or the Baytown Facility, there is no Applicable State Party;

c. "Applicable State Party Agency" shall mean: (i) with respect to the Cherokee Facility and/or obligations under this Consent Decree relating to the Cherokee Facility, the ADEM and (ii) with respect to the Pryor Facility, and/or obligations under this Consent

Decree relating to the Pryor Facility, the ODEQ; however, where a particular provision of this Consent Decree concerns the El Dorado Facility or the Baytown Facility, there is no Applicable State Party Agency;

d. “Applicable State Agency” shall mean: (i) with respect to the Cherokee Facility, the ADEM (ii) with respect to the El Dorado Facility, the Arkansas Department of Environmental Quality; (iii) with respect to the Pryor Facility, ODEQ, and with respect to the Baytown Facility, the Texas Commission on Environmental Quality;

e. “BMS” shall mean Bayer MaterialScience, LLC, a third party owner of the Baytown Facility;

f. “Baytown Facility” shall mean the facility located at 8490 West Bay Road, Baytown, Texas 77523, currently operated by EDN and owned by BMS, which consists of one Nitric Acid Plant, the Baytown Nitric Acid Plant (“Baytown”), that is operational and already utilizing SCR capable of meeting the NO<sub>x</sub> emissions limits required under Section IV (Compliance Requirements) as of the Date of Lodging;

g. “Baytown Operating Agreement” shall mean a Nitric Acid Supply, Operating, and Maintenance Agreement by and Among EDN, EDCC, and BMS, dated October 23, 2008, and any amendments thereto, including a First Amendment, dated June 29, 2009, a Second Amendment, dated June 16, 2010, and a Third Amendment, dated June 25, 2013;

h. “CEMS” or “Continuous Emission Monitoring System” shall mean the total equipment required under the CEMS Plan, attached as Attachment C to this Consent Decree, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters specified in the CEMS Plan;

i. “CEMS Plan” shall mean the applicable CEMS Plan for each of the Operating Nitric Acid Plants that are identified in Attachment C;

j. “Cherokee Facility” shall mean the facility located at 1080 Industrial Drive, Cherokee, Alabama, 35616, currently owned and operated by CNC, which consists of two Nitric Acid Plants, the No. 1 Nitric Acid Plant (“Cherokee #1”) and the No. 2 Nitric Acid Plant (“Cherokee #2”), with the following operational statuses as of the Date of Lodging, respectively:

i. Cherokee #1 is operational. A permit authorizing construction to install SCR controls at this plant was issued by ADEM on January 9, 2013 (Permit 701-0013-X002), and the permit contains NO<sub>x</sub> emissions limits consistent with the requirements in Section IV (Compliance Requirements);

ii. Cherokee #2 is operational. A permit authorizing construction to install SCR controls at this plant was issued by ADEM on July 6, 2012 (Permit 701-0013-X003), and the permit contains NO<sub>x</sub> emissions limits consistent with the requirements in this Section IV (Compliance Requirements);

k. “CNC” shall mean Cherokee Nitrogen Company;

l. “Complaint” shall mean the Complaint jointly filed by the United States, the State of Alabama, the ADEM, and the ODEQ in this action;

m. “Consent Decree” shall mean this Consent Decree and all appendices attached hereto, but in the event of any conflict between the text of this Consent Decree and any appended Attachment, the text of this Consent Decree shall control;

n. “Covered Nitric Acid Plants” shall mean all ten of Settling Defendants’ owned and/or operated Nitric Acid Plants in the United States that are subject to this Consent

Decree: two at the Cherokee Facility (Cherokee #1 and #2); one at the Baytown Facility (Baytown); four at the El Dorado Facility (El Dorado East, El Dorado West, El Dorado DMW, and El Dorado DSN); and three at the Pryor Facility (Pryor #1, #3, and #4);

o. “Date of Lodging” shall mean the date the Consent Decree is lodged or electronically filed with the Court for the United States District Court for the Western District of Oklahoma prior to the public notice and comment period provided for in Section XXI (Public Participation);

p. “Day” shall mean a calendar day unless expressly stated to be a working day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal or State holiday, the period shall run until the close of business of the next working day;

q. “Defendants” shall mean CNC, EDCC, and PCC, who are the defendants named in the Complaint filed concurrently with this Consent Decree, and “Defendants” thus shall be a term of lesser scope than the similar term “Settling Defendants,” defined below;

r. “Effective Date” shall have the meaning given in Section XVII (Effective Date);

s. “EDCC” shall mean El Dorado Chemical Company;

t. “El Dorado Facility” shall mean the facility located at 7500 North West Avenue, El Dorado, Arkansas 71730, currently owned and operated by EDCC, which consists of four Nitric Acid Plants, the El Dorado East Nitric Acid Plant (“El Dorado East”), the El Dorado West Nitric Acid Plant (“El Dorado West”), the El Dorado DM Weatherly Nitric Acid Plant (“El Dorado DMW”), and the El Dorado Hoechst-UHDE Direct Strong Synthesis Nitric Acid Plant

(“El Dorado DSN”), with the following operational statuses as of the Date of Lodging, respectively:

- i. El Dorado East is operational;
- ii. El Dorado West is operational;
- iii. El Dorado DMW is operational;
- iv. El Dorado DSN is non-operational, as a result of a May 15, 2012,

explosion of a nitric reactor that caused significant damage to associated process equipment; EDCC has determined that El Dorado DSN is beyond repair and will remain permanently shut down, such that EDCC permanently removed emissions sources associated with the DSN Plant from Permit 0573-AOP-R14. Thus, El Dorado DSN is not an Operating Nitric Acid Plant included in the requirements under this Section IV (Compliance Requirements), but it is a Covered Nitric Acid Plant;

- u. “EDN” shall mean El Dorado Nitrogen, Limited Partnership;
- v. “Facility” shall mean a Nitric Acid Plant site at which one or more

Covered Nitric Acid Plants are located;

- w. “Interest” shall mean the interest rate set forth in 28 U.S.C. § 1961 as of the Effective Date;

- x. “Interim NO<sub>x</sub> Emissions Limit” shall mean a 3-hour rolling average NO<sub>x</sub> emission limit (rolled hourly) expressed in terms of pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (“lb/ton”); compliance with the Interim NO<sub>x</sub> Emissions Limit shall be calculated in accordance with the applicable CEMS Plan attached to this Consent Decree as Attachment C; the Interim NO<sub>x</sub> Emissions Limit does not apply during periods of Startup, Shutdown, or Malfunction;

y. “Long-Term NO<sub>x</sub> Emissions Limit” shall mean a 365-day rolling average NO<sub>x</sub> emission limit (rolled daily) expressed as pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (“lb/ton”); compliance with the Long-Term NO<sub>x</sub> Emissions Limit shall be calculated in accordance with the applicable CEMS Plan attached to this Consent Decree as Attachment C. The Long-Term NO<sub>x</sub> Emissions Limit applies at all times, including during periods of Startup, Shutdown, or Malfunction;

z. “LSB” shall mean LSB Industries, Inc., the parent corporation of EDCC, CNC, PCC, and EDN;

aa. “Malfunction” shall mean, consistent with 40 C.F.R. § 60.2, any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, but shall not include failures that are caused in whole or in part by poor maintenance or careless operation;

bb. “Month” shall mean calendar month;

cc. “Non-Selective Catalytic Reduction” and “NSCR” shall mean a pollution control device that uses non-selective catalyst reduction technology to react NO<sub>x</sub> (including N<sub>2</sub>O) and a fuel to give nitrogen and water;

dd. New Source Review and “NSR” shall mean a program for New Source Review under the CAA within the meaning of Part D of Subchapter I of the CAA, 42 U.S.C. §§ 7501-7515; specifically, as used herein, “major NSR” refers to permits required for new major sources or major modifications to major sources in nonattainment areas, while “minor NSR” refers to permits that are required by any state, regional, or local statutes or ordinances governing non-major new and modified sources of air pollution;



ee. “NSPS” shall mean the standards of performance for new stationary sources codified at 40 C.F.R. Part 60. General NSPS requirements are codified at 40 C.F.R. Part 60, Subpart A. NSPS requirements specifically for Nitric Acid Plants are codified at 40 C.F.R. Part 60, Subpart G;

ff. “NSPS NO<sub>x</sub> Emissions Limit” shall mean the NO<sub>x</sub> emission limit expressed as 1.5 kg of NO<sub>x</sub> per metric ton of 100% Nitric Acid Produced (3 lb per ton) specified at 40 C.F.R. § 60.72(a)(1);

gg. “100% Nitric Acid Produced” shall mean the quantity of a nitric acid product manufactured by a Nitric Acid Plant multiplied by the concentration of actual nitric acid in the product. For example, if a Nitric Acid Plant produces 100 tons of a 54% nitric acid product, this equals 54 tons of 100% Nitric Acid Produced;

hh. “Nitric Acid Plant” shall mean a process unit engaged in the production of nitric acid and related products through the catalytic oxidation of ammonia. Settling Defendants own and operate ten (10) Covered Nitric Acid Plants that are subject to this Consent Decree;

ii. “NO<sub>x</sub>” shall mean, consistent with 40 C.F.R. § 60.2, all oxides of nitrogen except nitrous oxide (N<sub>2</sub>O). For the purposes of calculating mass emission rates, NO<sub>x</sub> has a molecular weight of 46.0055 lb/lb-mol;

jj. “NO<sub>x</sub> Stack Analyzer” shall mean for all Operating Nitric Acid Plants except the Baytown Plant (at all times) and the El Dorado East and West Plants during periods of required compliance with the Interim NO<sub>x</sub> Emissions Limit under the Consent Decree, that portion of a dual range or greater CEMS that senses NO<sub>x</sub> and generates an output proportional to the NO<sub>x</sub> concentration during Operating Periods; for the Baytown Plant and El Dorado East and West Plants (during periods of required compliance with the Interim NO<sub>x</sub> Emissions Limit under

the Consent Decree), “NO<sub>x</sub> Stack Analyzer” shall mean that portion of a single range CEMS unit that senses NO<sub>x</sub> and generates an output proportional to the NO<sub>x</sub> concentrations during Operating Periods;

kk. “ODEQ” shall mean the Oklahoma Department of Environmental Quality or any successor department, agency, or entity;

ll. “One-hour Period” and “1-hour Period” shall mean any 60-minute period commencing on the hour;

mm. “One-minute Measurement” shall mean any single measurement or the arithmetic average of multiple measurements of a parameter during a one-minute period commencing on the minute;

nn. “Operating Nitric Acid Plants” shall mean any or all of the nine Covered Nitric Acid Plants that continue, or may continue, to operate as of the Date of Lodging (with El Dorado DSN excluded due to its permanent shut-down): two at the Cherokee Facility (Cherokee #1 and #2); one at the Baytown Facility (Baytown); three at the El Dorado Facility (El Dorado East, El Dorado West, and El Dorado DMW); and three at the Pryor Facility (Pryor #1, #3, and #4);

oo. “Operating Periods” shall mean periods during which an Operating Nitric Acid Plant is producing nitric acid and NO<sub>x</sub> is emitted, including periods of Startup, Shutdown and Malfunction;

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

qq. “Parties” shall mean the United States, the State of Alabama, the ODEQ, and Defendants, and shall be a term of lesser scope than the similar term “Settling Parties,” defined below;

rr. “PCC” shall mean Pryor Chemical Company;

ss. “Pryor Facility” shall mean the facility located at 4463 Hunt Street, Pryor, Oklahoma, 74361, owned and operated by PCC, which consists of three Nitric Acid Plants, the Nitric Acid Plant #1 (“Pryor #1”), the Nitric Acid Plant #3 (“Pryor #3”), and the Nitric Acid Plant #4 (“Pryor #4”), with the following operational statuses as of the Date of Lodging, respectively:

i. Pryor #1 is operational;

ii. Pryor #3 is non-operational. The startup of Pryor #3, including the performance of required maintenance activities, is uncertain. Should PCC decide to repair and reactivate this Plant, PCC will do so in conformance with the Compliance Requirements set forth Section IV (Compliance Requirements) and in compliance with all other requirements of this Consent Decree;

iii. Pryor #4 is operational;

tt. “PSD” shall mean the Prevention of Significant Deterioration requirements within the meaning of Part C of Subchapter I of the CAA, 42 U.S.C. §§ 7470-7492, and the implementing regulations at 40 C.F.R. Part 52;

uu. “Section” shall mean a portion of this Consent Decree identified by a roman numeral;

vv. “Selective Catalytic Reduction” and “SCR” shall mean a pollution control device that employs selective catalytic reduction technology to react ammonia (NH<sub>3</sub>) with NO<sub>x</sub> to form nitrogen (N<sub>2</sub>) and water (H<sub>2</sub>O) using a catalyst to speed the reaction;

ww. “Settling Defendants” shall mean any or all of CNC, EDCC, PCC, EDN and LSB, determined as follows:

i. Regarding all terms of, and obligations under, this Consent Decree that are not specific to a particular Facility and jointly apply to all Settling Defendants and/or all Facilities, and regarding all terms applicable to the Settling Parties, “Settling Defendants” shall mean CNC, EDCC, PCC, EDN and LSB, collectively;

ii. Regarding all terms of, and obligations under, this Consent Decree that are specific to the Baytown Facility, “Settling Defendants” or “the respective Settling Defendants” shall mean EDN and LSB;

iii. Regarding all terms of, and obligations under, this Consent Decree that are specific to the Cherokee Facility, “Settling Defendants” or “the respective Settling Defendants” shall mean CNC and LSB;

iv. Regarding all terms of, and obligations under, this Consent Decree that are specific to the El Dorado Facility, “Settling Defendants” or “the respective Settling Defendants” shall mean EDCC and LSB;

v. Regarding all terms of, and obligations under, this Consent Decree that are specific to the Pryor Facility, “Settling Defendants” or “the respective Settling Defendants” shall mean PCC and LSB;

xx. “Settling Parties” shall mean the United States, the State of Alabama, the ODEQ, and all Settling Defendants;

yy. “Short-Term NO<sub>x</sub> Emissions Limit” shall mean a 3-hour rolling average NO<sub>x</sub> emission limit (rolled hourly) expressed in terms of pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (“lb/ton”); compliance with the Short-Term NO<sub>x</sub> Emissions Limit shall be calculated in accordance with the applicable CEMS Plan attached to this Consent Decree as Attachment C; the Short-Term NO<sub>x</sub> Emissions Limit does not apply during periods of Startup, Shutdown, or Malfunction;

zz. “Shutdown” shall mean the cessation of nitric acid production operations of an Operating Nitric Acid Plant for any reason. Shutdown begins at the time the feed of ammonia to the Operating Nitric Acid Plant ceases and ends when the compressor train(s) is shut down;

aaa. “Stack Flowmeter” shall mean that portion of the CEMS that senses the volumetric flow rate and generates an output proportional to that flow rate;

bbb. “Startup” shall mean the process of initiating nitric acid production operations of an Operating Nitric Acid Plant. Startup begins with the start of the compressor train(s) at the Operating Nitric Acid Plant and ends no more than 5 hours after the initiation of the feed of ammonia;

ccc. “State of Alabama” shall mean the State of Alabama and ADEM;

ddd. “State Parties” shall mean the State of Alabama, the ADEM and the ODEQ;

eee. “Title V Permit” shall mean a permit required by or issued pursuant to the requirements of 42 U.S.C. §§ 7661 - 7661f, and the implementing regulations at 40 C.F.R Part 70;

fff. “Ton” or “tons” shall mean short ton or short tons. One Ton equals 2,000 pounds;

ggg. “EPA” shall mean the United States Environmental Protection Agency or any successor department, agency, or entity;

hhh. “United States” shall mean the United States of America, acting on behalf of EPA.

#### **IV. COMPLIANCE REQUIREMENTS**

##### **A. NO<sub>x</sub> Emissions Limits and Schedule of Compliance**

9. The respective Settling Defendants shall install, upgrade, and/or maintain emissions control equipment, utilizing SCR and/or NSCR technology, at each of their respective Operating Nitric Acid Plants to meet the emissions limits and compliance schedules required under this Section IV.A. (Compliance Requirements).

10. Final NO<sub>x</sub> Emission Limits at All Operating Nitric Acid Plants. The respective Settling Defendants shall comply with the following emissions limits (Short-Term NO<sub>x</sub> Emissions Limits and Long-Term NO<sub>x</sub> Emissions Limits) for each of their respective Operating Nitric Acid Plants, conducting monitoring in accordance with the requirements of Section IV.C of this Consent Decree (Emissions Monitoring) and pursuant to the applicable CEMS Plan at Attachment C, by the corresponding compliance deadline specified below in Table 1 and Attachment A:

Table 1: NO<sub>x</sub> Emissions Limits and Compliance Schedule

<b>Facility and Plant</b>	<b>Short-Term NO<sub>x</sub> Emissions Limit</b>	<b>Short-Term NO<sub>x</sub> Emissions Limit Compliance Deadline<sup>1</sup></b>	<b>Long-Term NO<sub>x</sub> Emissions Limit</b>	<b>Long-Term NO<sub>x</sub> Emissions Limit Compliance Deadline<sup>2</sup></b>
Cherokee Facility, Cherokee #1	1.0 lb/ton	Effective Date	0.60 lb/ton	365 Days after the Effective Date
Cherokee Facility, Cherokee #2	1.0 lb/ton	Effective Date	0.60 lb/ton	365 Days after the Effective Date
Baytown Facility, Baytown	1.0 lb/ton	Effective Date	0.60 lb/ton	365 Days after the Effective Date
El Dorado Facility, El Dorado East	1.0 lb/ton	January 1, 2016	0.60 lb/ton	January 1, 2017
El Dorado Facility, El Dorado West	1.0 lb/ton	January 1, 2016	0.60 lb/ton	January 1, 2017
El Dorado Facility, El Dorado DMW	1.0 lb/ton	July 1, 2014	0.60 lb/ton	July 1, 2015
Pryor Facility, Pryor #1	1.0 lb/ton	January 1, 2018	0.60 lb/ton	January 1, 2019
Pryor Facility, Pryor #3	1.0 lb/ton	January 1, 2018, or upon startup, whichever date is later	0.60 lb/ton	January 1, 2019, or 365 Days following startup, whichever date is later
Pryor Facility, Pryor #4	1.0 lb/ton	January 1, 2018	0.60 lb/ton	January 1, 2019

11. Interim NO<sub>x</sub> Emission Limit at El Dorado East and El Dorado West. At the El Dorado Facility only, and regarding only El Dorado East and El Dorado West Nitric Acid Plants, the respective Settling Defendants shall comply with the applicable Interim NO<sub>x</sub> Emissions

<sup>1</sup> LSB shall commence monitoring its NO<sub>x</sub> Emissions in accordance with the applicable CEMS Plan required at each Operating Nitric Acid Plant, pursuant to Section IV.C of this Consent Decree (Emissions Monitoring), as of the corresponding Short-Term NO<sub>x</sub> Emissions Limit Compliance deadline.

<sup>2</sup> The Long-Term NO<sub>x</sub> Emissions Limit Compliance Deadline listed in Table 1 is the date at which 365 days of monitoring data have been gathered to calculate the 365-day rolling average NO<sub>x</sub> emissions in accordance with the CEMS Plan, and thus the date by which LSB shall demonstrate compliance with the Long-Term NO<sub>x</sub> Emissions Limit.

Limit, and conduct Interim NO<sub>x</sub> Emissions Limit monitoring in accordance with the requirements of Section IV.C of this Consent Decree (Emissions Monitoring) and pursuant to the applicable CEMS Plan at Attachment C, by the corresponding compliance deadlines specified below in Table 2 and Attachment A. The respective Settling Defendants shall comply with the Interim NO<sub>x</sub> Emissions Limit and compliance deadlines listed in Table 2 until the deadline specified in Table 1 (in Paragraph 10) for complying with the Long-Term NO<sub>x</sub> Emissions Limits applicable to these named Nitric Acid Plants.

Table 2: Interim NO<sub>x</sub> Emissions Limit and Compliance Schedule

<b>Facility and Plant</b>	<b>Interim NO<sub>x</sub> Emissions Limit</b>	<b>Interim NO<sub>x</sub> Emissions Limit Compliance Deadline</b>
El Dorado Facility, El Dorado East	3.0 lb/ton	Effective Date
El Dorado Facility, El Dorado West	3.0 lb/ton	Effective Date

**B. NSPS Applicability**

12. Each of the Operating Nitric Acid Plants shall be considered an “affected facility” for purposes of the New Source Performance Standards (“NSPS”), 40 C.F.R. Part 60, Subpart G, by no later than the Effective Date.

13. Upon the date that each Operating Nitric Acid Plant becomes an “affected facility,” as specified above in Paragraph 12, the respective Settling Defendants shall, for each of their respective Operating Nitric Acid Plants, comply with all applicable requirements for affected facilities under the NSPS at 40 C.F.R. Part 60, Subparts A and G, including but not limited to the obligation to install, calibrate, maintain, and operate a CEMS at each Operating Nitric Acid Plant, pursuant to 40 C.F.R. Part 60 Subparts A and G, no later than the Effective Date. Satisfactory compliance with notice and compliance demonstration obligations set forth in



this Consent Decree shall be deemed to satisfy all applicable initial notification and compliance demonstration requirements of NSPS Subparts A and G.

14. Best Practices. At all times after the Effective Date of this Consent Decree, including periods of Startup, Shutdown, and Malfunction, the respective Settling Defendants shall, to the extent practicable, maintain and operate each of their respective Operating Nitric Acid Plants, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, consistent with 40 C.F.R. § 60.11(d).

**C. Emissions Monitoring**

15. In addition to the requirements set forth above in Paragraph 13, and no later than the respective dates specified below in Paragraph 16, Table 3 (“Deadline for Installation, Certification and Calibration of CEMS”), the respective Settling Defendants shall, at each of their respective Operating Nitric Acid Plants, comply with the requirements of this Section IV.C (Compliance Requirements – Emissions Monitoring), including the terms of the CEMS Plan at Attachment C (where more stringent).

16. CEMS - Installation, Certification, and Calibration. By no later than the applicable “Deadline for Installation, Certification and Calibration of CEMS” set forth below in Table 3 and Attachment A of this Consent Decree, the respective Settling Defendants shall, at each of their respective Operating Nitric Acid Plants, install, certify, and calibrate the NO<sub>x</sub> CEMS required by this Consent Decree and as further described by the CEMS Plan at Attachment C. Each such CEMS shall include a NO<sub>x</sub> Stack Analyzer, as defined in Section III (Definitions), Paragraph 9.ii, and the applicable CEMS Plan in Attachment C, capable of measuring NO<sub>x</sub> concentration and a Stack Flowmeter that senses volumetric flow rate. Except as

may be specified in the applicable CEMS Plan in Attachment C of this Consent Decree, the NO<sub>x</sub> Stack Analyzers shall comply with 40 C.F.R. Part 60, Appendix B, Performance Specification 2 and the quality assurance/quality control requirements specified in 40 C.F.R. Part 60, Appendix F, Procedure 1, and the Stack Flowmeters shall comply with 40 C.F.R. Part 60, Appendix B, Performance Specification 6.

Table 3: Deadline for Installation, Certification and Calibration of the CEMS (Pursuant to Attachment C)<sup>3</sup>

<b>Facility and Plant</b>	<b>NO<sub>x</sub> CEMS Deadline</b>
Cherokee Facility, Cherokee #1	Effective Date
Cherokee Facility, Cherokee #2	Effective Date
Baytown Facility, Baytown	Effective Date
El Dorado Facility, El Dorado East	<ul style="list-style-type: none"> <li>• For the applicable CEMS operating during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit: Effective Date</li> <li>• For the applicable CEMS operating during period of required compliance with the Short Term NO<sub>x</sub> Emissions Limit: January 1, 2016</li> </ul>
El Dorado Facility, El Dorado West	<ul style="list-style-type: none"> <li>• For the applicable CEMS operating during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit: Effective Date</li> <li>• For the applicable CEMS operating during period of required compliance with the Short Term NO<sub>x</sub> Emissions Limit: January 1, 2016</li> </ul>
El Dorado Facility, El Dorado DMW	July 1, 2014

<sup>3</sup> Pursuant to Paragraph 12 of this Consent Decree, as of the Effective Date and up until each of the deadlines listed in this table (Table 3), the respective Settling Defendants shall, at each of their respective Operating Nitric Acid Plants, install, calibrate, maintain and operate a CEMS pursuant to the NSPS, 40 C.F.R. Part 60 Subparts A and G. Where a deadline listed in this table (Table 3) is in fact the Effective Date for a particular Operating Nitric Acid Plant, the more stringent emissions monitoring requirements of the CEMS Plan at Attachment C immediately apply at that particular Operating Nitric Acid Plant as of the Effective Date.

Pryor Facility, Pryor #1	January 1, 2018
Pryor Facility, Pryor #3	January 1, 2018, or upon startup, whichever date is later
Pryor Facility, Pryor #4	January 1, 2018

17. Continuous Operation of CEMS and Minimization of CEMS Downtime. On and after the applicable “Deadline for Installation, Certification and Calibration of CEMS (Pursuant to Attachment C)” set forth in Table 3 (in Paragraph 16) and Attachment A of this Consent Decree, and except during periods of CEMS breakdowns, analyzer malfunctions, repairs, and required quality assurance or quality control activities (including calibration checks and required zero and span adjustments), the requisite CEMS on each Operating Nitric Acid Plant shall be in continuous operation during all Operating Periods to demonstrate compliance with the Interim and Final NO<sub>x</sub> Emission Limits established in Section IV.A (Compliance Requirements) of this Consent Decree. Settling Defendants shall take all necessary steps to minimize CEMS breakdowns and minimize CEMS downtime at each of their respective Operating Nitric Acid Plants. This shall include, but is not limited to, operating and maintaining the CEMS in accordance with best practices, pursuant to Paragraph 14, and maintaining an on-site inventory of spare parts or other supplies necessary to make rapid repairs to the equipment.

18. NO<sub>x</sub> CEMS Plan (Attachment C). Notwithstanding the requirements of Paragraph 13 of this Consent Decree, on and after the applicable “Deadline for Installation, Certification and Calibration of CEMS (Pursuant to Attachment C)” set forth in Table 3 (in Paragraph 16) and Attachment A of this Consent Decree, Settling Defendants shall, at each of their respective Operating Nitric Acid Plants, implement the applicable CEMS Plan at Attachment C. Attachment C describes how the respective Settling Defendants shall monitor compliance with the Interim and Final NO<sub>x</sub> Emission Limits for each Operating Nitric Acid Plant

established in Section IV.A (Compliance Requirements) of this Consent Decree, including the methodology required to demonstrate compliance in the event of CEMS downtime. The EPA, ADEM, and ODEQ have approved the monitoring methods specified in the CEMS Plan in Attachment C of this Consent Decree as appropriate alternative monitoring methods for purposes of NSPS, pursuant to 40 C.F.R. § 60.13(i), for each Operating Nitric Acid Plant.

**D. Performance Testing**

19. Dates. Settling Defendants shall conduct the performance tests required in this Section IV.D. (Compliance Requirements) at each of their respective Operating Nitric Acid Plants by no later than the applicable “Deadline to Conduct Performance Test” specified in Table 4 below and Attachment A of this Consent Decree for each such corresponding Operating Nitric Acid Plant.

Table 4: Deadline to Conduct Performance Test

<b>Facility and Plant</b>	<b>Performance Testing Deadline</b>
Cherokee Facility, Cherokee #1	Effective Date
Cherokee Facility, Cherokee #2	Effective Date
Baytown Facility, Baytown	Effective Date
El Dorado Facility, El Dorado East	180 Days after the initial startup of such facility following the SCR installation
El Dorado Facility, El Dorado West	180 Days after the initial startup of such facility following the SCR installation
El Dorado Facility, El Dorado DMW	180 Days after the initial startup of such facility following the SCR installation

Pryor Facility, Pryor #1	180 Days after the initial startup of such facility following the SCR installation
Pryor Facility, Pryor #3 (currently shut down)	180 Days after the initial startup of such facility following the SCR installation
Pryor Facility, Pryor #4	180 Days after the initial startup of such facility following the SCR installation

20. NO<sub>x</sub> Emission Limits. The respective Settling Defendants shall conduct a performance test at each of their respective Operating Nitric Acid Plants measuring the emission rate of NO<sub>x</sub> in accordance with the applicable requirements of 40 C.F.R. §§ 60.8, 60.73, 60.74, Part 60 Appendix A, and Part 60 Appendix B. This test shall consist of at least nine method test runs and may serve as the CEMS relative accuracy test required under Performance Specification 2 in Part 60 Appendix B. Each Settling Defendant shall, to the extent practicable, assure accurate measurements of 100% Nitric Acid Produced during each test run.

21. Conversion Factor. During each performance test required under Paragraph 20 of this Consent Decree, the respective Settling Defendants shall establish a conversion factor for each of their respective Operating Nitric Acid Plants for the purpose of converting monitoring data, in terms of NO<sub>x</sub> concentration, into terms of mass of NO<sub>x</sub> per unit of 100% Nitric Acid Produced consistent with 40 C.F.R. § 60.73(b). Subsequently, the respective Settling Defendants shall reestablish the conversion factors during each Relative Accuracy Test Audit conducted in accordance with 40 C.F.R. Part 60, Appendix F.

22. Advance Notification. By no later than 30 Days before any performance test required by this Section IV.D (Compliance Requirements) is conducted, the respective Settling Defendants shall provide notice of their intent to conduct such test, in the manner set forth in

Section XVI (Notices), to the EPA and the Applicable State Agency. This notification must include the scheduled date of the test, an emissions test protocol, a description of the planned operating rate and operating conditions, and the procedures that will be used to measure 100% Nitric Acid Produced. If the EPA or the Applicable State Agency identifies specific concerns regarding the proposed emissions test protocol, operating conditions, and/or procedures to be used, and notifies the respective Settling Defendants in writing of these concerns a minimum of 7 Days prior to the proposed test date, the respective Settling Defendants shall either make such adjustments and conduct the performance test in conformity with the EPA's and/or the Applicable State Agency's identified concerns or submit the issue(s) for resolution under the dispute resolution provisions under Section XII (Dispute Resolution) of this Consent Decree.

23. Report of Results. By no later than 60 Days after completing a performance test required under this Section IV.D (Compliance Requirements), the respective Settling Defendants shall submit to the EPA and to the Applicable State Agency, in the manner set forth in Section XVI (Notices), a copy of the report documenting the results of such corresponding performance test.

**E. Operation and Maintenance Plan**

24. By no later than the applicable "O&M Plan Submittal Deadline" specified below in Table 5 and Attachment A of this Consent Decree, the respective Settling Defendants shall prepare and submit to the EPA and the Applicable State Agency, in the manner set forth in Section XVI (Notices), an Operation and Maintenance Plan ("O&M Plan") for each Operating Nitric Acid Plant.

Table 5: O&amp;M Plan Submittal Deadline

Facility and Plant	O&M Plan Submittal Deadline
Cherokee Facility, Cherokee #1	By the Effective Date
Cherokee Facility, Cherokee #2	By the Effective Date
Baytown Facility, Baytown	90 Days after the Effective Date
El Dorado Facility, El Dorado East	<ul style="list-style-type: none"> <li>• Effective Date (for initial plan, covering operations during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit)</li> <li>• December 1, 2015 (for amended plan, covering operations during period of required compliance with the Short Term NO<sub>x</sub> Emissions Limit).</li> </ul>
El Dorado Facility, El Dorado West	<ul style="list-style-type: none"> <li>• Effective Date (for initial plan, covering operations during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit)</li> <li>• December 1, 2015 (for amended plan, covering operations during period of required compliance with the Short Term NO<sub>x</sub> Emissions Limit).</li> </ul>
El Dorado Facility, El Dorado DMW	June 1, 2014
Pryor Facility, Pryor #1	December 1, 2017
Pryor Facility, Pryor #3	December 1, 2017, or upon startup, whichever date is later
Pryor Facility, Pryor #4	December 1, 2017

25. Each O&M Plan shall describe the operating and maintenance procedures necessary to: (i) minimize the frequency of Operating Nitric Acid Plant Shutdowns (thereby reducing the number of Startups of each Operating Nitric Acid Plant); and (ii) at all times, including periods of Startup, Shutdown, and Malfunction, maintain and operate each Operating Nitric Acid Plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions in accordance with 40 C.F.R. §

60.11(d). The EPA and/or the Applicable State Agency may provide comments and/or recommendations with respect to each corresponding O&M Plan.

26. By no later than the applicable “O&M Plan Implementation Deadline” set forth in Table 5 (Paragraph 24) and Attachment A of this Consent Decree for each corresponding Operating Nitric Acid Plant, the respective Settling Defendants shall implement the O&M Plan for each of their respective Operating Nitric Acid Plants. At least once every three years, the respective Settling Defendants shall review, and update as necessary, the O&M Plan for their Operating Nitric Acid Plants.

## **V. CIVIL PENALTY**

27. Within 30 Days after the Effective Date of this Consent Decree, Settling Defendants, collectively, shall pay \$725,000.00 as a civil penalty, together with Interest accruing from the date on which the Consent Decree is entered by the Court at the rate specified in 28 U.S.C. § 1961 as of the Effective Date. Settling Defendants shall pay this civil penalty in the following increments:

- a. The sum of \$362,500.00 as a civil penalty to the United States;
- b. The sum of \$156,250.00 as a civil penalty to the State of Alabama;
- c. The sum of \$206,250.00 as a civil penalty to the ODEQ.

28. Settling Defendants shall pay the civil penalty due to the United States by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice in accordance with written instructions to be provided to Settling Defendants following entry of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the Western District of Oklahoma, Suite 400, 210 West Park Avenue Oklahoma City, Oklahoma 73102, (405) 553-8700. At the time of payment, Settling Defendants shall send a copy of the EFT authorization



form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States et al. v. El Dorado Chemical Company et al., and shall reference the civil action number and DOJ # 90-5-2-1-103411, to the United States in the manner set forth in Section XVI of this Consent Decree (Notices), by email to [acctsreceivable.CINWD@epa.gov](mailto:acctsreceivable.CINWD@epa.gov), and by mail to:

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

29. Settling Defendants shall pay the civil penalty due to Alabama by check made payable to “The Alabama Department of Environmental Management” and mailed to:

Office of General Counsel  
Alabama Department of Environmental Management  
Post Office Pox 301463  
Montgomery, Alabama 36130-1463

30. Settling Defendants shall pay the civil penalty due to ODEQ by check or money order made payable to the Oklahoma Department of Environmental Quality Penalty Fund and delivered to:

Accounts Receivable  
Financial and Human Resources Management  
Department of Environmental Quality  
P.O. Box 2036  
Oklahoma City, OK 73101-2036

31. If any portion of the civil penalty due to the United States or Applicable State Party is not paid when due, Settling Defendants shall pay Interest on the amount past due, accruing from the Effective Date through the date of payment. Interest payment under this Paragraph shall be in addition to any stipulated penalty due.

32. Settling Defendants shall not deduct any penalties paid under this Consent Decree pursuant to this Section V (Civil Penalty) or Section X (Stipulated Penalties) in calculating their respective federal or state or local income tax.

**VI. ENVIRONMENTAL MITIGATION**

33. Settling Defendants shall implement the Environmental Mitigation described in Attachment B of this Consent Decree. In implementing the Environmental Mitigation, Settling Defendants shall spend no less than \$150,000.00. Settling Defendants shall not include their own personnel costs in overseeing the implementation of the Environmental Mitigation.

34. Settling Defendants shall maintain, and present to EPA upon request, all documents that substantiate the money expended and work completed to implement the Environmental Mitigation described in Attachment B of this Consent Decree, and shall provide these documents to EPA within 30 Days of a request for the documents.

35. Settling Defendants shall certify, within 30 Days of the Effective Date of this Consent Decree, that Settling Defendants are not otherwise required by law to perform the Environmental Mitigation, that Settling Defendants are unaware of any other person who is required by law to perform the Environmental Mitigation, and that Settling Defendants will not use any of the Environmental Mitigation, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law.

36. Within 60 Days following the completion of the Environmental Mitigation described in Attachment B of this Consent Decree, Settling Defendants shall submit to Plaintiffs a report that documents the date that the Environmental Mitigation was completed, the results achieved by implementing the Environmental Mitigation, including the environmental benefits, and the money expended by Settling Defendants in implementing the Environmental Mitigation.

37. In connection with any communication to the public or to shareholders regarding Settling Defendants' actions or expenditures relating in any way to the Environmental Mitigation in this Consent Decree, Settling Defendants shall include prominently in the communication the information that the actions and expenditures were required as part of a negotiated consent decree to resolve the United States', Alabama's, and ODEQ's claims that Settling Defendants violated the Clean Air Act.

## VII. PERMITS

38. Permits Prior to Construction or Installation. Settling Defendants shall obtain, for each the respective Settling Defendants' Operating Nitric Acid Plants, all required federal, state, and local permits or approvals necessary for performing any compliance obligation under this Consent Decree, including but not limited to, permits for construction of pollution control technology and the installation of equipment at the Operating Nitric Acid Plants. The respective Settling Defendants may seek relief under the provisions of Section XI (Force Majeure) of this Consent Decree for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation if the respective Settling Defendant has submitted timely and administratively complete permit applications and has taken all other actions necessary to obtain such permit(s) or approval(s). Settling Defendant EDN may not seek relief under the provisions of Section XI (Force Majeure) of this Consent Decree for any delay in the performance of any such obligation resulting from BMS's ownership of the Baytown Facility or the terms of the Baytown Operating Agreement.

39. Applications for Permits, or Amended Permits, Incorporating the NO<sub>x</sub> Emissions Limits, NSPS Applicability, and Emissions Monitoring Requirements of Section IV (Compliance Requirements) of this Consent Decree. By no later than the dates specified below in Table 6 and

Attachment A, the respective Settling Defendants shall follow the procedures set forth in subparagraphs a., b., c., and d., below, to submit to the relevant permitting authority an administratively complete permit application or amended permit application, as appropriate, to incorporate the following requirements into federally enforceable minor or major NSR permits or other federally-enforceable permits (other than Title V permits): (i) the NO<sub>x</sub> emission limits established in Section IV.A (Compliance Requirements) of this Consent Decree; (ii) the applicability of 40 C.F.R. Part 60, Subparts A and G, and all requirements therein, as established in Section IV.B (Compliance Requirements) of this Consent Decree; and (iii) the monitoring requirements in the applicable CEMS Plan in Attachment C, as established in Section IV.C (Compliance Requirements) of this Consent Decree.

Table 6: Permit Application or Amended Permit Application Submittal Deadline

<b>Facility and Plant</b>	<b>Permit Application or Amended Permit Application Submittal Deadline</b>
Cherokee Facility, Cherokee #1	180 Days after the Effective Date
Cherokee Facility, Cherokee #2	180 Days after the Effective Date
Baytown Facility, Baytown	180 Days after the Effective Date
El Dorado Facility, El Dorado East	July 1, 2016
El Dorado Facility, El Dorado West	July 1, 2016
El Dorado Facility, El Dorado DMW	January 1, 2015
Pryor Facility, Pryor #1	July 1, 2018
Pryor Facility, Pryor #3 (currently shut down)	July 1, 2018, or upon startup, whichever date is later
Pryor Facility, Pryor #4	July 1, 2018

a. For the Cherokee Facility, CNC shall amend its applications by the dates specified above in Table 6 and Attachment A, which will amend permit applications previously submitted, pursuant to Ala. Code § 22-28-16 (2006 Rplc. Vol.), on October 25, 2012, and April 17, 2012, for the Cherokee #1 Nitric Acid Plant and the Cherokee #2 Nitric Acid Plant, respectively.

b. For the El Dorado Facility, EDCC shall apply for a combined construction and operating permit pursuant to Arkansas Regulation No. 26 by the dates specified above in Table 6 and Attachment A.

c. For the Pryor Facility, PCC shall apply for a modification to the federal operating permit and underlying construction permit pursuant to Oklahoma Administrative Code Title 252, Chapter 100, Subchapter 8 by the dates specified above in Table 6 and Attachment A.

d. For the Baytown Facility, EDN shall apply for a modification to the federal operating permit and underlying construction permit pursuant to Title 30 Texas Administrative Code Chapter 116 by the dates specified above in Table 6 and Attachment A.

40. Following submission of any complete permit application or amended permit application, the respective Settling Defendants shall cooperate with the Applicable State Agency by promptly submitting any information required by the Applicable State Agency for purposes of processing such permit applications.

41. Title V or Other Operating Permits: Emission Limits and Standards. This Consent Decree shall not terminate until the requirements set forth in this Paragraph are incorporated into Title V or other operating permits for each Operating Nitric Acid Plant and its associated Facility. Therefore, during the duration of this Consent Decree, the respective Settling Defendants shall file all applications necessary to incorporate the following Consent

Decree requirements into the Title V or other operating permits for each of their respective Operating Nitric Acid Plants in accordance with Applicable State Agency rules, including applicable administrative amendment provisions of such rules:

a. The NO<sub>x</sub> emission requirements specified in Section IV.A (Compliance Requirements) of this Consent Decree (*i.e.* Short-Term NO<sub>x</sub> Emissions Limit of 1.0 lb/ton and Long-Term NO<sub>x</sub> Emissions Limit of 0.60/lb/ton);

b. A statement that the above-referenced NO<sub>x</sub> emission requirements were established pursuant to a negotiated Consent Decree with the United States, the State of Alabama, and the ODEQ, and shall not be relaxed without the approval of EPA and the Applicable State Party, if any;

c. The monitoring requirements specified in Section IV.C (Compliance Requirements) of this Consent Decree and established in the applicable CEMS Plan in Attachment C of this Consent Decree; and

d. The applicability of NSPS 40 C.F.R. Part 60, Subparts A and G, and all applicable requirements therein, as established in Section IV.B (Compliance Requirements) of this Consent Decree.

42. Requirements incorporated into Title V or other operating permits pursuant to Paragraph 41 shall survive termination of this Consent Decree.

43. For any permit applications required by this Section VII (Permits) that are filed after the Effective Date of this Consent Decree, the respective Settling Defendants shall submit to the EPA in the manner set forth in Section XIV (Notices), a copy of each application, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity. If, as of the Effective Date of this Consent Decree, any of

the respective Settling Defendants have already received any permit necessary to implement the requirements of this Consent Decree, then no later than 30 Days after the Effective Date of this Consent Decree, such Settling Defendants shall submit copies of such permits to the EPA in the manner set forth in Section XIV (Notices). The EPA may excuse in writing all or part of the latter submissions if copies of such permits have already been submitted prior to the Effective Date of this Consent Decree.

#### **VIII. EMISSION CREDIT GENERATION**

44. No Settling Defendant may use any NO<sub>x</sub> emission reductions resulting from implementation of this Consent Decree for the purpose of obtaining netting credits or offsets in any PSD, major NSR, and/or minor NSR permit or permit proceeding, and shall not buy, sell or trade any NO<sub>x</sub> emission reductions resulting from implementation of this Consent Decree; provided however, that nothing in this Consent Decree is intended to prohibit Settling Defendants from:

- a. Using netting reductions or emission offset credits from Covered Nitric Acid Plants that are covered by this Consent Decree to the extent the proposed netting reductions or emission offset credits represent the difference between the emission limits set forth in this Consent Decree and the more stringent emission limits that such Settling Defendant may elect to accept for the Covered Nitric Acid Plants in a permitting process;
- b. Using netting reductions or emissions offset credits from units that are not Covered Nitric Acid Plants;
- c. Using netting reductions or emissions offset credits for any pollutants other than NO<sub>x</sub>.

45. Baseline Actual Emissions. For the purposes of calculating baseline actual emissions as defined in the PSD or NSR rules, in any PSD, major NSR, and/or minor NSR permit or permit proceeding for any Operating Nitric Acid Plant, emissions of NO<sub>x</sub> from any Operating Nitric Acid Plant during any 24-month period selected by Settling Defendant EDCC (for the El Dorado Facility), Settling Defendant CNC (for the Cherokee Facility), Settling Defendant PCC (for the Pryor Facility), or Settling Defendant EDN (for the Baytown Facility), shall be adjusted downward to exclude any emissions that would have exceeded the Long-Term NO<sub>x</sub> Emissions Limit for that Operating Nitric Acid Plant established under this Consent Decree had the Operating Nitric Acid Plant been required to comply with the Long-Term NO<sub>x</sub> Emissions Limit during the selected consecutive 24-month period.

#### **IX. REPORTING REQUIREMENTS**

46. Semi-Annual Reports: Contents. After the Effective Date and until the date that this Consent Decree is terminated pursuant to Section XX (Termination), the respective Settling Defendants shall submit to the EPA, ADEM, and ODEQ in the manner set forth in Section XVI (Notices), a semi-annual progress report for their respective Operating Nitric Acid Plants no later than January 31 and July 31 of each year, with the first semi-annual report due on July 31, 2013. Each semi-annual progress report shall contain the following information or discussion for each Operating Nitric Acid Plant with respect to the half-year between July 1 and December 31, or the half-year between January 1 and June 30:

a. Progress made toward implementing the requirements of Section IV (Compliance Requirements) of this Consent Decree, including the respective Settling Defendants' plans for how they intend to comply with such requirements (*e.g.*, indicating, if applicable, preliminary design specifications), and descriptions of any work already performed;



b. Any significant modifications to previously-submitted design specifications of any pollution control system, or to monitoring equipment, required to comply with the requirements of Section IV (Compliance Requirements) of this Consent Decree;

c. Any significant problems encountered or anticipated in complying with the requirements of Section IV (Compliance Requirements) of this Consent Decree;

d. A summary of the emissions monitoring and testing data collected to demonstrate compliance with any requirement of this Consent Decree;

e. On and after the compliance dates for the applicable Short-Term NO<sub>x</sub> Emissions Limit, a description of all periods of Startup, Shutdown, and Malfunction, including the quantity of NO<sub>x</sub> emitted during such periods, and the cause of Malfunctions;

f. On and after the compliance dates for the applicable Short-Term NO<sub>x</sub> Emissions Limit, all information required to be reported in the applicable CEMS Plan;

g. Status of permit applications and a summary of all permitting activity pertaining to compliance with this Consent Decree;

h. Any correspondence with Applicable State Agencies pertaining to compliance with this Consent Decree; and

i. After submission of the O&M Plans specified in Section IV.E (Compliance Requirements) of this Consent Decree, a description of any changes or updates made to such O&M Plans.

47. Notification of Potential Non-Compliance. If any of the respective Settling Defendants violate, or have reason to believe that they may violate, any requirement of this Consent Decree, one or more of the respective Settling Defendants shall notify the United States and the Applicable State, if any, of such violation or potential violation and its duration or

anticipated likely duration, in writing, within 45 Days of the Day that one or more of the respective Settling Defendants first became aware of the violation or potential violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, by one or more of the respective Settling Defendants to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the reporting actor for the respective Settling Defendants shall so state in the report. The reporting actor for the respective Settling Defendants shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the day the respective Settling Defendants first became aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves the respective Settling Defendants of their obligations to provide the notice required by Section XI of this Consent Decree (Force Majeure).

48. Imminent Threat. Whenever any violation of this Consent Decree or of any applicable permit(s) or any other event at a Covered Nitric Acid Plant may pose an immediate threat to the public health or welfare or the environment, one or more of the respective Settling Defendants shall notify EPA and the Applicable State Agency orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after the respective Settling Defendants first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph, and is in addition to any other state or federal reporting requirement which may be applicable.

49. All reports shall be submitted to the persons and in the manner designated in Section XVI (Notices) of this Consent Decree.

50. Each report submitted by one or more of the respective Settling Defendants under this Section shall be signed by a plant manager, a corporate official responsible for environmental management and compliance, or a corporate official responsible for plant engineering management of the reporting actor for the respective Settling Defendants and shall include the following certification:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gather and present the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowingly and willfully submitting a materially false statement.

51. The reporting requirements of this Consent Decree do not relieve the respective Settling Defendants of any reporting obligations required by the CAA or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement. The reporting requirements of this Section are in addition to any other reports, plans, or submissions required by other Sections of this Consent Decree.

52. Any information provided pursuant to this Consent Decree may be used by the United States or the State Parties in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law. All information and documents submitted by the respective Settling Defendant to the United States or the State Parties pursuant to this Consent Decree shall be subject to public inspection unless identified and supported as confidential business information (“CBI”) in accordance with 40 C.F.R. Part 2 and other applicable state law.

Under no circumstances shall emissions data required to be submitted pursuant this Consent Decree be identified or considered CBI.

**X. STIPULATED PENALTIES**

53. Settling Defendants shall be liable for stipulated penalties to the United States and the Applicable State Party, if any, for violations of this Consent Decree as specified below, unless excused under Section XI (Force Majeure), or waived pursuant to Paragraph 66 of this Consent Decree. A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Consent Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree.

54. Late Payment of Civil Penalty. If Settling Defendants fails to pay the civil penalty required to be paid under Section V of this Consent Decree (Civil Penalty) when due, Settling Defendants shall pay a Stipulated Penalty of \$1,000 per Day for each Day that the payment is late.

55. Final Short-Term NO<sub>x</sub> Emissions Limit Violation. For each violation of the Short-Term NO<sub>x</sub> Emissions Limit, as set forth in Section IV.A (Compliance Requirements) of this Consent Decree, in any non-overlapping 3-hour period (*i.e.*, no more than eight violations in a single twenty-four hour period) on and after the corresponding applicable Compliance Date for each Operating Nitric Acid Plant (see Table 1) the stipulated penalty for the respective Settling Defendants shall be:

<u>Percentage Over the Limit</u>	<u>Penalty per Violation</u>
1 - 50%	\$250
51 - 100%	\$500
Over 100%	\$750

Where a violation of the Short-Term NO<sub>x</sub> Emissions Limit also violates the NSPS NO<sub>x</sub> Limit, the provisions of this Stipulated Penalty paragraph shall apply.

56. Final Long-Term NO<sub>x</sub> Emissions Limit Violation. For each violation, per day, of the Long-Term NO<sub>x</sub> Emissions Limit, as set forth in Section IV.A (Compliance Requirements) of this Consent Decree, on and after the corresponding Compliance Date for each Operating Nitric Acid Plant (see Table 1), the stipulated penalty for the respective Settling Defendants shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$1000
15th - 30th day	\$1500
31st day and each day thereafter	\$2000

57. Interim NO<sub>x</sub> Emissions Limit Violation. For each violation of the Interim NO<sub>x</sub> Emissions Limit, as set forth in Section IV.A (Compliance Requirements) of this Consent Decree, on and after the corresponding applicable Compliance Date for each Nitric Acid Plant subject to an Interim NO<sub>x</sub> Emissions Limit (see Table 2) the stipulated penalty for the respective Settling Defendants shall be:

<u>Percentage Over the Limit</u>	<u>Penalty per Violation</u>
1 - 50%	\$250
51 - 100%	\$500
Over 100%	\$750

58. Violation of Opacity Limits in the NSPS. For each violation of the opacity requirements of 40 C.F.R. § 60.72(a)(2), as demonstrated by EPA Reference Test Method 9, the stipulated penalty for the respective Settling Defendants shall be \$40 per six (6) minute average reading in excess of the limit, up to a maximum of \$2000 per day.

59. Emissions Monitoring Violations. For each violation of any of the requirements in Section IV.C (Compliance Requirements), including the requirements in the CEMS Plan, the stipulated penalty for the respective Settling Defendants shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$1500
15th - 30th day	\$2000
31st day and each day thereafter	\$2500

60. Violation of Performance Testing Requirements. For each violation of any of the requirements in Section IV.D (Compliance Requirements) the stipulated penalty for the respective Settling Defendants shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$1000
15th - 30th day	\$1500
31st day and each day thereafter	\$2000

61. Violation of Permitting Requirements. For each violation of any of the requirements of Section VII (Permits), the stipulated penalty for the respective Settling Defendants shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$1000
15th - 30th day	\$1500
31st day and each day thereafter	\$2000

62. Violation Emission Credit Generation Provisions. For each violation of any of the requirements of Section VIII (Emission Credit Generation), the stipulated penalty shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$1000
15th - 30th day	\$1500
31st day and each day thereafter	\$2000

63. Violation of Reporting Requirements. For each violation of any of the requirements of Section IX (Reporting Requirements), the stipulated penalty for the respective Settling Defendants shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$150
15th - 30th day	\$250
31st day and each day thereafter	\$500

64. All Other Violations. For each failure to comply with any requirement of this Consent Decree not specifically referenced in Paragraphs 53 - 63 or of any plan or schedule approved under this Consent Decree within the specified time established by or approved under this Consent Decree, the stipulated penalty shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per violation per day</u>
1st - 14th day	\$150
15th - 30th day	\$250
31st day and each day thereafter	\$500

65. Payment or Allocation of Stipulated Penalties. The respective Settling Defendants shall pay stipulated penalties provided under this Consent Decree upon written demand by the United States or the Applicable State Party, if any. Demand from either the United States or an Applicable State Party, if any, shall be deemed a demand from both, but the United States and



the Applicable State Party shall consult with each other prior to making a demand. Stipulated penalties shall be directed as follows:

a. Payment of Stipulated Penalties to the United States when there is No Applicable State Party. When there is no Applicable State Party eligible to receive particular stipulated penalties due under this Consent Decree (*e.g.* for violations relating to a Facility located outside of the jurisdiction of the State Parties), stipulated penalties shall be paid solely to the United States (100%) in accordance with the payment procedures set forth in Paragraph 70;

b. Allocation of Payment of Stipulated Penalties Amongst the United States and the Applicable State Parties, where there is at least one Applicable State Party. Where there is at least one Applicable State Party eligible to receive particular stipulated penalties due under this Consent Decree, the stipulated penalties shall be paid to the United States and the Applicable State Party, the total amount divided 50% to the United States and 50% to the Applicable State Party (such that if both State Parties are Applicable State Parties for the particular stipulated penalties due, each State Party shall receive 25%), in accordance with the payment procedures set forth in Paragraph 70.

66. Waiver of Payment. The United States and/or the Applicable State Party receiving stipulated penalties, if any, may, in its/their unreviewable discretion and after consultation, reduce or waive payment of any portion or all of the stipulated penalties that may be due to it/them under this Consent Decree.

67. Demand for Stipulated Penalties. A written demand for the payment of stipulated penalties will identify: (i) the particular violation(s) to which the stipulated penalty relates; (ii) the stipulated penalty amount that the United States and/or the Applicable State Party, if any, is

demanding for each violation (as can be best estimated); (iii) the calculation method underlying the demand; and, (iv) the grounds upon which the demand is based.

68. Stipulated Penalties' Accrual. Stipulated penalties will begin to accrue on the day after performance is due or the day a violation occurs, whichever is applicable, and will continue to accrue until performance is satisfactorily completed or the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

69. Stipulated Penalties Payment Due Date. Stipulated penalties shall be paid no later than 30 Days after the respective Settling Defendant's receipt of a written demand by the United States and/or the Applicable State Party, if any, unless the demand is disputed through compliance with the requirements of Section XII (Dispute Resolution) of this Consent Decree.

70. Manner of Payment of Stipulated Penalties. Stipulated penalties owing to the United States and/or any Applicable State Party shall be paid in the manner set forth and with the confirmation notices required by Paragraphs 28, 29, and/or 30 of Section V (Civil Penalty), except that the transmittal letter shall state that the payment is for stipulated penalties and shall identify the violation(s) to which the stipulated penalties payment relates.

71. Disputes over Stipulated Penalties. Stipulated penalties shall continue to accrue as provided in Paragraph 68, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision or order of the EPA or Applicable State Party Agency, if any, that is not appealed to the Court, then within 30 Days of the effective date of such agreement or the receipt of such decision or order, the respective Settling Defendants shall pay accrued penalties determined to be owing, together with Interest, as provided under Paragraph 65;

b. If the dispute is appealed to the Court and the EPA or Applicable State Party Agency, if any, prevails in whole or in part, the respective Settling Defendants shall pay all accrued penalties determined by the Court to be owing, together with Interest, as provided under Paragraph 65, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below;

c. If any Party appeals the Court's decision issued under subparagraph b, above, the respective Settling Defendants shall pay all accrued penalties determined to be owing, together with Interest, as provided under Paragraph 65, within 15 Days of receiving the final appellate court decision.

72. If the respective Settling Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, the respective Settling Defendant shall be liable for Interest on such penalties, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or the Applicable State Party, if any, from seeking any remedy otherwise provided by law for the respective Settling Defendant's failure to pay any stipulated penalties.

73. Subject to the provisions of Section XIV of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or the Applicable State Party, if any, for a violation of this Consent Decree or applicable law. If the violations of the Long-Term NO<sub>x</sub> Emissions Limit established in Paragraph 10 of Section IV.A (Compliance Requirements) of this Consent Decree (i.e. 0.60 lb/ton) at an Operating Nitric Acid Plant results in excess NO<sub>x</sub> emissions greater than one ton of NO<sub>x</sub> as determined based on a 365-day rolling average (rolled daily), then the United States and/or Applicable State Party, if any,

may elect to seek compensatory emissions reductions, equal to the excess mass amount of NO<sub>x</sub> emissions that the Operating Nitric Acid Plant emitted in accordance with and pursuant to Attachment D to this Consent Decree, in addition to injunctive relief or stipulated penalties. Where a violation of this Consent Decree also is a violation of Subparts A or G of the NSPS, or of the PSD requirements, or of the Title V or other operating permit requirements, the respective Settling Defendant shall be allowed a credit for any stipulated penalties paid (whether to the United States and/or the Applicable State Party, if any) against any statutory penalties imposed for such violation.

#### **XI. FORCE MAJEURE**

74. “Force Majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the respective Settling Defendants, of any entity controlled by the respective Settling Defendants, or of the respective Settling Defendants’ contractors, which delays or prevents the performance of any obligation under this Consent Decree despite the respective Settling Defendants’ best efforts to fulfill the obligation. The requirement that the respective Settling Defendants exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. “Force Majeure” does not include the respective Settling Defendants’ financial inability to perform any obligation under this Consent Decree. “Force Majeure” also does not include any delay by EDN in the performance of any obligation at or regarding the Baytown Facility resulting from BMS’s ownership of the Baytown Facility or the Terms of the Baytown Operating Agreement.

75. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, one or more of the respective Settling Defendants shall provide notice orally or by electronic or facsimile transmission to the United States and the Applicable State Party, if any, in the manner listed in Section XVI (Notices), within seven (7) business Days of when one or more of the respective Settling Defendants first knew that the event might cause a delay. Within seven (7) business Days thereafter, the reporting entity for the respective Settling Defendants shall provide in writing to EPA, and the Applicable State Party Agency, if any, an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the respective Settling Defendants' rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of the respective Settling Defendants, such event may cause or contribute to an endangerment to public health, welfare or the environment. The reporting entity for the respective Settling Defendants shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude the respective Settling Defendants from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. The respective Settling Defendants shall be deemed to know of any circumstance of which the respective Settling Defendants, any entity controlled by the respective Settling Defendants, or the respective Settling Defendants' contractors knew or should have known.

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

77. If EPA, after a reasonable opportunity for review and comment by the Applicable State Party Agency, if any, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the respective Settling Defendants in writing of EPA's decision.

78. If one or more of the respective Settling Defendants elect to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution) in response to any notice issued under Paragraph 77, it shall do so no later than 15 Days after receipt of EPA's notice. In any such proceeding, the invoking actor for the respective Settling Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that the respective Settling Defendants complied with the requirements of Paragraphs 74 and 75, above. If the respective

Settling Defendants carry this burden, the delay at issue shall be deemed not to be a violation by the respective Settling Defendants of the affected obligation(s) of this Consent Decree that the respective Settling Defendants identified to EPA and the Court as being delayed by the force majeure event.

## **XII. DISPUTE RESOLUTION**

79. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. The respective Settling Defendants' failure to seek resolution of a dispute under this Section shall preclude the respective Settling Defendants from raising any such issue as a defense to an action by the United States and/or the Applicable State Party, if any, to enforce any obligation of the respective Settling Defendants arising under this Consent Decree.

80. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when one or more of the respective Settling Defendants sends the United States and the Applicable State Party, if any, a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless that period is modified by written agreement. If the parties to the dispute cannot resolve a dispute by informal negotiations, then the position advanced by the United States, in consultation with the Applicable State Party, if any, shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, the respective Settling Defendant invokes the formal dispute resolution procedures as set forth below.

81. Formal Dispute Resolution. One or more of the respective Settling Defendants shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph 80, by serving on the United States and the Applicable State Party, if any, a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting the respective Settling Defendants' position and any supporting documentation relied upon by the respective Settling Defendants.

82. The United States shall serve its Statement of Position upon the respective Settling Defendants within 45 Days of receipt of the respective Settling Defendants' Statement of Position. The United States' Statement of Position shall be prepared in consultation with the Applicable State Party, if any, and shall include, but need not be limited to, any factual data, analysis, or opinion supporting the United States' position and any supporting documentation relied upon by the United States. In the event that the positions of the United States and any Applicable State Party differ, the Statement of Position of the United States shall represent the final position of the Plaintiffs and shall be binding on the respective Settling Defendants, unless one or more of the respective Settling Defendants files a motion for judicial review of the dispute in accordance with the following Paragraph 83.

83. The respective Settling Defendants may seek judicial review of the dispute by filing with the Court and serving on the United States and the Applicable State Party, if any, in accordance with Section XVI of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph 82. The motion shall contain a written statement of the respective Settling Defendants' position on the matter in dispute,



including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

84. The United States and the Applicable State Party, if any, shall respond to the respective Settling Defendant's motion within the time period allowed by the Local Rules of this Court. The respective Settling Defendants may file a reply memorandum, to the extent permitted by the Local Rules.

85. Standard of Review.

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, record review under applicable principles of administrative law shall apply in any dispute brought under Paragraph 81 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by the EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 81, the respective Settling Defendants shall have the burden of demonstrating that its position complies with this Consent Decree and the CAA.

86. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of the respective Settling Defendants under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as

provided in Paragraph 71. If the respective Settling Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X (Stipulated Penalties).

**XIII. INFORMATION COLLECTION AND RETENTION**

87. The United States and its representatives, including attorneys, contractors, and consultants, and the Applicable State Parties and their representatives, including attorneys, contractors, and consultants, if any, shall have the right of entry into any of the Covered Nitric Acid Plants covered by this Consent Decree, at all reasonable times, upon presentation of proper credentials, for the purpose of monitoring compliance with any provision of this Consent Decree, including to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States and/or any Applicable State Party in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by a Settling Defendant or its representatives, contractors, or consultants in connection with their performance under this Consent Decree;
- d. obtain documentary evidence, including photographs and similar data, relevant to compliance with the terms of this Consent Decree; and
- e. assess a Settling Defendant's compliance with this Consent Decree.

88. Settling Defendants shall be entitled to obtain or receive from the United States and/or any Applicable State Parties: (1) splits of samples collected under Paragraph 87.c. where feasible, and (2) copies of any sampling and analytical results, documentary evidence and data

obtained by the United States, any Applicable State Parties, and their representatives pursuant to Paragraph 87 of the Consent Decree.

89. Until at least three (3) years after the termination of this Consent Decree, Settling Defendants shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into it or its contractors' or agents' possession or control, and that directly relate to the respective Settling Defendants' performance of obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, the United States and/or any Applicable State Party may request copies of any documents, records, or other information required to be maintained under this Paragraph.

90. At the conclusion of the information retention period specified in the preceding Paragraph 88, the respective Settling Defendants shall notify the United States and the Applicable State Party, if any, at least 90 Days prior to destroying any document(s), record(s), or other information subject to the requirements of the preceding Paragraph and, upon request by the United States and/or an Applicable State Party, if any, the respective Settling Defendants shall deliver any such document(s), record(s), or other information to the requesting Plaintiff. Settling Defendants may assert that certain documents, records, or other information otherwise subject to this Section XIII (Information Collection and Retention) are privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Settling Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and

title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by the respective Settling Defendant. However, no documents, records, data, or other information that is created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

91. Settling Defendants may also assert that information required to be provided under this Section is protected as CBI under 40 C.F.R. Part 2, or any corollary state laws and regulations. As to any information that a Settling Defendant seeks to protect as CBI, the respective Settling Defendant shall follow the procedures set forth in 40 C.F.R. Part 2 or any corollary state laws and regulations.

92. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State Parties pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Settling Defendants to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### **XIV. EFFECT OF SETTLEMENT / RESERVATION OF RIGHTS**

93. Entry of this Consent Decree shall resolve:

a. all civil liability of Settling Defendants to the United States and the State Parties at the Covered Nitric Acid Plants that arose prior to the Date of Lodging of this Consent Decree with respect to any and all of the following claims:

i. Claims based on Part C of Subchapter I of the CAA, 42 U.S.C. §§ 7470-7492, and the implementing regulations at 40 C.F.R. § 52.21, or the equivalent SIP

approved regulation arising from any construction or modification at any Covered Nitric Acid Plant;

ii. Claims based on Section 111 of the CAA, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subchapters A and G, arising at any Covered Nitric Acid Plant;

iii. Claims based on Sections 502(a), 503 and 504(a) of Title V of the CAA, 42 U.S.C. §§ 7661a(a), 7661b, and 7661c(a), and the implementing regulations at 40 C.F.R. Part 70, arising from the failure to obtain permits containing applicable requirements triggered by any construction or modification at any Covered Nitric Acid Plant;

iv. Any State or local law counterparts to the provisions above in this Paragraph 93.a.

b. all civil liability of Settling Defendants to the United States and the ODEQ for alleged violations at the Pryor Facility, but not at Covered Nitric Acid Plants, that arose prior to the Date of Lodging of this Consent Decree and are additionally alleged as follows in Complaint in this action:

i. Claims based on OKLAHOMA ADMIN. CODE (OAC) 252:100-9-7(a) and (b), for failure to submit immediate notice and 30-day reports of excess emission events for ODEQ excess emission identification numbers 17839, 17870, 17817, 17876, 17877, 18122, 20034, 20067, and 20871;

ii. Claims based on OAC 252:100-8-1.3, and 27A O.S. § 2-5-112(A) for failure to comply with permit conditions of ODEQ Air Quality Permit No. 2008-100-C (M-2) (PSD), specifically:

1. The permitted production capacity at the #1 and # 4 Ammonia Plants;
2. The permitted operating limit for the purge gas vents at the #1 and # 3 Ammonia Plants;
3. The permitted emission limit for NH<sub>3</sub> at the #1 and #3 Ammonia Plants;
4. The permitted emission limit for CO at the #4 Ammonia Plant;
5. The maximum permitted production rate of ammonium nitrate at the #2 Ammonium Nitrate Plant;
6. The permitted emission limit for NH<sub>3</sub> at the #2 Ammonium Nitrate Plant;
7. The permitted emission limit for NH<sub>3</sub> at the #2 Ammonium Nitrate Plant;
8. The permitted emission limit for CO, NO<sub>x</sub>, PM, PM<sub>10</sub>, SO<sub>2</sub>, and VOC at Boiler #1;
9. The permitted emission limit for CO, NO<sub>x</sub>, and PM at Boiler #2;
10. The requirement to perform daily opacity measurements using EPA Method 9;

iii. Any Federal, or local law counterparts to the provisions above in

this Paragraph 93.b.

c. all civil liability of Settling Defendants to the United States and the ODEQ for the following claim alleged in the Complaint filed in this action, regarding a violation at the

Pryor Facility Covered Nitric Acid Plants that arose prior to the Date of Lodging of this Consent Decree, which is not included in the claims alleged in Paragraph 93.a:

i. A claim based on OAC 252:100-8-1.3, and 27A O.S. § 2-5-112(A) for failure to comply with permit conditions of ODEQ Air Quality Permit No. 2008-100-C (M-2) (PSD), specifically the permitted emissions limit for CO at Pryor Facility Pryor #1;

ii. Any Federal, or local law counterparts to the provisions above in this Paragraph 93.c.

94. The United States and the State Parties reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 93. This Consent Decree shall not be construed to limit the rights of the United States or the State Parties to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 93. The United States and the State Parties further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Covered Nitric Acid Plants, whether related to the violations addressed in this Consent Decree or otherwise.

95. In any subsequent administrative or judicial proceeding initiated by the United States or either of the State Parties for injunctive relief, civil penalties, or other appropriate relief relating to the Covered Nitric Acid Plants or Settling Defendants alleged violations, Settling Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or a State Party in the subsequent proceeding were or should have been brought in the instant

case, except with respect to claims that have been specifically resolved pursuant to Paragraph 93 of this Section.

96. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Settling Defendants are responsible for achieving and maintaining complete compliance with all applicable Federal, State, and local laws, regulations, and permits; and Settling Defendants' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the State Parties do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Settling Defendants' compliance with any aspect of this Consent Decree will result in compliance with provisions of the CAA, or with any other provisions of federal, State, or local laws, regulations, or permits.

97. This Consent Decree does not limit or affect the rights of Settling Defendants or the Plaintiffs against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Settling Defendants, except as otherwise provided by law.

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

#### **XV. COSTS**

99. The Settling Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the State Parties shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to enforce this Consent Decree or to collect any portion of the civil penalty or any stipulated penalties due but not paid by Settling Defendants.



**XVI. NOTICES**

100. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree to be made to the United States, they shall be made in writing and addressed to: the (i) United States Department of Justice; (ii) the U.S. EPA Headquarters; and (iii) the U.S. EPA Region where the relevant Covered Nitric Acid Plant is located. Notices, submissions, or communications required by this Consent Decree to be made to U.S. EPA shall be made in writing and addressed to both (i) EPA Headquarters and (ii) the EPA Region where the relevant Covered Nitric Acid Plant is located. Notices, submissions, or communications required by this Consent Decree to be made to any Applicable State Party shall be made in writing and addressed to: (i) ADEM when Alabama is the Applicable State Party; and/or (i) the ODEQ when ODEQ is the Applicable State Party. The contact information for the Settling Parties to the Consent Decree is set forth in Table 7, below.

Table 7: Contact Information for the Settling Parties

<b>Receiving Party</b>	<b>To Receive</b>	<b>Contact Information</b>
The United States Department of Justice	All Notice or Submissions to the United States concerning any Covered Nitric Acid Plant or any requirement of this Consent Decree	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 Re: DOJ No. 90-5-2-1-10311
The United States EPA Headquarters	All Notice or Submissions to the United States and/or to the EPA concerning any Covered Nitric Acid Plant or any requirement of this Consent Decree	Air Enforcement Division Director U.S. Environmental Protection Agency Office of Civil Enforcement Air Enforcement Division U.S. Environmental Protection Agency 1200 Pennsylvania Ave, NW Mail Code: 22423A Washington, DC 20460

The United States EPA Region 6	All Notice or Submissions to the EPA concerning the Baytown Facility, the El Dorado Facility, and/or the Pryor Facility	Associate Director, Air/Toxics Inspection & Coordination Branch, US Environmental Protection Agency Region 6 1445 Ross Ave, Suite 1200, Dallas, TX 75202
The United States EPA Region 4	All Notice or Submissions to the EPA concerning the Cherokee Facility	Air Enforcement Branch Chief U.S. Environmental Protection Agency Region 4 Air and EPCRA Enforcement Branch 61 Forsyth Street, S.W. Atlanta, Georgia 30303
The State of Alabama/ADEM	All Notices or Submissions to ADEM concerning the Cherokee Facility	Chief, Air Division Alabama Department of Environmental Management Post Office Box 301463 Montgomery, Alabama 36130-1463
The ODEQ	All Notices or Submissions to the ODEQ concerning the Pryor Facility	Director, Air Quality Division Oklahoma Department of Environmental Quality 707 N. Robinson Oklahoma City, OK 73101
Any or all Settling Defendants	All Notice or Submissions to any or all Settling Defendants concerning any Covered Nitric Acid Plant or any requirement of this Consent Decree	John Carver, V-P Safety & Environmental Compliance, LSB, Cherokee Nitrogen, Pryor Chemical, El Dorado Chemical and El Dorado Nitrogen 16 South Pennsylvania Avenue Oklahoma City, Oklahoma 73107 E-mail: jcarver@lsb-okc.com  With a copy to :  David M. Shear, Senior Vice President and General Counsel LSB, Cherokee Nitrogen, Pryor Chemical, El Dorado Chemical and El Dorado Nitrogen 16 South Pennsylvania Avenue Oklahoma City, Oklahoma 73107 E-mail: dshear@lsb-okc.com

101. Any Settling Party may, by written notice to the other Settling Parties, change its designated notice recipient(s) or notice address(es) provided above in Paragraph 100, Table 8.

102. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Settling Parties in writing.

**XVII. EFFECTIVE DATE**

103. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

**XVIII. RETENTION OF JURISDICTION**

104. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Consent Decree, entering orders modifying this Consent Decree, or effectuating or enforcing compliance with the terms of this Consent Decree.

**XIX. MODIFICATION**

105. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by the all the Settling Parties, and filed with the Court as part of the record in this case. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

106. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XII of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 85, the Party seeking the modification bears the

burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

**XX. TERMINATION**

107. After Settling Defendants have paid the civil penalty and any accrued stipulated penalties, as required by this Consent Decree, then any Settling Defendant(s) may request Termination of this Consent Decree (with respect to all Settling Defendants and all Facilities) or Partial Termination of this Consent Decree (with respect to any Settling Defendant and Facility) by demonstrating that, as to the respective Facility(ies), Settling Defendant(s) have completed the requirements of Section IV of this Consent Decree (Compliance Requirements), have thereafter maintained continuous satisfactory compliance with such completed requirements for a period of one year (including demonstrating one year of compliance with the Short-Term NO<sub>x</sub> Emissions Limit and Long-Term NO<sub>x</sub> Emissions Limit in Section IV.A), have obtained all permits required by Section VII of this Consent Decree (Permits), and have complied with all other requirements of this Consent Decree. To make a request for Termination of this Consent Decree, the requesting Settling Defendant(s) shall serve upon the United States and the State Parties a Request for Termination of the Consent Decree, stating that Settling Defendants have satisfied all Consent Decree requirements, together with all necessary supporting documentation. To make a request for Partial Termination of this Consent Decree as to a particular Facility, the respective Settling Defendant(s) shall serve upon the United States and the State Parties a Request for Partial Termination of the Consent Decree, stating that all Consent Decree requirements regarding the respective Settling Defendants and the respective Facility have been satisfied, together with all necessary supporting documentation.

108. Following receipt by the United States and State Parties of any Settling Defendant's Request for Termination (or Partial Termination), the Settling Parties shall collectively confer informally concerning the Request and any disagreement that they may have as to whether the Settling Defendant(s) have satisfactorily complied with the requirements for termination of this Consent Decree.

109. If the United States, after consultation with the State Parties, agrees that the Consent Decree may be terminated or partially terminated, the Settling Parties shall submit, for the Court's approval, a joint stipulation terminating (or partially terminating) the Consent Decree.

110. If the United States, after consultation with the States Parties, does not agree that the Consent Decree may be terminated (or partially terminated), the respective Settling Defendant(s) may invoke Dispute Resolution under Section XII (Dispute Resolution) of the Consent Decree. However, the respective Settling Defendant(s) shall not seek dispute resolution of any dispute regarding termination, under Paragraph 81 of Section XII (Dispute Resolution), until 90 Days after service of its Request for Termination.

#### **XXI. PUBLIC PARTICIPATION**

111. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Each of the Settling Defendants consent to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United

States has notified Settling Defendants in writing that the United States no longer supports entry of the Consent Decree.

**XXII. SIGNATORIES / SERVICE**

112. Each undersigned representatives of the Settling Defendants, the State Parties, and the Acting Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Settling Party he or she represents to this document.

113. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.

114. Settling Defendants agree to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

**XXIII. INTEGRATION**

115. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Settling Parties with respect to the settlement embodied in the Consent Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Consent Decree or the settlement it represents, nor shall it be used in construing the terms of the Consent Decree.

**XXIV. APPENDICES**

116. The following Appendices are attached to and incorporated as part of this Consent Decree:

“Attachment A” is the “Consolidation of Tables 1-6 of the Consent Decree, Listing Applicable Compliance Requirements and Deadlines;”

“Attachment B” is the “Environmental Mitigation” - Reforestation and Soil Remediation of Select Union County Lands Program;

“Attachment C” is the “Nitric Acid Plant CEMS Plan” – CEMS Plan for NO<sub>x</sub> Emissions, LSB Operating Nitric Acid Plants;

“Attachment D” is the “Compensatory Emissions Reductions Applicability & Compliance Determination.”

**XXV. FINAL JUDGMENT**

117. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, Alabama, ODEQ, and Settling Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

Dated and entered this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

---

UNITED STATES DISTRICT JUDGE  
Western District of Oklahoma

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR PLAINTIFF THE UNITED STATES OF AMERICA:**

Date: 2/20/14



ROBERT G. DREHER  
Acting Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice

Date: 2/21/14



ROBYN E. HANSON  
Trial Attorney  
New York Bar No. 4462339  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, DC 20044-7611  
202-616-8907 (Phone)  
Robyn.Hanson@usdoj.gov

SANFORD C. COATS  
United States Attorney  
Western District of Oklahoma

By:

Date: 3/10/14



KAY SEWELL  
Assistant United States Attorney  
United States Attorney's Office  
Western District of Oklahoma  
210 Park Ave., Suite 400  
Oklahoma City, OK 73102  
405-553-8807 (Phone)  
405-553-8885 (Fax)  
Kay.Sewell@usdoj.gov



WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION  
AGENCY:**

Date: 1/31/14

[REDACTED]

SUSAN SHINKMAN  
Director, Office of Civil Enforcement  
United States Environmental Protection Agency  
Washington, D.C. 20460

Date: 1/31/14

[REDACTED]

PHILLIP A. BROOKS  
Director, Air Enforcement Division  
Office of Civil Enforcement  
United States Environmental Protection Agency  
Washington, D.C. 20460

Date: 1/27/2014

[REDACTED]

MELANIE SHEPHERDSON  
Attorney  
Air Enforcement Division  
Office of Civil Enforcement  
United States Environmental Protection Agency  
Washington, D.C. 20460

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

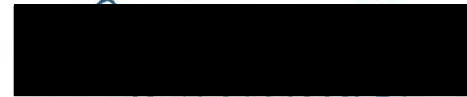
**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY,  
REGION 4:**

Date: 3/5/14



V. ANNE HEARD  
Acting Regional Counsel and Director  
Office of Environmental Accountability  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

Date: 3/5/14



VALERIE NOWELL  
Senior Attorney for Clean Air Act Enforcement  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY,  
REGION 6:**

Date: 1.24.13 14

  
JOHN BLEVINS

Director

Compliance Assurance and Enforcement Division  
U.S. Environmental Protection Agency, Region 6  
1445 Ross Ave, Suite 1200  
Dallas, TX 75202-2733

Date: Jan 24, 2014

  
JAN GERRO

Senior Enforcement Counsel

Air Enforcement Branch

Office of Regional Counsel

U.S. Environmental Protection Agency, Region 6

1445 Ross Ave, Suite 1200


Dallas, TX 75202-2733

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.


**FOR PLAINTIFFS THE STATE OF  
ALABAMA AND THE ALABAMA  
DEPARTMENT OF ENVIRONMENTAL  
MANAGEMENT:**

LUTHER STRANGE, ATTORNEY GENERAL

Date: 2-6-14

By:   
S. SHAWN SIBLEY (ASB-2802-Y49S)  
Assistant Attorney General and  
Associate General Counsel  
Alabama Department of  
Environmental Management  
Post Office Box 301463  
Montgomery, AL 36130-1463

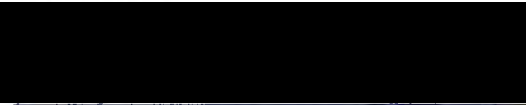
Date: 2-6-14

  
LANCE R. LEFLEUR, Director  
Alabama Department of  
Environmental Management  
Post Office Box 301463  
Montgomery, AL 36130-1463

WE HEREBY CONSENT to entry of the Consent Decree in United States, et. al. v. El Dorado Chemical Co., et al.

**FOR PLAINTIFF THE OKLAHOMA  
DEPARTMENT OF ENVIRONMENTAL  
QUALITY:**

Date: 2.14.14

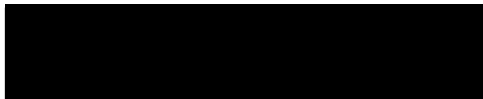


SCOTT A. THOMPSON  
Executive Director  
Oklahoma Department of Environmental Quality  
707 N. Robinson  
Oklahoma City, OK 73101

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR SETTLING DEFENDANT EL DORADO  
CHEMICAL COMPANY:**

Date: 1-23-14



JOHN M. CARVER  
Vice President  
El Dorado Chemical Company  
16 S. Pennsylvania Avenue  
Oklahoma City, OK 73107

Date: 1-24-14




CHARLES R. NESTRUD  
CHISENHALL, NESTRUD & JULIAN, P.A.  
400 West Capital, Suite 2840  
Little Rock, Arkansas 72201

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR SETTLING DEFENDANT CHEROKEE  
NITROGEN COMPANY:**

Date: 1-23-14

  
JOHN M. CARVER  
Vice President  
Cherokee Nitrogen Company  
16 S. Pennsylvania Avenue  
Oklahoma City, OK 73107

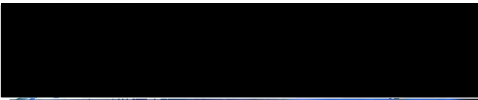
Date: 1-24-14

  
CHARLES R. NESTRUD  
CHISENHALL, NESTRUD & JULIAN, P.A.  
400 West Capital, Suite 2840  
Little Rock, Arkansas 72201

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

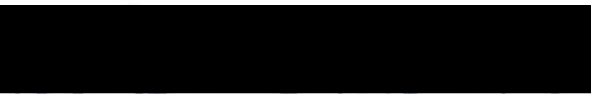
**FOR SETTLING DEFENDANT PRYOR  
CHEMICAL COMPANY:**

Date: 1-23-14



JOHN M. CARVER  
Vice President  
Pryor Chemical Company  
16 S. Pennsylvania Avenue  
Oklahoma City, OK 73107

Date: 1-24-14



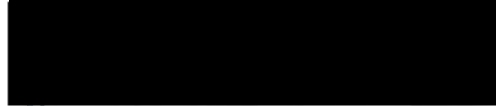
CHARLES R. NESTRUD  
CHISENHALL, NESTRUD & JULIAN, P.A.  
400 West Capital, Suite 2840  
Little Rock, Arkansas 72201



WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR SETTLING DEFENDANT LSB  
INDUSTRIES, INC.:**

Date: 1-23-14



JOHN M. CARVER  
Vice President  
LSB Industries, Inc.  
16 S. Pennsylvania Avenue  
Oklahoma City, OK 73107

Date: 1-24-14




CHARLES R. NESTRUD  
CHISENHALL, NESTRUD & JULIAN, P.A.  
400 West Capital, Suite 2840  
Little Rock, Arkansas 72201

WE HEREBY CONSENT to entry of the Consent Decree in United States, et al. v. El Dorado Chemical Co., et al.

**FOR SETTLING DEFENDANT EL DORADO  
NITROGEN, LP:**

Date: 1-23-14

  
JOHN M. CARVER  
Vice President  
El Dorado Nitrogen, L.P.  
16 S. Pennsylvania Avenue  
Oklahoma City, OK 73107

Date: 1-24-14

  
CHARLES R. NESTRUD  
CHISENHALL, NESTRUD & JULIAN, P.A.  
400 West Capital, Suite 2840  
Little Rock, Arkansas 72201

Consent Decree: *United States, et al. v. El Dorado Chemical Co., et al.***Attachment A****Consolidation of Tables 1-6 of the Consent Decree, Listing Applicable Compliance Requirements and Deadlines\***

Facility and Plant	Short-Term NO <sub>x</sub> Emissions Limit	Short-Term NO <sub>x</sub> Emissions Limit Compliance Deadline	Long-Term NO <sub>x</sub> Emissions Limit	Long-Term NO <sub>x</sub> Emissions Limit Compliance Deadline	Interim NO <sub>x</sub> Emissions Limit	Interim NO <sub>x</sub> Emissions Limit Compliance Deadline	NO <sub>x</sub> CEMS (Pursuant to Attachment C) Deadline	Performance Testing Deadline	O&M Plan Submittal Deadline	Permit Application or Amended Application Submittal Deadline
Cherokee Facility, Cherokee #1	1.0 lb/ton	Effective Date	0.60 lb/ton	365 Days after the Effective Date			Effective Date	Effective Date	By the Effective Date	180 Days after the Effective Date
Cherokee Facility, Cherokee #2	1.0 lb/ton	Effective Date	0.60 lb/ton	365 Days after the Effective Date			Effective Date	Effective Date	By the Effective Date	180 Days after the Effective Date
Baytown Facility, Baytown	1.0 lb/ton	Effective Date	0.60 lb/ton	365 Days after the Effective Date			Effective Date	Effective Date	90 Days after the Effective Date	180 Days after the Effective Date
El Dorado Facility, El Dorado East	1.0 lb/ton	January 1, 2016	0.60 lb/ton	January 1, 2017	3.0 lb/ton	Effective Date	<ul style="list-style-type: none"> <li>• For the applicable CEMS operating during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit: Effective Date</li> <li>• For the applicable CEMS operating during period of required compliance with the Short Term NO<sub>x</sub> Emissions Limit: January 1, 2016</li> </ul>	180 Days after the initial startup of such facility following the SCR installation	<ul style="list-style-type: none"> <li>• Effective Date (for initial plan, covering operations during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit)</li> <li>• December 1, 2015 (for amended plan, covering operations during period of required compliance with the Short Term NO<sub>x</sub> Emissions Limit)</li> </ul>	July 1, 2016
El Dorado Facility, El Dorado West	1.0 lb/ton	January 1, 2016	0.60 lb/ton	January 1, 2017	3.0 lb/ton	Effective Date	<ul style="list-style-type: none"> <li>• For the applicable CEMS operating during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit: Effective Date</li> </ul>	180 Days after the initial startup of such facility following the SCR installation	<ul style="list-style-type: none"> <li>• Effective Date (for initial plan, covering operations during period of required compliance with the Interim NO<sub>x</sub> Emissions Limit)</li> </ul>	July 1, 2016

\* This Table is provided solely to conveniently consolidate the requirements outlined in Tables 1-6 of the Consent Decree; this Table does not comprehensively represent all Consent Decree compliance deadlines.

Consent Decree: *United States, et al. v. El Dorado Chemical Co., et al.***Attachment A****Consolidation of Tables 1-6 of the Consent Decree, Listing Applicable Compliance Requirements and Deadlines\***

El Dorado Facility, El Dorado West (cont'd)							• For the applicable CEMS operating during period of required compliance with the Short Term NOx Emissions Limit: January 1, 2016		• December 1, 2015 (for amended plan, covering operations during period of required compliance with the Short Term NOx Emissions Limit).	
El Dorado Facility, El Dorado DMW	1.0 lb/ton	July 1, 2014	0.60 lb/ton	July 1, 2015			July 1, 2014	180 Days after the initial startup of such facility following the SCR installation	June 1, 2014	January 1, 2015
Pryor Facility, Pryor #1	1.0 lb/ton	January 1, 2018	0.60 lb/ton	January 1, 2019			January 1, 2018	180 Days after the initial startup of such facility following the SCR installation	December 1, 2017	July 1, 2018
Pryor Facility, Pryor #3	1.0 lb/ton	January 1, 2018, or upon startup, whichever date is later	0.60 lb/ton	January 1, 2019, or 365 Days following startup, whichever date is later			January 1, 2018, or upon startup, whichever date is later	180 Days after the initial startup of such facility following the SCR installation	December 1, 2017, or upon startup, whichever date is later	July 1, 2018, or upon startup, whichever date is later
Pryor Facility, Pryor #4	1.0 lb/ton	January 1, 2018	0.60 lb/ton	January 1, 2019			January 1, 2018	180 Days after the initial startup of such facility following the SCR installation	December 1, 2017	July 1, 2018

\* This Table is provided solely to conveniently consolidate the requirements outlined in Tables 1-6 of the Consent Decree; this Table does not comprehensively represent all Consent Decree compliance deadlines.

**Consent Decree: *United States, et al. v. El Dorado Chemical Co., et al.***

**ATTACHMENT B**

**ENVIRONMENTAL MITIGATION**

In compliance with and in addition to the requirements set forth in Section VI of this Consent Decree (“Environmental Mitigation”), Settling Defendants shall comply with the requirements set forth in this Attachment to ensure that the environmental benefits from the Reforestation and Soil Remediation of Select Union County Lands Program, more fully described below, are realized. Nothing in the Consent Decree or this Attachment shall be interpreted to prohibit Settling Defendants from completing any portion of this Program ahead of schedule.

**I. Summary of Program**

Union County, Arkansas owns a parcel consisting of 300 plus acres of land near the H. K. Thatcher Lock and Dam on the Ouachita River approximately 10 miles northeast from the City of El Dorado in Section 30, Township 16 South, Range 13 West. A portion of the County property includes a 50 acre (approximate) sparsely vegetated tract (the site) that is an apparent remnant from the construction of the lock and dam in the early 1980’s. The function of the site during the construction phase is unknown, but is speculated to have served as a dredged/excavated spoil dewatering area for earth removed during the excavation of the lock and navigation channel.

The site is generally flat with slight elevation gradient towards a thirty-acre impounded area at the southeastern portion of the property. Surface drainage for the northwestern area of the site exits the elevated plateau via an eroded cut, down to a cypress slough immediately adjacent the site to the west. Approximately forty percent of the site is totally devoid of vegetation. Roughly one-half of the site has isolated clusters of stunted pine trees and some native grasses. The remainder of the site has a fair stand of mature pine trees and shrub/scrub understory.

A preliminary site investigation indicated acidic surface soils in the areas devoid of vegetation, and is presumed to be a contributing factor to the limited vegetative cover on the site almost thirty years after completion of the lock and dam.

Settling Defendants propose to conduct an investigation of the site to fully characterize the soils and determine the appropriate corrective remedy to stabilize and restore the ability of the soil to support vegetative cover, including a diverse forest compatible with the surrounding area. Upon completion of the investigation, Settling Defendants will select the approximate 10-acre parcel to be remediated. Vegetative cover will address the erosion and migration of sediment from the remediated portion of the site plus reduce the potential water quality impacts that may be occurring due to site storm water run-off. Initial stabilization/remediation/vegetative planting activities may be completed in a relatively short time frame; however ultimate reforestation of the selected area may not be significantly measureable until planted tree seedlings have several years growth. Nevertheless, implementation of the proposed action will (a) mitigate sediment transport, (b) help remedy impacts of acidified soils, (c) reduce storm water runoff, including

nutrients and low pH storm-water, (d) reduce current site impacts to wildlife, and (e) sequester atmospheric elements and contribute to improved regional air quality.

## **II. Soil Remediation**

Settling Defendants will first conduct a physical investigation of the site to collect surface/subsurface soil and/or water samples for analysis to document the current conditions. Site data collected may be transmitted to the University of Arkansas Cooperative Extension Service soils laboratory for assistance in the selection of corrective soil amendments and appropriate loading/application rates. The site investigation will also provide general information on the topography, surface drainage characteristics, access points and other factors that may influence the selection of the parcel to be remediated as well as the erosion/sediment controls that could be necessary during remediation.

Upon selection of the remediation boundary, Settling Defendants will prepare a Storm Water Pollution Prevention Plan (SWP3) and obtain the Arkansas NPDES General Permit ARR150000 for Construction Storm Water Discharges. Initial work on the remediation site will be the installation of the erosion/sediment controls specified in the SWP3.

The soil stabilization/remediation actions may be based on recommendations from the University of Arkansas or other sources, but the conceptual approach is to implement the following tasks.

1. Rough grade and scarify the subsoil to receive remedial amendments.
2. Spread soil conditioners and perform structural soil mixing to thoroughly incorporate the materials with the soil matrix.
3. Till the top six inches with a disk harrow.
4. Collect random soil samples from the remediated area to confirm the desired characteristics have been achieved. As necessary, repeat steps 2 and 3.
5. Perform finish grading to attain the final desired surface features.
6. Apply the appropriate seasonal ground cover seed mix with mulch and fertilizer using hydromulch equipment.

## **III. Reforestation**

Upon completion of the soil remediation/stabilization phase, Settling Defendants will execute a reforestation plan intended to provide species diversity consistent with a mixed hardwood/pine forest typical of the gulf coastal plain regionally, and the Ouachita River basin locally. Reforestation will consist of the transplantation of approximately one-year old pine and mixed hardwood trees purchased by Settling Defendants from the Arkansas Forestry Commission or other nursery sources.

Based on the findings of the investigation, the site may be subdivided based on topography into Wet, Transitional, and Dry classifications. Specific native plant species will be designated for each topographic region. Approximately 12,750 seedlings (average 1,275/acre) consisting of 15 different species are to be planted in a clustered random fashion and not according to a typical, equally spaced grid. The reforestation plan will include a minimum of three native species in

each terrain category and could include the following tree species according to terrain characteristics:

<b><i>Pine Flat</i></b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Pinus taeda</i>	loblolly pine
<i>Quercus phellos</i>	willow oak
<i>Quercus nigra</i>	water oak
<i>Quercus pagoda</i>	cherrybark oak
<b><i>Hardwood Flat</i></b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Pinus taeda</i>	loblolly pine
<i>Quercus phellos</i>	willow oak
<i>Fraxinum pennsylvanica</i>	green ash
<i>Quercus nigra</i>	water oak
<i>Ulmus americana</i>	American elm
<i>Carya aquatica</i>	water hickory
<b><i>Low Gradient Riverine Backwater</i></b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Quercus phellos</i>	willow oak
<i>Ulmus americana</i>	American elm
<i>Celtis leavigata</i>	sugarberry
<i>Diospyros virginianan</i>	persimmon
<i>Taxodium distichum</i>	bald cypress
<i>Acer rubrum</i>	red maple
<i>Carya aquatica</i>	water hickory
<i>Fraxinus pennsylvanica</i>	green ash
<i>Populus deltoides</i>	cottonwood
<i>Quercus nigra</i>	water oak
<i>Nyssa sylvatica</i>	swamp blackgum
<i>Cephalanthus occidentalis</i>	button bush

#### **IV. Overall Budget and Schedule**

Settling Defendants utilized RS Means CostWorks 2013<sup>®</sup> as well as information developed by an environmental consultant to estimate the cost range of the Reforestation and Soil Remediation Project tasks. Major activities and their estimated costs are:

- Site investigation, NPDES permitting, remediation plan – \$30-40,000
- Soil remediation phase – \$100-115,000
- Reforestation phase – \$25-30,000.

These cost estimates were developed using the best available information; actual costs could vary. However, Settling Defendants are committed to invest a minimum of \$150,000 in the proposed Reforestation and Soil Remediation of Select Union County Lands Program and will adjust the remediation area (not the scope of work) as needed to fulfill their commitment. Specifically, should the total implementation costs for a 10-acre site be less than \$150,000, Settling Defendants will expand the area to be remediated appropriately.

The anticipated implementation schedule for the Environmental Mitigation is:

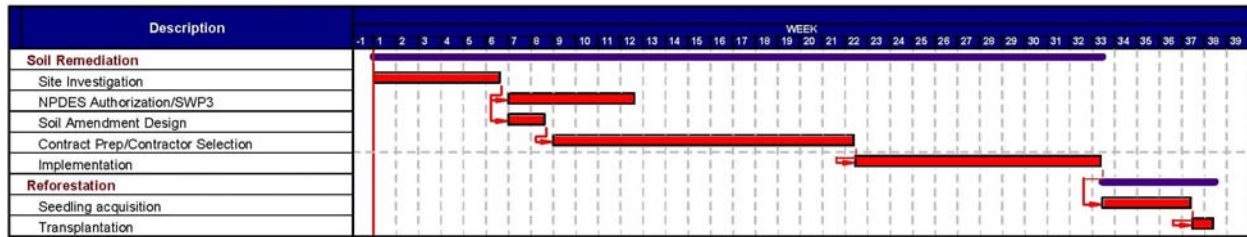
##### ***Soil Remediation***

- Site investigation – 6 weeks

- SWP3 preparation/NPDES authorization – 6 weeks
- Selection of remedial amendments for soils – 2 weeks
- Preparation of project contract documents, bidding, contractor selection – 12 weeks
- Implement the soil remediation plan and stabilize the site – 10 weeks (weather dependent)

### **Reforestation**

- Seedling acquisition – 4 weeks (schedule dependent on mid-winter availability)
- Tree transplantation – 1 week



Settling Defendants propose to initiate the Reforestation and Soil Remediation of Select Union County Lands Program within sixty days from the Effective Date of the Consent Decree, subject to a final agreement between Settling Defendants and Union County because the reforestation phase is dependent on the seasonal availability of tree seedlings from nurseries (typically mid-winter), the mitigation project may require eighteen months to complete.

## **V. Environmental Benefits**

It is expected that stabilization, soil remediation, and reforestation of the selected site will have an immediate effect on water quality by reducing erosion and transport/deposition of sediments in waters of the United States as well as neutralizing acidic properties and the current low pH storm water runoff that likely does not meet the ecoregion water quality standards established by the Arkansas Department of Environmental Quality. Good vegetative cover of the site will immediately reduce the rate and quantity of storm water runoff and increase infiltration, thus contributing to recharge of the shallow groundwater. Establishment of vegetative cover will also provide wildlife habitat for native terrestrial and avian species such as rabbits, squirrels, white-tailed deer, reptiles, and song birds.

As transplanted trees grow and mature, a successional shift in the dominant habitat is expected from shrub/scrub to Pine Flat, Hardwood Flat, and/or Low Gradient Riverine Backwater any of which will enhance the species diversity by providing forage for larger terrestrial mammals as well as habitat for avian species. Mature trees uptake nutrients (nitrogen, phosphorus) and trace metals which may be present in part due to atmospheric deposition from emission point sources. Trees also provide reduction of atmospheric carbon through conversion of carbon dioxide to cell matter and release of oxygen. Sequestration of carbon by reforestation of barren areas is recognized as one of the methods of the United Nations Framework Convention on Climate Change for obtaining reduction of greenhouse gases. Each tree can reduce greenhouse gases by up to one ton over its lifetime.



## **VI. Future Use of the Identified Reforested and Remediated Lands**

Union County, Arkansas will remain the owner of the remediated/reforested site and will be the authority for future use of the site. Potentially, Settling Defendants may enter a long-term lease agreement to protect the site from development and clearing for a minimum of ten years from the completion of the Environmental Mitigation. Other options may include obtaining protections through a recorded deed restriction of the remediated/reforested site to prevent regression of the site. A protective agreement (lease, deed restriction, other) for the Environmental Mitigation site will be in place no later than six months from the Effective Date of the Consent Decree.

Ultimately, the reforested site may be managed according to recognized forestry principles to maintain the health of the forest ecosystem. There is no anticipated use for the Environmental Mitigation site other than a managed forest system for many growth cycles.

**Consent Decree: *United States, et al. v. El Dorado Chemical Co., et al.***

**ATTACHMENT C**

**NITRIC ACID PLANT CEMS PLAN**

**CEMS Plan for NO<sub>x</sub> Emissions  
LSB Operating Nitric Acid Plants**

**Principle**

This CEMS Plan is the mechanism for determining compliance with the Short-Term NO<sub>x</sub> Limit and Long-Term NO<sub>x</sub> Limit applicable to each Operating Nitric Acid Plant, as specified in the Consent Decree, and is used to evaluate the compliance status with the NSPS NO<sub>x</sub> limits. The methodology described in this CEMS Plan will provide a continuous indication of compliance with the above-referenced NO<sub>x</sub> emission limits established in the Consent Decree by accurately determining the emission rate in terms of pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (lb/ton) as a rolling 3-hour average and a rolling 365-day average. The CEMS will utilize equipment to measure the stack NO<sub>x</sub> concentration and the stack volumetric flow rate. The 100% nitric acid production rate will be determined as allowed by NSPS Subpart G. From this data, real-time, accurate, and quality controlled measurements of the mass NO<sub>x</sub> emission rate per unit of production can be obtained.

**Definitions**

Terms used in this CEMS Plan that are defined in the Clean Air Act (“CAA”) or in Federal or state regulations promulgated pursuant to the CAA shall have the meaning assigned to them in the CAA or such regulations, unless otherwise defined in the Consent Decree. The terms used in this CEMS Plan that are defined in the Consent Decree shall have the meaning assigned to them therein. The following definitions specifically apply for purposes of this CEMS Plan.

- “CEMS” or “Continuous Emission Monitoring System” shall mean the total equipment, required under this CEMS Plan, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.
- “Covered Nitric Acid Plants” shall mean all ten of LSB’s Nitric Acid Plants in the United States that are subject to this Consent Decree: two at the Cherokee Facility (Cherokee #1 and #2); one at the Baytown Facility (Baytown); four at the El Dorado Facility (El Dorado East, El Dorado West, El Dorado DMW, and El Dorado DSN); and three at the Pryor Facility (Pryor #1, #3, and #4);
- “Day,” “day,” or “calendar day” shall mean a calendar day unless expressly stated to be a working day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day;
- “DSCFH” shall mean dry standard cubic feet per hour.
- “Interim NO<sub>x</sub> Emissions Limit” or “IL” shall mean a 3-hour rolling average NO<sub>x</sub> emission limit (rolled hourly) expressed in terms of pounds of NO<sub>x</sub> emitted per ton of

100% Nitric Acid Produced (“lb/ton”); compliance with the Interim NO<sub>x</sub> Emissions Limit shall be calculated in accordance with this CEMS Plan. The Interim NO<sub>x</sub> Emissions Limit does not apply during periods of Startup, Shutdown, or Malfunction;

- “Long-Term NO<sub>x</sub> Emissions Limit” or “LTL” shall mean a 365-day rolling average NO<sub>x</sub> emission limit (rolled daily) expressed as pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (“lb/ton”); compliance with the Long-Term NO<sub>x</sub> Emissions Limit shall be calculated in accordance with this CEMS Plan. The Long-Term NO<sub>x</sub> Emissions Limit applies at all times, including during periods of Startup, Shutdown, or Malfunction.
- “Malfunction” shall mean, consistent with 40 C.F.R. § 60.2, any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, but shall not include failures that are caused in whole or in part by poor maintenance or careless operation.
- “NSPS NO<sub>x</sub> Emissions Limit” shall mean the NO<sub>x</sub> emission limit expressed as 1.5 kg of NO<sub>x</sub> per metric ton of 100% Nitric Acid Produced (3 lb per ton) specified at 40 C.F.R. §60.72(a)(1).
- “NO<sub>x</sub>” shall mean, consistent with 40 C.F.R. § 60.2, all oxides of nitrogen except nitrous oxide. (N<sub>2</sub>O). For the purposes of calculating mass emission rates, NO<sub>x</sub> has a molecular weight of 46.0055 lb/lb-mol.
- “NO<sub>x</sub> Stack Analyzer” shall mean, for all Operating Nitric Acid Plants except the Baytown Plant (at all times) and El Dorado East and West Plants during only the period of required compliance demonstration with the Interim NO<sub>x</sub> Emissions Limit under the Consent Decree, that portion of a dual range or greater CEMS that senses NO<sub>x</sub> and generates an output proportional to the NO<sub>x</sub> concentration during Operating Periods. For the Baytown Plant and El Dorado East and West Plants (during only the period of required compliance demonstration with the Interim NO<sub>x</sub> Emissions Limit under the Consent Decree), “NO<sub>x</sub> Stack Analyzer” shall mean that portion of a single range CEMS unit that senses NO<sub>x</sub> and generates an output proportional to the NO<sub>x</sub> concentrations during Operating Periods.
- “100% Nitric Acid” shall mean nitric acid product manufactured by a Nitric Acid Plant multiplied by the concentration of actual nitric acid in the product. For example, if a Nitric Acid Plant produces 100 tons of a 54% nitric acid product, this equals 54 tons of 100% Nitric Acid.
- “One-hour period” and “1-hour period” shall mean any 60-minute period commencing on the hour.
- “One-minute measurement” shall mean any single measurement or the arithmetic average of multiple measurements of a parameter during a one-minute period on-the-clock.
- “Operating Nitric Plants” shall mean any or all of the nine of the ten Covered Nitric Acid Plants that continue, or may continue, to operate as of the Date of Lodging (with El Dorado DSN as the excluded Covered Nitric Acid Plant under this definition due to its permanent shut-down): two at the Cherokee Facility (Cherokee #1 and #2); one at the Baytown Facility (Baytown); three

at the El Dorado Facility (El Dorado East, El Dorado West, and El Dorado DMW); and three at the Pryor Facility (Pryor #1, #3, and #4); Operating Periods” shall mean periods during which an Operating Nitric Acid Plant is producing nitric acid and NO<sub>x</sub> is emitted, including periods of Startup, Shutdown and Malfunction; “Short-Term NO<sub>x</sub> Emissions Limit” or “STL” shall mean a 3-hour rolling average NO<sub>x</sub> emission limit (rolled hourly) expressed in terms of pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (“lb/ton”); compliance with the Short-Term NO<sub>x</sub> Emissions Limit shall be calculated in accordance with this CEMS Plan. The Short-Term NO<sub>x</sub> Emissions Limit does not apply during periods of Startup, Shutdown, or Malfunction.

- “Shutdown” shall mean the cessation of nitric acid production operations of a Operating Nitric Acid Plant for any reason. Shutdown begins at the time the feed of ammonia to the Operating Nitric Acid Plant ceases and ends when the compressor train(s) is shut down. “Stack Flowmeter” shall mean that portion of the CEMS that senses the volumetric flow rate and generates an output proportional to that flow rate.
- “Standard Cubic Foot” or “SCF” shall mean a quantity of gas equal to one cubic foot at a temperature of 68° Fahrenheit and a pressure of 14.696 pounds per square inch absolute.
- “Startup” shall mean the process of initiating nitric acid production operations of a Operating Nitric Acid Plant. Startup begins with the start of the compressor train(s) at the Operating Nitric Acid Plant and ends no more than 5 hours after the initiation of the feed of ammonia.
- “Ton” or “tons” shall mean short ton or short tons. One Ton equals 2,000 pounds.

### **Emissions Monitoring**

Emissions monitoring under this CEMS Plan will be done using the appropriate NO<sub>x</sub> Stack Analyzer and a stack flowmeter on each Operating Nitric Acid Plant. Except for periods of CEMS breakdowns, analyzer malfunctions, repairs, and required quality assurance or quality control activities (including calibration checks and required zero and span adjustments), Settling Defendants will demonstrate compliance with the STL, IL, and LTL during all Operating Periods by conducting continuous monitoring pursuant to this CEMS Plan at each Operating Nitric Acid Plant, as follows:

- The NO<sub>x</sub> Stack Analyzer will measure the stack NO<sub>x</sub> concentration, in parts per million by volume, dry basis (ppmvd)<sup>1</sup> and reduce the data to one-minute measurements, and the stack flowmeter will measure the volumetric flow rate in dry standard cubic feet per hour (DSCFH)<sup>2</sup>.

<sup>1</sup> For the purposes of calculations under this CEMS Plan, as-is NO<sub>x</sub> concentration measurements at Operating Nitric Plants (e.g., those utilizing FTIR, NDIR, or other types of stack gas analyzers capable of making wet measurements) will be assumed to be dry. However, LSB may adjust for any moisture contained in the stack gas if the Operating Nitric Acid Plant is equipped with a continuous moisture analyzer or equipment which removes the moisture prior to the stack gas analyzer.

<sup>2</sup> For the purposes of the calculations under this CEMS Plan, as-is volumetric flow rate measurements will be assumed to be dry. However, LSB may adjust for any moisture contained in the stack gas if the Operating Nitric Acid Plant is equipped with a continuous moisture analyzer.

- For every 1-hour period (60-minute period commencing on the hour), the CEMS will reduce the one-minute measurements generated by the NO<sub>x</sub> Stack Analyzer and the stack flowmeter by taking the arithmetic average of all the one-minute measurements made during the previous 1- hour period. At least four one-minute measurements must be used to make this calculation, with at least one data point in each 15-minute quadrant of the hour.

#### Backup Monitoring Procedure for Long-Term NO<sub>x</sub> Emissions Limit

In the event that the NO<sub>x</sub> Stack Analyzer and/or stack flowmeter is/are not available or is/are out-of-control, Settling Defendants will implement the backup monitoring procedure specified below. The resulting data will be used to calculate the 365-day average NO<sub>x</sub> emission rate.

- a) Settling Defendants will comply with the following requirements to fill in data gaps in the array:
  - Exit stack gas will be sampled and analyzed for NO<sub>x</sub> at least once every three (3) hours, during all Operating Periods. Sampling will be conducted by making physical measurements of the NO<sub>x</sub> concentration in the gas stream to the main stack using alternative/non-CEMS methods (e.g., through the use of a portable analyzer/detector or non-certified NO<sub>x</sub> Stack Analyzer). The reading obtained will be substituted for the 180 (or less) one-minute measurements that would otherwise be utilized if the CEMS were operating normally. Alternatively, Settling Defendants may conduct the required sampling and analysis using a redundant, certified NO<sub>x</sub> Stack Analyzer.
  - Stack volumetric flow rate will be estimated using engineering judgment.
- b) During required quality assurance or quality control activities (including calibration checks and required zero and span adjustments) of the CEMS and stack flow meter, Settling Defendants may utilize either (1) the previous calendar day average when the previous day does not include a Startup, Shutdown, or Malfunction, or (2) the average of the block hour average immediately preceding the affected analyzer's(s') stoppage and the initial block hour average of the affected analyzer's(s') upon the resumption of operation following the stoppage, when the previous calendar day includes a Startup, Shutdown or Malfunction, to fill in any data gaps in lieu of the procedures specified in subparagraph a).
- c) If any one or more than one of the CEMS or stack flowmeter is/are not operating for a period of less than 24 consecutive hours due to breakdowns, malfunctions, repairs, or out-of-control period of the same, Settling Defendants may utilize either (1) the previous calendar day average when the previous day does not include a Startup, Shutdown, or Malfunction, or (2) the average of the block hour average immediately preceding the affected analyzer's(s') stoppage and the initial block hour average of the affected analyzer's(s') upon the resumption of operation following the stoppage, when

the previous calendar day includes a Startup, Shutdown or Malfunction, to fill in any data gaps in lieu of the procedures specified in subparagraph a).

### **Production Data**

Following each calendar day at each Operating Nitric Acid Plant, as allowed by NSPS Subpart G, Settling Defendants will record the quantity of nitric acid produced during that day and the average strength of the nitric acid produced during that day. From this information, Settling Defendants will calculate the 100% Nitric Acid Produced for that day, in units of tons per day.

### **Conversion Factor**

During each performance test for each Covered Nitric Acid Plant required under Paragraph 19 of the Consent Decree, Settling Defendants will develop a conversion factor, in units of lb/ton of 100% Nitric Acid Produced per lb/hr NO<sub>x</sub>. The conversion factor will be developed consistent with the procedures in 40 C.F.R. §60.73(b). Subsequently, Settling Defendants will reestablish the conversion factors during each Relative Accuracy Test Audit conducted in accordance with 40 C.F.R. Part 60, Appendix F.

### **Emissions Calculations**

#### **Rolling 3-Hour Average**

Compliance with the STL and IL shall be based on a rolling 3-hour average (rolled hourly). For purposes of calculating a rolling 3-hour average NO<sub>x</sub> emission rate, the CEMS will maintain an array of the 3 most recent and contiguous 1-hour period average measurements of the NO<sub>x</sub> concentration measurement (ppmvd) at the exit stack and the average volumetric flow rate measurement (DSCFH) of the exit stack. Every hour, it will add the most recent 1-hour period value to the array and exclude the oldest 1-hour period value. Data generated using the backup monitoring procedure specified above need not be included in this calculation. Any data generated during periods that are not Operating Periods will not be included in this calculation.

The rolling 3-hour average lb/ton NO<sub>x</sub> emission rate ( $E_{3hravg}$ ) will then be calculated every hour using Equation 1.

#### **Equation 1:**

$$E_{3hravg} = \frac{K \cdot 1.193 \times 10^7 \sum_{i=1}^3 Q_{stack^i} \cdot C_{NO_x^i}}{3}$$

Where:

$C_{NO_x i}$  = Arithmetic average of all one-minute measurements of stack  $NO_x$  concentration, parts per million by volume, dry basis (ppmvd) during 1-hour period “i”Q

$K$  = Conversion factor determined during the most recent  $NO_x$  performance test or RATA (lb  $NO_x$ /ton of 100% nitric acid produced per lb/hr  $NO_x$ )

$Q_{Stack i}$  = Arithmetic average of all one minute measurements of stack volumetric flow rate. DSCFH during one hour period “i”

$1.193 \times 10^7$  = Conversion factor in units of pounds per standard cubic foot (lb/SCF)  $NO_x$  per ppm

$E_{3hravg}$  = 3-hour average lb  $NO_x$  per ton 100% Nitric Acid Produced

### Rolling 365-Day Average

Compliance with the LTL shall be based on a rolling 365-day average (rolled daily). For the purposes of calculating the 365-day average  $NO_x$  emission rate each calendar day at each Operating Nitric Acid Plant, Settling Defendants will maintain an array of the mass emissions (lb/day) of  $NO_x$  (calculated using Equation 2) and the 100% Nitric Acid Produced for that day (tons/day) and the preceding 364 days. Each subsequent day, the data from that day will be added to the array, and the data from the oldest day will be excluded.

For the purposes of calculating the daily mass emission rate, the CEMS will maintain an array of each one-hour average  $NO_x$  concentration measurement (ppmvd) at the exit stack and each one-hour average volumetric flow rate measurement (DSCFH) of the exit stack over each day. Any partial hourly data will be adjusted on a *pro-rata* basis. In the event that one or more of the  $NO_x$  Stack Analyzers and stack flowmeters is/are not available, Settling Defendants will use the backup monitoring procedure, specified above, to fill in the data gaps. Any data generated during periods that are not Operating Periods will not be included in this calculation.

Following each calendar day, the daily  $NO_x$  mass emissions will be calculated using Equation 2.

Equation 2:

$$M_{NO_x Day} = 1.193 \times 10^{-7} \cdot \sum_{i=1}^n Q_{Stack i} \cdot C_{NO_x i}$$

Where:

- $C_{NO_x i}$  = Arithmetic average of all one-minute measurements of stack NO<sub>x</sub> concentration, parts per million by volume, dry basis (ppmv) during 1-hour period “*i*”  
 $Q_{Stack i}$  = Arithmetic average of all one-minute measurements of stack volumetric flow rate, DSCFH during 1-hour period “*i*”  
 $1.193 \times 10^{-7}$  = Conversion factor in units of pounds per standard cubic foot (lb/SCF) NO<sub>x</sub> per ppm  
 $M_{NO_x Day}$  = Mass emissions of NO<sub>x</sub> during a calendar day, lb  
 $n$  = Number of hours of Operating Period in a calendar day

Following each calendar day, the NO<sub>x</sub> emission rate as lb/ton, averaged over a rolling 365-day period ( $E_{365-Day Avg}$ ), will be calculated using Equation 3.

Equation 3:

$$E_{365-Day Avg} = \frac{\sum_{d=1}^{365} M_{NO_x Day d}}{\sum_{d=1}^{365} P_d}$$

Where:

- $M_{NO_x Day d}$  = Mass emissions of NO<sub>x</sub> during a calendar day “*d*”, lb  
 $P_d$  = 100% Nitric Acid Produced during a calendar day “*d*”, tons  
 $E_{365-Day Avg}$  = 365-day rolling average lb NO<sub>x</sub> per ton of 100% Nitric Acid Produced

### **Rounding of Numbers Resulting from Calculations**

Upon completion of the calculations, the final numbers shall be rounded as follows:

- $E_{3hravg}$ : Rounded to the nearest tenth.  
 $E_{365-Day Avg}$ : Rounded to the nearest hundredth.

The numbers “5”-“9” shall be rounded up, and the numbers “1”-“4” shall be rounded down. Thus, “1.05” shall be rounded to “1.1”, and “1.04” shall be rounded to “1.0”.

### **Compliance with Consent Decree NO<sub>x</sub> Limits**

#### Short-Term NO<sub>x</sub> Emissions Limits and Interim NO<sub>x</sub> Emissions Limits

The STLs and ILs do not apply during periods of Startup, Shutdown, or Malfunction. During



all other Operating Periods at an Operating Nitric Acid Plant, Settling Defendants will be in compliance with the STL specified in the Consent Decree if  $E_{3hravg}$  does not exceed 1.0 lb of NO<sub>x</sub> per ton of 100% Nitric Acid Produced and Settling Defendants will be in compliance with the IL specified in the Consent Decree if  $E_{3hravg}$  does not exceed 3.0 lb of NO<sub>x</sub> per ton of 100% Nitric Acid Produced. If Settling Defendants contend that any 3-hour rolling average emission rate is in excess of 1.0 lb/ton for the STL or 3.0 lb/ton for the IL due to the inclusion of hours of Startup, Shutdown or Malfunction in the 3-hour period, Settling Defendants shall recalculate  $E_{3hravg}$  to exclude measurements recorded during the period(s) of the claimed Startup, Shutdown or Malfunction(s).

#### NSPS NO<sub>x</sub> Emissions Limits

The NSPS NO<sub>x</sub> Emissions Limit does not apply during periods of Startup, Shutdown, or Malfunction. During all other Operating Periods at a Operating Nitric Acid Plant, Settling Defendants will be in compliance with the NSPS Limit if  $E_{3hravg}$  does not exceed 3.0 lb of NO<sub>x</sub> per ton of 100% Nitric Acid Produced. If Settling Defendants contend that any 3-hour rolling average emission rate is in excess of 3.0 lb/ton due to the inclusion of hours of Startup, Shutdown or Malfunction in the 3-hour period, Settling Defendants shall recalculate  $E_{3hravg}$  to exclude measurements recorded during the period(s) of the claimed Startup, Shutdown or Malfunction(s). Nothing in this CEMS Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a Operating Nitric Acid Plant would have been in compliance with the NSPS NO<sub>x</sub> Emissions Limit if the appropriate performance test or compliance procedure had been performed.

#### Long-Term NO<sub>x</sub> Emissions Limits

Settling Defendants will be in compliance with the LTL specified in the Consent Decree if  $E_{365-Day Avg}$  does not exceed 0.60 lb of NO<sub>x</sub> per ton of 100% Nitric Acid Produced. The LTL applies during all Operating Periods, including during periods of Startup, Shutdown, or Malfunction.

#### **Retention of All CEMS Data, including Data, during Startup, Shutdown, and Malfunction**

Settling Defendants will retain all data generated by the appropriate NO<sub>x</sub> Stack Analyzer and Stack Flowmeter, including all data generated during periods of Startup, Shutdown, and/or Malfunction at each Operating Nitric Acid Plant in accordance with Section XIII of the Consent Decree (Information Collection and Retention).

#### **Analyzer and Stack Flowmeter Specifications**

The appropriate NO<sub>x</sub> Stack Analyzers and the Stack Flowmeters required under this CEMS Plan at each Operating Nitric Acid Plant will meet the following specifications:

**Table 1**

Analyzer	Parameter	Location	Span Value
NO <sub>x</sub> Stack Analyzers	NO <sub>x</sub> , ppm by volume, dry basis	Stack	<u>Dual Range or greater:</u> Normal: 0 – 500 ppm NO <sub>x</sub> , or as appropriate to accurately measure the normal concentration range. SSM: 0 to 125% of the maximum estimated NO <sub>x</sub> emission concentration during the Operating Periods.  <u>Baytown Single Range:</u> Normal and SSM: 0-200 ppm NO <sub>x</sub> , or as appropriate to accurately measure the normal concentration range.  <u>El Dorado East and West Single Range (during IL compliance period only):</u> Normal: 0-500 ppm NO <sub>x</sub>
Stack Flowmeter	Volumetric Flow rate, SCFH	Stack	0 to 125% of the maximum expected volumetric flow rate

Further specifications for each Operating Nitric Acid Plant under this CEMS Plan are as follows:

- For the Plants utilizing dual range or greater NO<sub>x</sub> Stack Analyzers (all Operating Nitric Acid Plants except the Baytown Plant and El Dorado East and West Plants during only the period of required IL compliance):
  - The NO<sub>x</sub> Stack Analyzer will meet all applicable requirements of 40 C.F.R. §60.11, §60.13, 40 C.F.R. Part 60, Appendix B, Performance Specification 2, and the Quality Assurance and Quality Control Procedures in 40 C.F.R. Part 60, Appendix F, Procedure 1. It should be noted, however, that the daily drift test requirement at 40 C.F.R. §60.13(d) and the requirements of Appendix F apply only to the normal range of the NO<sub>x</sub> Stack Analyzers with a dual or greater range.
  - The SSM range of the NO<sub>x</sub> Stack Analyzers will be evaluated once each calendar quarter, or at the next startup and shutdown opportunity if an evaluation cannot be performed during the calendar quarter, to verify accuracy. For the stack analyzer evaluations at each such Operating Nitric Acid Plant, sampling will be conducted by making physical measurements of the NO<sub>x</sub> concentration in the gas stream to the main stack using an alternative/non-CEMS method(s) approved by the permitting authority (e.g., stack sampling and analysis, through the use of a portable analyzer/detector, or non-certified NO<sub>x</sub> stack analyzer).
- For the Plants utilizing single range NO<sub>x</sub> Stack Analyzers (the Baytown Plant and El Dorado East and West Plants during only the period of required IL compliance):

- The NO<sub>x</sub> Stack Analyzer will meet all applicable requirements of 40 C.F.R. §60.11, §60.13, 40 C.F.R. Part 60, Appendix B, Performance Specification 2, and the Quality Assurance and Quality Control Procedures in 40 C.F.R. Part 60, Appendix F, Procedure 1. The daily drift test requirement at 40 C.F.R. §60.13(d) and the requirements of Appendix F apply to the span of the NO<sub>x</sub> Stack Analyzer.
  - For the stack analyzer evaluations at each such Operating Nitric Acid Plant, sampling will be conducted by making physical measurements of the NO<sub>x</sub> concentration in the gas stream to the main stack using an alternative/non-CEMS method(s) approved by the permitting authority (e.g., stack sampling and analysis, through the use of a portable analyzer/detector, or non-certified NO<sub>x</sub> stack analyzer).
  - The range of the Baytown NO<sub>x</sub> Stack Analyzer will be evaluated once each calendar year during the annual RATA using the Quality Assurance and Quality Control Procedures in 40 C.F.R. Part 60, Appendix F, Procedure 1
- For the Stack Flowmeters at all Operating Nitric Acid Plants:
    - For the Baytown Plant only, the stack flow meter will meet 40 C.F.R. Part 60, Appendix B, Performance Specification 6 and will be evaluated once each calendar year during the RATA to verify accuracy.
    - At all other Operating Nitric Acid Plants except Baytown, the stack flow meters will meet 40 C.F.R. Part 60, Appendix B, Performance Specification 6 and will be evaluated once each calendar quarter and during the RATA of the appropriate NO<sub>x</sub> Stack Analyzer to verify accuracy.

### **Compliance with the NSPS: 40 C.F.R. Part 60, Subpart G**

In addition to the requirements in this CEMS Plan, Settling Defendants also will comply with all of the requirements of the NSPS relating to monitoring at each Operating Nitric Acid Plant except that, pursuant to 40 C.F.R. §60.13(i), this CEMS Plan will supersede the following provisions of 40 C.F.R. Part 60, Subpart G:

- The requirement at 40 C.F.R. §60.73(a) that the NO<sub>x</sub> stack analyzers have a normal span value of 500 ppm. In lieu of this, Settling Defendants will utilize the span values specified in Table 1 of this CEMS Plan; and
- The requirement at 40 C.F.R. § 60.73(a) that pollutant gas mixtures under Performance Specification 2 and for calibration checks under 40 C.F.R. §60.13(d) be nitrogen dioxide (NO<sub>2</sub>). Settling Defendants will use calibration gases containing NO and/or NO<sub>2</sub>, as appropriate to assure accuracy of the NO<sub>x</sub> Stack Analyzers except where verified reference cells are used in accordance with Performance Specification 2.
- The requirement at 40 C.F.R. §60.73(b) that the conversion factor be developed/expressed in the units of lb NO<sub>x</sub> per ton of 100% nitric acid produced per ppm. In lieu of this requirement, Settling Defendants will develop/express the conversion factor in the units of lb NO<sub>x</sub> per ton of 100% nitric acid produced per lb/hr NO<sub>x</sub>.

**Consent Decree: *United States, et al. v. El Dorado Chemical Co., et al.***

**ATTACHMENT D**

**COMPENSATORY EMISSIONS REDUCTIONS  
APPLICABILITY & COMPLIANCE DETERMINATION**

Pursuant to Paragraph 73 of the Consent Decree, the United States and/or an Applicable State Party, if any, may elect to seek Compensatory Emissions Reductions for excess NO<sub>x</sub> emissions in addition to injunctive relief or stipulated penalties. The following sets forth the basis for determining when and under what circumstances Compensatory Emissions Reductions are applicable as well as the amount, nature, and duration of Compensatory Emissions Reductions which may be required.

“Compensatory Emissions Reductions” are reductions in emissions that occur after the date of the emission exceedance and that reduce emissions by at least an amount equal to excess emissions caused by the emission exceedance.

Applicability

In accordance with Section IV of the Consent Decree (Compliance Requirements), each Operating Nitric Acid Plant is subject to a Long-Term NO<sub>x</sub> Emissions Limit of 0.60 pounds of NO<sub>x</sub> emitted per ton of 100% Nitric Acid Produced (“lb/ton”) as of a specified compliance date. Compliance with the Long-Term NO<sub>x</sub> Emissions Limit is determined based on a 365-day rolling average (rolled daily) calculated in accordance with the CEMS Plan contained in Attachment C to the Consent Decree.

Compensatory Emissions Reductions pursuant to Paragraph 73 of the Consent Decree may be sought if:

1. The resulting 365-day rolling average NO<sub>x</sub> emission rate for a Operating Nitric Acid Plant is determined to exceed the Long-Term NO<sub>x</sub> Emissions Limit, and
2. Mass emissions of NO<sub>x</sub> represented by the exceedance (as determined below) are greater than one (1) ton.

Calculation of Excess NO<sub>x</sub> Emissions

The determination of the mass emissions of NO<sub>x</sub> in excess of a Long-Term NO<sub>x</sub> Emissions Limit shall be calculated as follows:

$$EX_{NO_x} = M_{NO_x \text{ 365-Day Total}} / 2,000 - P_{365\text{-Day Total}} \times 0.60 \text{ lb/ton} / 2,000$$

Where:

$EX_{NO_x}$  = Excess NO<sub>x</sub> emissions in a 365-day period, tons

$M_{NO_x \text{ 365-Day Total}}$  = Mass NO<sub>x</sub> emissions 365-day period, lb

$P_{365\text{-Day total}}$  = 100% nitric acid produced during a rolling 365-day period, tons

### Timeframe & Manner of Achieving Compensatory Emissions Reductions

LSB shall have no less than 365 Days and no more than 730 Days from the date LSB receives a written demand for Compensatory Emissions Reductions by the United States and/or an Applicable State Party, if any, to achieve such Compensatory Emissions Reductions unless such timeframe is extended by agreement of the Parties.

For purposes of achieving Compensatory Emissions Reductions, LSB may use any method of reducing emissions onsite or offsite from where the violations occurred that is approved by U.S. EPA and the Applicable State Party, if any. However, the following steps may be used to achieve Compensatory Emissions Reductions without further approval:

1. Operation of a Covered Nitric Acid Plant located at the facility where the excess emissions occurred at an emission rate below the Long-Term NO<sub>x</sub> Emissions Limit (with available Compensatory Emissions Reductions being calculated as the difference (on a mass basis) between the actual emissions rate over a specified period and Long-Term NO<sub>x</sub> Emissions Limit); and
2. Temporary cessation of operation of any emission unit that emits NO<sub>x</sub> and is at the facility where the excess emissions occurred, where the temporary cessation of operation was not otherwise necessary (with available Compensatory Emissions Reductions being calculated as the expected mass emissions of NO<sub>x</sub> had the emission unit operated during the specified timeframe). The above provision shall not be interpreted as precluding LSB from inspecting and/or conducting work on an emission unit which has temporarily ceased operation for purposes of achieving Compensatory Emissions Reductions.

Compensatory Emissions Reductions may be satisfied through any other steps approved in writing by U.S. EPA and the Applicable State Party, if any. In making any decision to approve or disapprove proposed steps for achieving Compensatory Emissions Reductions U.S. EPA and the Applicable State Party, if any, will consider the following factors: 1) the pollutant(s) that will be reduced, 2) the location of the expected emissions reductions (i.e. the expected environmental benefit to the area where the excess emissions occurred), 3) the degree to which the emissions from such steps are quantifiably less than what would otherwise be expected; 4) the time period in which such reductions will be achieved, and 5) the overall expected benefit to human health and the environment.

### Effect

Compensatory Emissions Reductions shall be calculated and determined on a mass emission basis (i.e., tons of NO<sub>x</sub>) and shall not result in the amendment of or impact the Short-Term NO<sub>x</sub> Emissions Limit or Long-Term NO<sub>x</sub> Emissions Limit applicable to a Covered Nitric Acid Plant under the Consent Decree whether or not the emissions reductions are achieved at a Covered Nitric Acid Plant. Further, Compensatory Emissions Reductions shall not be permanent in nature and shall not require or result in the modification or amendment of any NO<sub>x</sub> emission limitation contained within any air quality permit issued by the United States, an Applicable State Party, and/or an Applicable State Agency, unless otherwise agreed by the Parties.