

UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF LOUISIANA

UNITED STATES OF AMERICA,

and

THE LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY,

and

THE STATE OF TEXAS,

Plaintiffs,

v.

SID RICHARDSON CARBON, LTD.,

Defendant.

Civil Action No. 3:17-cv-01792-SDD-RLB

CONSENT DECREE

TABLE OF CONTENTS

I. JURISDICTION AND VENUE2

II. APPLICABILITY3

III. DEFINITIONS4

IV. CIVIL PENALTY22

V. ENVIRONMENTAL MITIGATION23

**VI. SO₂ CONTROL TECHNOLOGY, EMISSIONS LIMITS, AND MONITORING
REQUIREMENTS.....24**

**VII. NO_x CONTROL TECHNOLOGY, EMISSIONS LIMITS, AND MONITORING
REQUIREMENTS.....30**

**VIII. PM CONTROL TECHNOLOGY, EMISSIONS LIMITS, BEST MANAGEMENT
PRACTICES, AND EARLY WARNING SYSTEM REQUIREMENTS37**

IX. PROHIBITION ON USE OF FLARES42

X. ADDITIONAL REQUIREMENTS FOR BORGER.....42

XI. PROHIBITION ON NETTING CREDITS OR OFFSETS.....45

XII. PERMITS46

XIII. REVIEW AND APPROVAL OF SUBMITTALS.....51

XIV. RECORDKEEPING AND REPORTING REQUIREMENTS.....53

XV. STIPULATED PENALTIES59

XVI. FORCE MAJEURE63

XVII. AFFIRMATIVE DEFENSES TO CERTAIN STIPULATED PENALTIES.....67

XVIII. DISPUTE RESOLUTION69

XIX. INFORMATION COLLECTION AND RETENTION.....73

XX. EFFECT OF SETTLEMENT / RESERVATION OF RIGHTS75

XXI. COSTS79

XXII. NOTICES.....	79
XXIII. EFFECTIVE DATE	82
XXIV. RETENTION OF JURISDICTION.....	82
XXV. MODIFICATION.....	82
XXVI. SALES OR TRANSFER OF OPERATIONAL OR OWNERSHIP INTERESTS ...	83
XXVII. PUBLIC PARTICIPATION	84
XXVIII. TERMINATION.....	85
XXIX. SIGNATORIES/SERVICE.....	89
XXX. INTEGRATION	90
XXXI. FINAL JUDGMENT	90
XXXII. APPENDICES	90
APPENDIX A: ENVIRONMENTAL MITIGATION PROJECTS.....	A1
APPENDIX B: OTHER PM CONTROL REQUIREMENTS	B1
APPENDIX C: PARTICULATE EMISSIONS BEST MANAGEMENT PRACTICES CONTROL PLAN	C1
APPENDIX D: PM EARLY WARNING SYSTEM.....	D1
APPENDIX E: PROTOCOL FOR SETTING FINAL SO₂ EMISSION LIMITS	E1
APPENDIX F: METHODOLOGY FOR DETERMINING COMPLIANCE WITH CAPS	F1

WHEREAS, Plaintiffs, the United States of America (“the United States”), on behalf of the United States Environmental Protection Agency (“EPA”), the State of Louisiana (through the Louisiana Department of Environmental Quality (“LDEQ”)), and the State of Texas, on behalf of the Texas Commission on Environmental Quality (“TCEQ”), are concurrently with this Consent Decree filing a complaint (“Complaint”) against Sid Richardson Carbon, Ltd. (“Defendant”) pursuant to Sections 112, 113(b) and 167 of the Clean Air Act (“CAA” or “the Act”), 42 U.S.C. §§ 7412, 7413(b) and 7477. The Complaint seeks injunctive relief and the assessment of civil penalties for violations of one or more of the following statutory and regulatory requirements of the Act at Defendant’s Addis, Big Spring and Borger carbon black facilities: the Prevention of Significant Deterioration (“PSD”) provisions of the Act, 42 U.S.C. §§ 7470-7492; the nonattainment New Source Review (“Nonattainment NSR”) provisions of the Act, 42 U.S.C. §§ 7501-7515; the federally-approved and enforceable Louisiana and Texas State Implementation Plans (“SIPs”), including without limitation those which incorporate and/or implement the above-listed federal PSD and/or Nonattainment NSR requirements; and Title V of the Act, 42 U.S.C. §§ 7661-7661f and/or Title V’s implementing federal and state regulations;

WHEREAS, EPA contends that this settlement is part of EPA’s national enforcement initiative to control air pollution from the largest sources of emissions, including carbon black manufacturing facilities;

WHEREAS, the Complaint alleges, *inter alia*, that Defendant failed to obtain the necessary permits and install and Continuously Operate the controls necessary to reduce sulfur dioxide (“SO₂”), nitrogen oxides (“NO_x”) and particulate matter (“PM”), including without limitation particulate matter with a diameter of ten microns or less (“PM₁₀”), and comply with

requirements for monitoring, record-keeping, and reporting, as specified in the Act;

WHEREAS, EPA provided Defendant, LDEQ, and TCEQ, with actual notice of the alleged violations, in accordance with Sections 113(a)(1) and (b) of the Clean Air Act, 42 U.S.C. §§ 7413(a)(1);

WHEREAS, Defendant stipulates for purposes of this Consent Decree that it does not contest the adequacy of the notice provided;

WHEREAS, Defendant denies any liability to the United States or Plaintiff-States (collectively “Plaintiffs”) arising out of the acts or omissions alleged in the Complaint and this Consent Decree resolves all allegations stated in the Complaint;

WHEREAS, the Plaintiffs and Defendant (collectively “the Parties”) have agreed that settlement of this action is in the public interest and will result in air quality improvements, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable and in the public interest.

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

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and over the

Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 112, 113, 167, and 304 of the Act, 42 U.S.C. §§ 7412, 7413, 7477, and 7604.

2. Venue lies in this district pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. § 1391(b) and (c), because some of the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this district.

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

4. Solely for purposes of this Consent Decree and the underlying Complaint, and any action to enforce this Consent Decree, Defendant consents to this Court's jurisdiction over Defendant and any action to enforce this Consent Decree and to venue in this judicial district. Defendant consents to and shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any Party other than the Parties to this Consent Decree.

5. Except as provided in Section XXVII (Public Participation) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

6. Upon the Effective Date, the obligations of this Consent Decree shall apply to, and be binding upon, the United States, the Plaintiff-States, and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.

7. Defendant shall provide a copy of this Consent Decree to all officers, employees,

and agents whose duties include compliance with any provision of this Decree, as well as to any Contractor retained to provide services required to comply with the provisions of this Consent Decree. Defendant shall condition any agreement with such Contractor upon performance of the services in conformity with the provisions of this Consent Decree. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or Contractors to take any actions necessary to comply with the provisions of this Consent Decree. Notwithstanding any retention of any such entities to perform any work required under this Consent Decree, Defendant shall ensure that all work is performed in accordance with the requirements of this Consent Decree.

III. DEFINITIONS

8. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated by EPA pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. “3-hour Average Emissions Limit” shall mean the limit on average hourly emissions specified in Paragraph 32, determined in accordance with Paragraph 33, of this Consent Decree (subject to Section XVII, below).
- b. “7-day Rolling Average Emissions Limit” shall mean the limit on average daily emissions during the preceding seven Operating Days, specified in Paragraphs 17 and 27. For purposes of clarity, to calculate the average daily emissions to compare against the limit, the first complete 7-day average compliance period is seven Operating Days after the Date of

Continuous Operation (e.g., if the Date of Continuous Operation is January 1, the first Day in the averaging period is January 1 and the first complete 7-day average compliance period is January 1 – January 7, provided each Day qualifies as an Operating Day), and all emissions that occur during the specified period, including emissions during all periods of Malfunction (subject to Section XVII, below) within an Operating Day, shall be included in the calculation.

- c. “365-day Rolling Average Emissions Limit” shall mean the limit on average daily emissions during the preceding 365 Operating Days, specified in Paragraphs 17 and 27. For purposes of clarity, to calculate the average daily emissions to compare against the limit, the first complete 365-day average compliance period is 365 Operating Days after the Date of Continuous Operation (e.g., if the Date of Continuous Operation is January 1, the first Day in the averaging period is January 1 and the first complete 365-day average compliance period is January 1 - December 31, provided each Day qualifies as an Operating Day), and all emissions that occur during the specified period, including emissions during all periods of Malfunction within an Operating Day, shall be included in the calculation.
- d. “365-day Rolling Average Sulfur Content Weight Percent” shall mean the arithmetic average of daily sulfur contents in feedstock to all reactors as a weight percent during the preceding 365 Operating Days, specified in

Paragraph 21. It shall equal S_{365} and shall be calculated as follows:

$$S_{365} = \sum_{j=1}^{365} \left(\frac{100 * M_{S,j}}{M_{F,T,j}} \right) / 365$$

Where:

$\sum_{j=1}^{365}$ = Sum from Operating Day 1 through Operating Day 365

$M_{S,j}$ = Mass of sulfur in the feedstock delivered to reactors in a calendar Day j, in pounds, as measured by a continuous mass flow monitoring system

Where:

$$M_{S,j} = (S_{F,j} * M_{F,T,j}) / 100$$

$S_{F,j}$ = The average sulfur content of the feed to reactors in Operating Day j, in weight percent, feeding the reactor by Paragraph 22.a or 22.b

$M_{F,T,j}$ = Total mass of feedstock delivered to all reactors in a calendar Day j, in pounds, as measured by a continuous mass flow monitoring system

For purposes of clarity, the first complete 365-day average compliance period is 365 Operating Days after the Date of Continuous Operation (e.g., if the Date of Continuous Operation is January 1, the first Day in the averaging period is January 1 and the first complete 365-day average compliance period is January 1 - December 31, provided each Day qualifies as an Operating Day).

- e. “365-day Rolling Sum Emissions Limit” shall mean the limit on the sum of daily emissions during the preceding 365 Days, specified in Paragraph 24. For purposes of clarity, to calculate the sum of daily emissions to

compare against the limit, the first complete 365-day compliance period is 365 Days after the Date of Continuous Operation (e.g., if the Date of Continuous Operation is January 1, the first Day in the period is January 1 and the first complete 365-day compliance period is January 1 - December 31, provided each Day qualifies as an Operating Day), and all emissions that occur during the specified period, including emissions during all periods of Malfunction within an Operating Day, shall be included in the calculation.

- f. “Addis” shall mean Defendant’s carbon black facility located at
5221 Sid Richardson Rd.
Addis, LA 70710
- g. “Addis Incinerator” shall mean the Incinerator at Addis, which shall be built and operated after the date of signing this Consent Decree.
- h. “Addis NOx Cap” shall mean the cap on NOx emissions at Addis specified in Paragraph 31.a.
- i. “Addis SO2 Cap” shall mean the cap on SO2 emissions at Addis specified in Paragraph 23.a.
- j. “Alternative Equivalent Pollution Control Technology” shall mean an alternative equivalent pollution control technology installed in accordance with the requirements of Paragraph 19 or 29.
- k. “Big Spring” shall mean Defendant’s carbon black facility located at
1211 North Midway Rd.
Big Spring, TX 79720

- l. “Big Spring Incinerator” shall mean, as of the date of signing this Consent Decree, the Incinerator at Big Spring, identified in the Maximum Allowable Emission Rate Table in the air permit numbers 6580 and PSDTX151, as Incinerator 13-A.
- m. “Big Spring NOx Cap” shall mean the cap on NOx emissions at Big Spring specified in Paragraph 31.c.
- n. “Borger” shall mean Defendant’s carbon black facility located at
9455 FM 1559
Borger, TX 79007
- o. “Borger Common Stack” shall mean, as of the date of signing this Consent Decree, the common stack for Boiler #1 and Boiler #2 at Borger, identified in the Maximum Allowable Emission Rate Table in the air permit numbers 1867A and PSDTX1032, as EPN 119.
- p. “Borger NOx Cap” shall mean the cap on NOx emissions at Borger specified in Paragraph 31.b.
- q. “Borger SO2 Cap” shall mean the cap on SO2 emissions at Borger specified in Paragraph 23.b.
- r. “Business Day” shall mean any Day, except for Saturday, Sunday, and federal holidays, State of Louisiana holidays, and State of Texas holidays when TCEQ offices are closed.¹ In computing any period of time under this Consent Decree, where the last day of any period measured in

¹ See Tex. Gov’t Code §§ 662.003, 662.021, 662.022.

“Business Days” would fall on a Saturday, Sunday, or federal holiday, the period shall run to the close of business of the next Business Day.

- s. “Caps” shall mean the Addis SO₂ Cap, the Addis NO_x Cap, the Borger SO₂ Cap, the Borger NO_x Cap, and the Big Spring NO_x Cap.
- t. “CD Emissions Reductions” shall mean any emissions reductions that result from any projects conducted or controls used to comply with this Consent Decree except for Surplus Emission Reductions.
- u. “CEMS” or “Continuous Emission Monitoring System” shall mean, for obligations involving NO_x and SO₂ under this Consent Decree, the devices defined, installed, calibrated, maintained, and operated in accordance with 40 C.F.R. § 60.13 and 40 C.F.R. Part 60 Appendices A, B and F.
- v. “Clean Air Act” or “Act” shall mean the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- w. “Consent Decree” or “Decree” shall mean this Decree and the Appendices attached hereto, but in the event of any conflict between the text of this Decree and any Appendix, the text of this Decree shall control.
- x. “Continuously Operate” or “Continuous Operation” shall mean that, unless otherwise specified, when a Control Technology or a PM Early Warning System is used pursuant to the terms of this Consent Decree, it shall be operated at all times of Process System Operation, consistent with good engineering and maintenance practices for such Control Technology, PM Early Warning System or the Process System, as applicable, and good

air pollution control practices for minimizing emissions in accordance with 40 C.F.R. § 60.11(d).

- y. “Contractor” shall mean any person or entity hired by Defendant to perform services on its behalf necessary to comply with the provisions of this Consent Decree.
- z. “Control Technology” shall mean each Selective Catalytic Reduction System, Wet Gas Scrubber, or Alternative Equivalent Pollution Control Technology, installed pursuant to the terms of this Consent Decree, or the PM control mechanisms identified in Appendix B of this Consent Decree.
- aa. “Date of Continuous Operation” shall mean the date by which Defendant shall Continuously Operate a Control Technology on a Process System.
- bb. “Date of Lodging of the Consent Decree” or “Date of Lodging” shall mean the date the Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Middle District of Louisiana.
- cc. “Day” shall mean a calendar day unless expressly stated to be a Business Day, and means a 24-hour period measured from midnight to midnight.
- dd. “Defendant” shall mean Sid Richardson Carbon, Ltd.
- ee. “Dryer Exhaust Bag Filter” shall mean a high-efficiency fabric filtration unit which, during periods of carbon black production, receives water vapor, combusted by-product gases, and carbon black from the carbon black pellet dryer and separates the carbon black from the water vapor and

combusted by-product gases.

- ff. “Effective Date” shall have the meaning set forth in Section XXIII (Effective Date).
- gg. “Emissions Limit” shall mean the maximum allowable emissions in units as specified in this Consent Decree, measured in accordance with this Consent Decree, met to the number of significant digits in which the limit is expressed. For example, an Emissions Limit of 0.100 is not met if the actual emission is 0.101. The fourth significant digit shall be rounded to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual emission is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Limit of 0.100, and if an actual Emission Limit is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Limit of 0.100. The following Emissions Limits are specified in this Consent Decree: 3-hour Average Emissions Limit, 7-day Rolling Average Emissions Limit, 365-day Rolling Average Emissions Limit, 365-day Rolling Sum Emissions Limit, Final 7-day Rolling Average Emissions Limit, Final 365-day Rolling Average Emissions Limit, Interim 7-day Rolling Average Emissions Limit, Interim 365-day Rolling Average Emissions Limit.
- hh. “EPA” shall mean the United States Environmental Protection Agency

and any of its successor departments or agencies.

- ii. “Environmental Mitigation Project” shall mean a project funded or implemented by Defendant as a remedial measure to mitigate alleged harm to human health or the environment claimed to have been caused by the alleged violations described in the Complaint.
- jj. “Facilities” shall mean Addis, Big Spring and Borger, the Defendant’s facilities used for the manufacture of carbon black, each of which may be referred to as a “Facility.”
- kk. “Final 7-day Rolling Average Emissions Limit” shall mean the applicable Final 7-day Rolling Average Emissions Limit set forth in the table in Paragraph 17 and established pursuant to the protocol specified in Appendix E.
- ll. “Final 365-day Rolling Average Emissions Limit” shall mean the applicable Final 365-day Rolling Average Emissions Limit set forth in the table in Paragraph 17 and established pursuant to the protocol specified in Appendix E.
- mm. “Flare” shall mean a combustion device that uses an uncontrolled volume of ambient air to burn gases.
- nn. “gr/dscf” shall mean grains per dry standard cubic foot.
- oo. “Heat Load Operation” shall mean the operation of any carbon black reactor, boilers, dryers, or combustors, at a Facility under any of the following conditions: (1) at a reactor, when there is no oil feed but only

natural gas and combustion air supplied to the reactor burner, and the reactor is not manufacturing carbon black and generating Tail Gas, including, but not limited to, during periods of Startup and Shutdown, (2) at a reactor, during the periods either prior to or at the conclusion of Process System Operation, each of which shall be as short as practicable and shall not exceed 15 minutes, when transitioning between (A) an operational mode in which oil, natural gas, and combustion air are all fed to the reactor burner and the reactor is manufacturing carbon black and generating Tail Gas, and (B) an operational mode, including, but not limited to, during periods of Startup and Shutdown, in which no oil but only natural gas and combustion air are supplied to the reactor, or (3) at a boiler, when there is no oil feed to the reactors but only natural gas and combustion air (and not Tail Gas generated by a reactor during Process System Operation) are fed to the boiler, including, but not limited to, during periods of Startup and Shutdown, (4) at a dryer combustor, when only natural gas and combustion air (and not Tail Gas generated by a reactor during Process System Operations) are fed to the dryer combustor, including, but not limited to, during periods of Startup and Shutdown.

pp. “Inspection at the Alternative Combustion Technology” shall mean an outage to inspect and maintain the Addis Incinerator (or if ever constructed its associated co-generation equipment, including one or more waste heat boilers or turbines which generate electricity from steam), the

Big Spring Incinerator (or its associated co-generation equipment, including one or more waste heat boilers or turbines which generate electricity from steam), or the Borger Common Stack (or one of its constituent parts, Boiler #1 or Boiler #2, or its associated co-generation equipment, including one or more turbines which generate electricity from steam). For purposes of Section IX (Prohibition On Use Of Flares) of this Decree, the total for all outages annually at a Facility shall not exceed 336 hours in duration and may not be conducted more frequently than once a year at Addis and Big Spring and twice a year at Borger, except that no more than once every five years, at Big Spring and Borger (and if co-generation equipment is ever constructed at Addis, then also at Addis) there may be one outage at each Facility that may exceed 336 hours but shall not exceed 744 hours in duration, in all cases, on a 365-day block-basis starting with the Date of Continuous Operation in Paragraph 27 (e.g., if the first day included in the first 365-day block is April 1, 2021, then the first day included in the second 365-day block is April 1, 2022) as reasonably necessary to maintain the equipment in accordance with good engineering and maintenance practices.

- qq. “Integrity Assessment” shall mean the assessment described in Paragraph 38.b. and c.
- rr. “Integrity Assessment Plan” shall mean the final, EPA-approved plan described in Paragraph 38.b.

- ss. “Integrity Correction Plan” shall mean the final, EPA-approved correction action plan described in Paragraph 38.d.i.D.
- tt. “Integrity Report” shall mean the report described in Paragraph 38.d.
- uu. “Interim 7-day Rolling Average Emissions Limit” shall mean the applicable Interim 7-day Rolling Average Emissions Limit set forth in the table in Paragraph 17.
- vv. “Interim 365-day Rolling Average Emissions Limit” shall mean the applicable Interim 365-day Rolling Average Emissions Limit set forth in the table in Paragraph 17.
- ww. “TCEQ” shall mean the Texas Commission on Environmental Quality and its predecessor and/or successor agencies.
- xx. “Third Party” shall mean a certified professional engineer who is not, or has not been, directly employed by Defendant, but whose company may contract for services with Defendant, who is experienced in the operation of carbon black production facilities or similar industrial combustion processes and associated process piping and equipment. The Third Party shall have, or have had, no direct or indirect organizational or personal relationships that would impact its impartiality in doing any of the work specified in Paragraph 38. A contract with Defendant for the provision of services will not constitute a factor that will impact impartiality.
- yy. “kg FS/hr” shall mean kilograms of feedstock per hour.
- zz. “LDEQ” shall mean the Louisiana Department of Environmental Quality.

- aaa. “Main Bag Filter” shall mean a high-efficiency fabric filtration unit, equipped with bag filters or their equivalent, which, during periods of carbon black production, receives carbon black and Tail Gas from the reactor and separates the carbon black from the Tail Gas.
- bbb. “Malfunction” as used in this Consent Decree shall have the same meaning as defined at 40 C.F.R. § 60.2.
- ccc. “Method 9” shall mean the methodology in 40 C.F.R. Part 60, Appendix A.
- ddd. “Method 9 Trained Observer” shall mean a person who is trained in conducting visual assessments pursuant to Method 9.
- eee. “Method for Managing PM Emissions” shall mean the method for managing PM emissions identified in the third column of Appendix B.
- fff. “Month” shall mean a calendar month.
- ggg. “National Ambient Air Quality Standards” or “NAAQS” shall mean national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
- hhh. “NO_x” shall mean oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- iii. “Nonattainment NSR” shall mean the nonattainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, 40 C.F.R. Part 51, and any applicable State Implementation Plan.

- jjj. “Notices of Violation” shall mean the notices of violation issued by the EPA to Defendant on September 18, 2012, January 11, 2013, February 8, 2013, and September 26, 2017.
- kkk. “Operating Day” shall mean any Day of Process System Operation.
- lll. “Optimization and Demonstration Study” shall mean a study to optimize and demonstrate the performance of a WGS or Alternative Equivalent Pollution Control Technology to minimize SO₂ emissions from the Process System in accordance with the requirements of Paragraph 3 of Appendix E of this Consent Decree.
- mmm. “Paragraph” shall mean a portion of this Decree identified by an Arabic numeral.
- nnn. “Particulate Emissions Best Management Practices Control Plan” shall mean the plan for identifying sources of particulate emissions and the measures to reduce such emissions that is reflected in Appendix C to this Consent Decree.
- ooo. “Parties” shall mean the United States, Plaintiff-States, and Defendant.
- ppp. “Party” shall mean one of the Parties.
- qqq. “Plaintiff-States” shall mean LDEQ and the State of Texas. Plaintiff state shall mean either LDEQ or the State of Texas.
- rrr. “Plaintiffs” shall mean the United States and Plaintiff-States.
- sss. “PM” shall mean filterable particulate matter, measured in accordance with Paragraph 33 of this Consent Decree.

- ttt. “PM Early Warning System” shall mean a probe electrification-type technology (i.e., a system in which a probe is inserted into the emissions stream and measures the momentum of the PM flowing through the duct), or a monitoring system designed to achieve an equivalent level of performance to a probe electrification-type technology that shall be approved or disapproved by EPA within 60 Days of submission, that provides early warning detection of excess PM emissions from carbon black production operations by producing a signal that is transmitted to an alarm management system and converted into a numeric readout, over an averaging period of no longer than 15 minutes, as described in Appendix D to this Consent Decree.
- uuu. “PM Emissions Equipment” shall mean the PM emissions equipment identified in the first column of Appendix B.
- vvv. “PM Monitor Point” shall mean the point at which the PM Early Warning System is installed to measure the PM flowing through the duct of each of the Main Bag Filter, and Dryer Exhaust Bag Filter.
- www. “PM Reduction Mechanism” shall mean the PM reduction mechanism identified in the middle column of Appendix B.
- xxx. “ppmvd” means parts per million, volumetric dry.
- yyy. “Process Secondary Bag Filter” shall mean a high efficiency fabric filtration unit equipped with a membrane bag filter or its equivalent, which separates carbon black from the air stream and routes the carbon black to

grinders and pelletizers. Carbon black is pneumatically conveyed from the Main Unit Filter to the Process Filter.

- zzz. “Process System” shall mean, collectively, all Tail Gas generating and Tail Gas combustion equipment, including, all preheaters, reactors, dryers, thermal oxidizers, and boilers, necessary for the manufacture of carbon black, at a designated Facility.
- aaaa. “Process System Operation” shall mean the operation of any Process System or any of its constituent parts when there is oil feed to any reactor burners within such Process System, and the reactor is manufacturing carbon black. Process System Operation ends when oil feed to the reactor burners within such Process System ceases; provided however that any period of operation meeting the definition of Heat Load Operation shall not constitute Process System Operation.
- bbbb. “Project Dollars” shall mean Defendant’s expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section V (Environmental Mitigation) and Appendix A (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section V (Environmental Mitigation) and Appendix A of this Consent Decree, and (b) constitute Defendant’s direct payments for such projects, or Defendant’s external costs for Contractors, vendors, and equipment to carry out such projects. Defendant shall not include its own

personnel costs in overseeing the implementation of the Projects as Project Dollars.

- cccc. “PSD” shall mean the Prevention of Significant Deterioration program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 40 C.F.R. Part 52, and any applicable State Implementation Plan.
- dddd. “Purge Filter” shall mean a high-efficiency fabric filtration unit which, during periods of carbon black production, receives water vapor, air, and carbon black from the carbon black pellet dryer and separates the carbon black from the water vapor and air.
- eeee. “Reactor Vent Scrubber” shall mean a spray tower/demister.
- ffff. “Section” shall mean a portion of this Decree identified by a capitalized Roman numeral.
- gggg. “Selective Catalytic Reduction System” or “SCR” shall mean a pollution control system that employs anhydrous, aqueous ammonia or urea reagent injection and a catalyst to speed the reaction of the reagent with NO_x and to drive the reaction to greater completion, for the purpose of reducing NO_x emissions.
- hhhh. “Shutdown” shall mean the period of ceasing of operation at a Facility for any purpose, and shall be limited to an operational mode in which no oil and only natural gas and combustion air are supplied to the reactor.
- iiii. “SO₂” shall mean the pollutant sulfur dioxide, measured in accordance

with the provisions of this Consent Decree.

jjjj. “Startup” shall mean the period of setting in operation at a Facility for any purpose, and shall be limited to an operational mode in which no oil and only natural gas and combustion air are supplied to the reactor.

kkkk. “Surplus Emission Reductions” shall mean reductions in an Emission Limit and/or 365-day Rolling Average Sulfur Content Weight Percent over and above those required to comply with the requirements of this Consent Decree, to the extent that such reduced Emission Limit and/or 365-day Rolling Average Sulfur Content Weight Percent is reflected in a federally enforceable emissions limit or requirement, which reductions may or may not take the form of credits that can be transferred to another entity, and is more stringent than the corresponding Emission Limit and/or 365-day Rolling Average Sulfur Content Weight Percent imposed under this Consent Decree.

llll. “Tail Gas” shall mean the gaseous by-product of the carbon black process, which is generated during periods when there is oil feed to a reactor burner.

mmmm. “Title V permit” shall mean a permit required by and issued in accordance with the requirements of 42 U.S.C. §§ 7661 - 7661f;

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

oooo. “Wet Gas Scrubber” and “WGS” shall mean a pollution control device

that removes SO₂ and PM from flue gas through contact with a scrubbing liquid.

IV. CIVIL PENALTY

9. Within 30 Days after the Effective Date of this Consent Decree, Defendant shall pay to the United States a civil penalty of \$333,000. Failure to timely pay the civil penalty shall subject Defendant to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Defendant liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor of the United States in securing payment. Defendant shall make the above referenced payment by FedWire Electronic Funds Transfer (“EFT” or wire transfer) to the United States Department of Justice account in accordance with current electronic funds transfer procedures, referencing DOJ Case No. 90-5-2-1-10663. Payment shall be made in accordance with instructions provided to Defendant by the Financial Litigation Unit of the United States Attorney’s Office for the Middle District of Louisiana. Any payments received by the Department of Justice after 4:00 P.M. (Central Time) will be credited on the next Business Day. At the time of payment, Defendant 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. Defendant Sid Richardson Carbon, Ltd.*, and shall reference the civil action number and DOJ case number 90-5-2-1-10663, to the United States in accordance with Section XXII (Notices); by email to acctsreceivable.CINWD@epa.gov; and to:

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

10. Within 30 Days after the Effective Date of this Consent Decree, Defendant shall pay to the LDEQ a civil penalty of \$333,000. If any portion of the civil penalty due to the State is not paid when due, Defendant shall pay interest on the amount past due, accruing from the Effective Date through the date of payment at the rate identified in Paragraph 9 above, by certified check made payable to the Louisiana Department of Environmental Quality, Fiscal Director, Office of Management and Finance, LDEQ, P.O. Box 4303, Baton Rouge, Louisiana 70821-4303, or by EFT to the State of Louisiana in accordance with written instructions to be provided to Defendant upon request.

11. Within 30 Days after the Effective Date of this Consent Decree, Defendant shall pay a civil penalty of \$333,000 to the State of Texas. If any portion of the civil penalty due to the State is not paid when due, Defendant shall pay interest on the amount past due, accruing from the Effective Date through the date of payment at the rate identified in Paragraph 9 above. All payments under this paragraph shall be made by wire transfer to the Texas Comptroller of Public Accounts – Federal Reserve Clearing Account for the Office of the Attorney General, as provided in Appendix G.

12. Defendant shall not deduct any penalties paid under this Section or Section XV (Stipulated Penalties) in calculating its federal or state or local income tax.

V. ENVIRONMENTAL MITIGATION

13. Defendant shall implement the Environmental Mitigation Projects described in Appendix A of this Consent Decree, in compliance with the schedules for such Environmental Mitigation Projects and the other terms of this Consent Decree. In implementing the

Environmental Mitigation Projects, Defendant shall spend no less than a total of \$490,000 in Project Dollars, in the aggregate, for all Environmental Mitigation Projects.

14. All reports prepared by Defendant pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA and the applicable Plaintiff-States shall be publicly available (subject to the provisions of Paragraph 94 of this Consent Decree) from Defendant without charge.

15. Defendant shall certify, within 30 Days before the start of any Environmental Mitigation Project, that Defendant is not otherwise required by law to perform the Environmental Mitigation Project, that Defendant is unaware of any other person who is required by law to perform the Environmental Mitigation Project, and that Defendant will not use any Environmental Mitigation Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law.

16. Defendant shall maintain, and upon Plaintiffs' request, provide to Plaintiffs within 60 Days of such request, all documents that substantiate the work completed on the Environmental Mitigation Projects or the Project Dollars expended to implement the Environmental Mitigation Projects in accordance with Sections XXII (Notices) and XIX (Information Collection and Retention).

VI. SO₂ CONTROL TECHNOLOGY, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

17. SO₂ Process System Operation Emissions Limits and Control Technology. No later than the dates set forth in the table below, Defendant shall install, and continuing thereafter, Defendant shall Continuously Operate, a WGS on each Process System or equipment as

specified in the table below so as to achieve and maintain during Process System Operation the Emissions Limits specified in the table below:

Process System or equipment	Control Technology	7-day Rolling Average Emissions Limit	365-day Rolling Average Emissions Limit	Date of Continuous Operation
Addis Process System	WGS	Interim 7-day Rolling Average Emissions Limit: No greater than 158 ppmvd (at 0% oxygen)	Interim 365-day Rolling Average Emissions Limit: No greater than 130 ppmvd (at 0% oxygen)	Applicable interim Emissions Limit: December 31, 2022
		Final 7-day Rolling Average Emissions Limit: Option A: No greater than 120 ppmvd (at 0% oxygen) Option B: No less than 120 ppmvd (at 0% oxygen) and no greater than 158 ppmvd (at 0% oxygen)	Final 365-day Rolling Average Emissions Limit: Option A: No greater than 80 ppmvd (at 0% oxygen) Option B: No less than 80 ppmvd (at 0% oxygen) and no greater than 130 ppmvd (at 0% oxygen)	Applicable final Emissions Limit: Pursuant to the protocol specified in Appendix E
Borger Common Stack	WGS	Interim 7-day Rolling Average Emissions Limit: No greater than 158 ppmvd (at 0% oxygen)	Interim 365-day Rolling Average Emissions Limit: No greater than 130 ppmvd (at 0% oxygen)	Applicable interim Emissions Limit: April 1, 2021
		Final 7-day Rolling Average Emissions Limit: Option A: No greater than 120 ppmvd (at 0% oxygen) Option B: No less than 120 ppmvd (at 0% oxygen) and no greater than 158 ppmvd (at 0% oxygen)	Final 365-day Rolling Average Emissions Limit: Option A: No greater than 80 ppmvd (at 0% oxygen) Option B: No less than 80 ppmvd (at 0% oxygen) and no greater than 130 ppmvd (at 0% oxygen)	Applicable final Emissions Limit: Pursuant to the protocol specified in Appendix E

18. WGS Design Specifications. Defendant shall submit to EPA and the applicable Plaintiff-State the process design specifications for the WGS specified in the table above no later than 24 months prior to the start of installation of the WGS. Defendant shall design the WGS specified in Paragraph 17 to achieve a minimum of 95% removal of SO₂ emissions at all times at the applicable Process System based on inlet SO₂ concentration of 1291 ppmvd to 3666 ppmvd (at 0% oxygen). In addition, if Defendant elects to comply with the applicable Emissions Limit pursuant to Option B, the Parties shall follow the protocol specified in Appendix E.

19. SO₂ Alternative Equivalent Pollution Control Technology. Alternatively, notwithstanding any provision of this Consent Decree to the contrary, no later than the applicable dates set forth in Paragraph 17, Defendant may install, and continuing thereafter shall Continuously Operate, an Alternative Equivalent Pollution Control Technology that is at least as effective as a WGS, so as to achieve and maintain the applicable Emissions Limits specified in Paragraph 17, provided there has been prior written request, no later than the applicable date set forth in Paragraph 18, and written approval of such Alternative Equivalent Pollution Control Technology pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree.

20. SO₂ Monitoring Requirements. Beginning no later than the dates specified in the table in Paragraph 17, Defendant shall use a CEMS (in accordance with the terms of this Paragraph) to monitor SO₂ emissions during Process System Operation and to report compliance with the terms and conditions of SO₂ Emission Limits in Paragraph 17 this Consent Decree. Defendant shall install, calibrate, certify, maintain and operate all CEMS in accordance with the equipment manufacturer's specifications and reference methods specified in 40 C.F.R. § 60.13

that are applicable to CEMS (including, for the avoidance of doubt, all other provisions), and Part 60, Appendixes A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B, to demonstrate compliance with the SO₂ Emissions Limits specified in Paragraph 17 of this Consent Decree.

21. Other Big Spring SO₂ Requirements. No later than the dates set forth in the table below, and continuing thereafter, at all times of Process System Operation, Defendant shall process carbon black feedstock with a sulfur content of no greater than the average weight specified in the table below:

Process System	365-day Rolling Average Sulfur Content Weight Percent	Date of Continuous Operation
Big Spring	2.80%	June 30, 2019

22. Feedstock Sulfur Content Monitoring Requirements. Beginning no later than the dates specified in the table in Paragraph 21, Defendant shall demonstrate compliance with the 365-day Rolling Average Sulfur Content Weight Percent in Paragraph 21 by either:

- a. at least once per calendar week, analyzing the sulfur content of the feedstock at a point just prior to where the feedstock oil is introduced into the reactors on a weight % basis, or
- b. within one Business Day of each feedstock delivery, calculating the feedstock sulfur content, through the following equation:

$$S_T = \frac{VS\rho + V_1S_1\rho_1}{V\rho + V_1\rho_1}$$

Where:

S_T = Specific feedstock sulfur content, after the delivery of feedstock, weight %

V = Volume of the feedstock, prior to the delivery of feedstock, gallons

S = Sulfur content of the feedstock, prior to the delivery of feedstock, weight %

ρ = Liquid density of the feedstock, prior to the delivery of feedstock, lb/gallon

V_I = Volume of feedstock delivered, gallons

S_I = Sulfur content of the feedstock delivered as certified by the feedstock supplier, weight %

ρ_I = Liquid density of the feedstock delivered as certified by the feedstock supplier, lb/gallon

23. SO₂ Caps.

- a. Addis. Defendant shall comply with an Addis SO₂ Cap (Flares only²) of no more than 433 tons per year, except if co-generation equipment is ever constructed at Addis, then once every five years the cap shall be 959 tons per year, in either case, on a 365-day block basis starting on December 31, 2022 (i.e., the first day included in the first 365-day block is December 31, 2022, and the first day included in the second 365-day block is December 31, 2023). For purposes of determining compliance with the Addis SO₂ Cap, SO₂ emissions shall be calculated pursuant to Appendix F.

² Addis shall be configured such that during operation of the Flares, the Dryers will still be controlled by the WGS and SCR.

- b. Borger. Defendant shall comply with a Borger SO₂ Cap (Facility-wide) of no more than 4540 tons per year, except once every five years the cap shall be 4978 tons per year, in either case, on a 365-day block-basis starting on April 1, 2021 (i.e., the first day included in the first 365-day block is April 1, 2021, and the first day included in the second 365-day block is April 1, 2022). For purposes of determining compliance with the Borger SO₂ Cap, SO₂ emissions shall be calculated pursuant to Appendix F.

VII. NO_x CONTROL TECHNOLOGY, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

24. NO_x Emissions Limits Applicable to Heat Load Operation, Startup, and Shutdown. No later than the dates set forth in the table below, and continuing thereafter, Defendant shall operate the reactors, boilers, dryers, and combustors at each Facility to collectively achieve and maintain the Emissions Limits specified in the table below, at all times, collectively, of Heat Load Operation, Startup, and Shutdown:

Facility	365-day Rolling Sum Emissions Limit	Date of Continuous Operation
Addis	No greater than 50 tons (in total for all reactors and boilers) for the prior 365 Days	December 31, 2022
Big Spring	No greater than 50 tons (in total for all reactors and boilers) for the prior 365 Days	June 30, 2020
Borger	No greater than 50 tons (in total for all reactors and boilers) for the prior 365 Days	April 1, 2021

25. Heat Load Operation, Startup, and Shutdown Compliance Calculation. Beginning no later than the dates specified in the table in Paragraph 24, and continuing thereafter, to evaluate compliance with the applicable 365-day Rolling Sum Emissions Limit specified in Paragraph 24, Defendant shall perform the following calculation, for each Day, summing as described, to derive cumulative NO_x emissions in tons:

$$X = \left(\sum_{i=1}^{365} \left[\frac{\phi * \text{consumption}_i}{2000 \text{ lbs}} \right] \right)$$

Where:

“X” = cumulative NO_x emissions (tons) during preceding 365 Days

“φ” = 0.48 lbs NO_x/MMBtu.

“i” = each Day in the preceding 365 Days

consumption_i = the amount of energy input from natural gas and oil (to account for the transition period if applicable) (in MMBtu) to the Process System per Day for each Day *i* of Heat Load Operation, Startup, or Shutdown. For any Day in which no Heat Load Operation, Startup, or Shutdown occur, consumption_i shall equal zero. The natural gas and oil heating values will be adjusted on a Monthly basis, either by analysis of the fuel, or based on data submitted by the natural gas vendor.

26. Alternative Heat Load Operation, Startup, and Shutdown Compliance Calculation. As an alternative to the calculation in Paragraph 25, beginning no later than the dates specified in the table in Paragraph 24, and continuing thereafter, to evaluate compliance with the applicable 365-day Rolling Sum Emissions Limit specified in Paragraph 24, Defendant may perform an alternative calculation, for each Day, to derive daily NO_x emissions in tons as a sum for the prior 365 Days, provided there has been prior written request, which specifies the basis for the derivation of such alternative calculation no later than 24 Months from the Effective Date of the Consent Decree, and written approval of such alternative calculation pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree.

27. NO_x Process System Operation Emissions Limits and Control Technology.

- a. No later than the dates set forth in the table below, Defendant shall install, and continuing thereafter, Defendant shall Continuously Operate, a SCR on each Process System or equipment specified in the table below so as to achieve and maintain during Process System Operation the Emissions Limits specified in the table below:

Process System or equipment	Control Technology	7-day Rolling Average Emissions Limit	365-day Rolling Average Emissions Limit	Date of Continuous Operation
Addis Process System	SCR	No greater than 54 ppmvd (at 0% oxygen)	No greater than 39 ppmvd (at 0% oxygen)	December 31, 2022
Big Spring Incinerator	SCR	No greater than 54 ppmvd (at 0% oxygen)	No greater than 39 ppmvd (at 0% oxygen)	June 30, 2020
Borger Common Stack	SCR	No greater than 54 ppmvd (at 0% oxygen)	No greater than 39 ppmvd (at 0% oxygen)	April 1, 2021

- b. As an alternative to the Emissions Limit specified in the table in Paragraph 27.a. above, for the Big Spring Incinerator and Borger Common Stack (and if co-generation equipment is ever constructed at Addis, then also at the Addis Process System), Defendant may elect to use the procedures in this Paragraph 27.b. to set an alternate Emissions Limit.
- i. If Defendant makes such an election, then, at least 30 Days prior to the Date of Continuous Operation specified in Paragraph 27.a. for Big Spring and Borger, and for Addis at least 30 Days prior to

Process System Operation utilizing co-generation equipment, Defendant shall submit to EPA and the applicable Plaintiff-State written notification in accordance with Section XXII (Notices) of Defendant's election to utilize the procedures in this Paragraph 27.b. to propose an alternate Emissions Limit. Defendant shall include with any such notice the proposed alternate Emissions Limit, as well as the technical basis for such proposal. The technical basis relied upon by Defendant in support of the proposed alternate Emissions Limit may include information furnished by the equipment vendor for the SCR, as well as other available and relevant information, and may take into account the facilities' existing process conditions for Big Spring and Borger and the expected process conditions using co-generation equipment for Addis, in all cases without adding supplemental heat.

- ii. Any such alternate Emissions Limit proposed by Defendant shall be no lower than 54/39 ppmvd (at 0% oxygen) and no higher than 80/70 ppmvd (at 0% oxygen) on a 7-day Rolling Average/365-day Rolling Average, respectively, and shall reflect a value which can be met with a reasonable certainty of compliance on the Facilities' existing process conditions for Big Spring and Borger and the expected process conditions using co-generation equipment for

Addis, in all cases without adding supplemental heat. After consultation with the applicable Plaintiff-State, EPA will determine the adjusted Emissions Limit within the aforementioned range, based on: (i) the information submitted by Defendant pursuant to this Paragraph 27.b., (ii) a reasonable certainty of compliance; and (iii) any other available and relevant information.

- iii. EPA shall notify Defendant in writing of EPA's determination of the adjusted Emissions Limit. During the period from the Date of Continuous Operation specified in Paragraph 27.a. until 60 Days after the date that EPA provides written notification to Defendant of EPA's determination of the adjusted Emissions Limit, Defendant shall comply with the alternate Emissions Limit proposed by Defendant pursuant to this Paragraph 27.b.
- iv. Beginning 60 Days after the date that EPA provides written notification to Defendant of EPA's determination of the adjusted Emissions Limit, and continuing thereafter, Defendant shall Continuously Operate the SCR so as to achieve and maintain compliance with the adjusted Emissions Limit identified by EPA.
- v. During any dispute under this Paragraph, Defendant shall continue to operate the SCR required under Paragraph 27.a. in compliance with the alternate Emissions Limit proposed by Defendant and in a manner consistent with good air pollution control practices in lieu

of meeting the EPA-adjusted Emissions Limit under this Paragraph

27.b.

28. SCR Design Specifications. Defendant shall submit to EPA the process design specifications for each Control Technology specified in the table in Paragraph 27. a. above no later than 24 Months (Addis and Borger) and 12 Months (Big Spring) prior to the start of installation of the pertinent Control Technology.

29. NO_x Alternative Equivalent Pollution Control Technology. Alternatively, notwithstanding any provision of this Consent Decree to the contrary, no later than the applicable dates set forth in Paragraph 27, Defendant may install, and continuing thereafter shall Continuously Operate, an Alternative Equivalent Pollution Control Technology that is at least as effective as a SCR, so as to achieve and maintain the applicable Emissions Limits specified in Paragraph 27, provided there has been prior written request, no later than the applicable date set forth in Paragraph 28, and written approval of such Alternative Equivalent Pollution Control Technology pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree.

30. NO_x Monitoring Requirements. Beginning no later than the dates specified in the table in Paragraph 27, Defendant shall use a CEMS (in accordance with the terms of this Paragraph) to monitor NO_x emissions during Process System Operation and to report compliance with the terms and conditions of the NO_x Emission Limits (Paragraph 27) of this Consent Decree. Defendant shall install, calibrate, certify, maintain, and operate all CEMS in accordance with the equipment manufacturer's specifications and reference methods specified in 40 C.F.R. § 60.13 (including, for the avoidance of doubt, all other provisions) that are applicable

to CEMS, and Part 60, Appendixes A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B, to demonstrate compliance with the NO_x Emissions Limits specified in Paragraph 27 of this Consent Decree.

31. NO_x Caps.

- a. Defendant shall comply with an Addis NO_x Cap (Flares only³) of no more than 41 tons per year, except if co-generation equipment is ever constructed at Addis, then once every five years the cap shall be 90 tons per year, in either case, on a 365-day block basis starting on December 31, 2022 (i.e., the first day included in the first 365-day block is December 31, 2022, and the first day included in the second 365-day block is December 31, 2023). For purposes of determining compliance with the Addis NO_x Cap, NO_x emissions shall be calculated pursuant to Appendix F.
- b. Defendant shall comply with a Borger NO_x Cap (Facility-wide) of no more than 640 tons per year except once every five years the cap shall be 682 tons per year, in either case, on a 365-day block basis starting on April 1, 2021 (i.e., the first day included in the first year is April 1, 2021, and the first day included in the second 365-day block is April 1, 2022). For purposes of determining compliance with the Borger NO_x Cap, NO_x emissions shall be calculated pursuant to Appendix F.
- c. Defendant shall comply with a Big Spring NO_x Cap (Flares only) of no

³ Addis shall be configured such that during operation of the Flares, the Dryers will still be controlled by the WGS and SCR.

more than 25 tons per year except once every five years the cap shall be 55 tons per year, in either case, on a 365-day block basis starting on June 30, 2020 (i.e., the first day included in the first year is June 30, 2020, and the first day included in the second 365-day block is June 30, 2021). For purposes of determining compliance with the Big Spring NO_x Cap, NO_x emissions shall be calculated pursuant to Appendix F.

VIII. PM CONTROL TECHNOLOGY, EMISSIONS LIMITS, BEST MANAGEMENT PRACTICES, AND EARLY WARNING SYSTEM REQUIREMENTS

32. PM Control Technology and Emissions Limits.

- a. No later than the dates set forth in the table below, Defendant shall install, and continuing thereafter, Defendant shall Continuously Operate, a WGS on each Process System or equipment specified in the table below so as to achieve and maintain the Emissions Limits specified in the table below:

Process System or Equipment	Control Technology	3-hour Average Emissions Limit for PM	Date of Continuous Operation
Addis Process System	WGS	No greater than 0.0069 gr/dscf	July 1, 2023
Borger Common Stack	WGS	No greater than 0.0069 gr/dscf	October 1, 2021

- b. As an alternative to the Emissions Limit specified in the table in Paragraph 32.a. above, Defendant may elect to use the procedures in this Paragraph 32.b. to set an alternate 3-Hour Average Emissions Limit.
- i. If Defendant makes such an election, then, at least 30 Days prior to

the Date of Continuous Operation specified in Paragraph 32.a., Defendant shall submit to EPA and the applicable Plaintiff-State written notification in accordance with Section XXII (Notices) of Defendant's election to utilize the procedures in this Paragraph 32.b. to propose an alternate 3-Hour Average Emissions Limit. Defendant shall include with any such notice the proposed alternate 3-Hour Average PM Emissions Limit, as well as the technical basis for such proposal. The technical basis relied upon by Defendant in support of the proposed alternate 3-Hour Average PM Emissions Limit may include information furnished by the equipment vendor for the WGS, any particulate matter distribution information developed by Defendant for the Process System or equipment, any PM stack test data collected for the Process System or equipment, as well as other available and relevant information.

- ii. Any such alternate 3-Hour Average Emissions Limit proposed by Defendant shall be no lower than 0.0069 gr/dscf and no higher than 0.015 gr/dscf on a 3-hour average basis, and shall reflect a value which can be met with a reasonable certainty of compliance. After consultation with the applicable Plaintiff-State, EPA will determine the adjusted 3-Hour Average Emissions Limit within the range of 0.0069 gr/dscf to 0.015 gr/dscf based on: (i) the information submitted by Defendant pursuant to this Paragraph

32.b., including the level of performance during stack test(s); (ii) a reasonable certainty of compliance; and (iii) any other available and relevant information.

- iii. EPA shall notify Defendant in writing of EPA's determination of the adjusted 3-Hour Average Emissions Limit. During the period from the Date of Continuous Operation specified in Paragraph 32.a. until 60 Days after the date that EPA provides written notification to Defendant of EPA's determination of the adjusted 3-Hour Average Emissions Limit, Defendant shall comply with the alternate 3-Hour Average PM Emissions Limit proposed by Defendant pursuant to this Paragraph 32.b.
- iv. Beginning 60 Days after the date that EPA provides written notification to Defendant of EPA's determination of the adjusted 3-Hour Average Emissions Limit, and continuing thereafter, Defendant shall Continuously Operate the WGS so as to achieve and maintain compliance with the adjusted 3-Hour Average Emissions Limit identified by EPA.
- v. During any dispute under this Paragraph, Defendant shall continue to operate the WGS required under Paragraph 32.a. in compliance with the alternate 3-Hour Average PM Emissions Limit proposed by Defendant and in a manner consistent with good air pollution control practices in lieu of meeting the EPA-adjusted 3-Hour

Average Emissions Limit under this Paragraph 32.b.

33. PM Stack Testing Requirements. Beginning no later than the dates specified in the table in Paragraph 32.a., and continuing annually thereafter, Defendant shall conduct a stack test for PM for each Process System or equipment specified therein to report compliance with the terms and conditions of Paragraph 32. No two annual tests shall be conducted less than 11 Months apart. The reference methods and procedures for performing PM stack tests and for determining compliance with the applicable PM 3-hour Average Emissions Limit shall be those specified in 40 C.F.R. § 60.8(f) and 40 C.F.R. Part 60, Appendix A-3, Reference Method 5/5B. Each test shall consist of three separate runs performed under representative operating conditions, not including periods of Startup, Shutdown, or Malfunction. The sampling time for each run shall be at least 60 minutes and the minimum sample volume of each run shall be 30 ft³ (dry volume, standard temperature basis).

34. Other PM Control Requirements. For all PM Emissions Equipment identified in Appendix B to this Consent Decree, Defendant shall Continuously Operate the associated PM Reduction Mechanism in accordance with the Method for Managing PM Emissions identified therein. Starting no later than 60 Days after the Effective Date of this Consent Decree, once each Operating Day, Defendant shall conduct a Method 22 of 40 CFR Part 60, Appendix A-7 visual assessment of the emissions from each piece of PM Emissions Equipment identified in Appendix B to this Consent Decree to determine if there are any detectable visible emissions. In the event that any visible emissions are observed from PM Emissions Equipment during the visual assessment described in this Paragraph, Defendant shall identify, address and resolve the source of visible emissions as expeditiously as practicable. If the visible emissions event occurs after

the date of Continuous Operation of the PM Early Warning System in accordance with Paragraph 36 of this Consent Decree, the event shall be considered resolved once the PM Early Warning System alarm is below the Action Level. If the visible emissions event is not resolved within 24 hours, once visibility conditions are sufficient for a Method 9 observation, Defendant shall conduct a six minute observation in accordance with Method 9 at least once every eight hours (during daylight hours), until visible emissions from the PM Emissions Equipment that triggered the event are less than 5% over the six minute average. Defendant shall maintain a record of each visual assessment conducted pursuant to this Paragraph sufficient to meet the requirements in Section XIV (Recordkeeping and Reporting Requirements).

35. Particulate Emissions Best Management Practices Control Plan. Within 60 Days of the Effective Date of this Consent Decree, Defendant shall implement the Particulate Emissions Best Management Practices Control Plan reflected in Appendix C at each of its Facilities.

36. PM Early Warning System. No later than the dates set forth in the table below, Defendant shall install, and continuing thereafter, Defendant shall Continuously Operate, a PM Early Warning System in accordance with the protocol specified in Appendix D:

Process System	Date of Continuous Operation
Addis Process System	December 31, 2018
Big Spring Process System	December 31, 2018
Borger Process System	December 31, 2018

IX. PROHIBITION ON USE OF FLARES

37. Prohibition On Use Of Flares. No later than the date set forth in the table below, Defendant shall permanently cease operation of any Flares at each Facility, except in the limited instance of (a) a Malfunction that satisfies the requirements of Section XVII (Affirmative Defenses To Certain Stipulated Penalties), (b) Inspection at the Alternative Combustion Technology, or (c) Force Majeure that satisfies the requirements of Section XVI (Force Majeure). During operation of any Flare in accordance with this Section IX (Prohibition on Use of Flares), the emissions from the Flare shall not be included in the calculation of any Emission Limits, but shall be included in the calculation of any Caps. In response to any of these of instances, Defendant shall operate the Flare only as necessary to comply with the carbon black MACT standard (40 C.F.R. § 63.1103(f)), minimize operation of the Flare to the extent possible, and comply with applicable law at all times the Flares are in operation.

Facility	Date
Addis	December 31, 2022
Big Spring	June 30, 2020
Borger	April 1, 2021

X. ADDITIONAL REQUIREMENTS FOR BORGER

38. Borger Repair, Replacement and Integrity Assessment.
- a. Repairs and/or Replacements. No later than two years after the Effective Date: (i) Defendant shall provide to EPA and TCEQ a certification by an outside engineering firm certifying that the firm oversaw all aspects of, and was involved with, Defendant's execution of the Integrity Correction

Plan (described below in Paragraph 38(d)(i)(D)) and that Defendant repaired or replaced any components of the Process System that allow for the unauthorized release of any Tail Gas, or other unauthorized emissions to the atmosphere, consistent with good engineering practices, and design specifications and manufacturer's instructions suitable for the process application, and (ii) Defendant shall begin implementation of an on-going maintenance plan to evaluate and test the mechanical and structural integrity of the Process System and correct any deficiencies no less frequently than once per calendar year.

- b. Integrity Assessment Plan. Defendant shall retain, at its expense, an outside engineering firm to assess the mechanical and structural integrity of its Borger Process System. No later than 180 Days after the Effective Date, Defendant shall submit to EPA and TCEQ for review and approval a plan developed by that outside engineering firm to identify any components of the Borger Process System that allow for the unauthorized release of any Tail Gas, or other unauthorized emissions to the atmosphere. The plan shall include a map of all Process System piping, ductwork, associated equipment (including, but not limited to the baghouses, main unit filters, reactors, cyclones, fans, and blowers), supporting structures, and previous repair attempts (patches, welds, etc.) to be tested, the mechanism for testing each component, a schedule for

testing each component, and an explanation of how the testing will be conducted in accordance with good engineering practices.

- c. Integrity Assessment. Defendant shall direct its outside engineering firm to complete the Integrity Assessment in accordance with the Integrity Assessment Plan no later than 90 Days after EPA's and TCEQ's approval of the Integrity Assessment Plan. Defendant shall provide at least 30 Days' notice prior to start of the Integrity Assessment, to enable the EPA and TCEQ to observe some or all of it.
- d. Integrity Report. Defendant shall direct its outside engineering firm to submit a report (the "Integrity Report") detailing the findings of the Integrity Assessment no later than 90 days after completing the Integrity Assessment. Defendant shall further direct its outside engineering firm to submit the Integrity Report simultaneously to Defendant and the EPA and TCEQ, as set forth in Section XXIII (Notices).
 - i. The Integrity Report shall include, at a minimum:
 - A. A description of how the Integrity Assessment Plan was implemented, including a detailed timeline.
 - B. Identification of any current failures (e.g., holes, cracks, corrosion, deterioration) and any failures likely to occur before the next scheduled maintenance, of any component of the Process System that allow for the release of any Tail Gas, combustion gas, or other emissions to the atmosphere.

- C. An itemized list prioritizing such failures from most severe to least severe, as assessed by volume of Tail Gas, combustion gases or other unauthorized emissions released to the atmosphere during times of normal operation.
 - D. A proposed schedule and corrective action plan (the “Integrity Correction Plan”) for addressing such failures, for EPA approval.
 - E. Any data (including, but not limited to, photos and test results) developed during the Integrity Assessment.
 - F. Signature and certification as set forth in Paragraph 59.
- ii. Defendant shall not influence any draft or final Integrity Report before its submittal to the EPA and TCEQ, and Defendant shall share any drafts it receives with the EPA and TCEQ within 7 Days of receipt from the outside engineering firm.
 - iii. Defendant may assert that information provided in the Integrity Report is protected as CBI as set forth in Paragraph 61.

XI. PROHIBITION ON NETTING CREDITS OR OFFSETS

39. Defendant shall neither generate nor use any CD Emissions Reductions: as netting reductions; as emissions offsets; to apply for, obtain, trade, or sell any emission reduction credits; or in determining whether a project would result in a significant emissions increase or significant net emissions increase in any PSD, Non-Attainment NSR, and/or minor New Source Review permit or permit proceeding.

40. The limitations set forth in Paragraph 39 above do not prohibit Defendant from seeking to, nor prohibit an applicable state agency from denying Defendant's ability to, generate or use Surplus Emission Reductions.

41. Nothing in this Section is intended to prohibit Defendant from seeking to, nor to prohibit an applicable state agency from denying, Defendant's ability to use CD Emissions Reductions for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and Non-Attainment NSR rules, but including, for example, Reasonably Achievable Control Technology rules) that apply to the facility; provided, however, that Defendant shall not be allowed to trade or sell any CD Emissions Reductions. Nothing in this Consent Decree is intended to preclude the CD Emissions Reductions from being considered by a State or EPA for the purpose of attainment demonstrations submitted pursuant to Section 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

XII. PERMITS

42. Where any compliance obligation under this Consent Decree requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit a timely and complete application for each such permit or approval and take all other actions necessary to obtain all such permits or approvals, allowing for all legally required processing and review, including requests for additional information by the permitting or approval authority necessary to process a permit application to satisfy the compliance obligations established by this Decree. Defendant may seek relief under the provisions of Section XVI (Force Majeure) for any delay in

the performance of any obligation under this Consent Decree resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, only if Defendant has (a) submitted timely and complete applications in a manner that provides the permitting authority sufficient and reasonable time to process the permit application, (b) responded to requests for additional information by the permitting authority necessary to process the application to satisfy the compliance obligations established by this Decree, (c) taken all other actions necessary to obtain such permits or approvals for the compliance obligations established by this Decree in a timely fashion, and (d) prosecuted appeals of any allegedly unlawful, invalid or otherwise objectionable terms and conditions, if any, imposed by the permitting authority in a timely fashion. Each Plaintiff-State agrees to work cooperatively with Defendant in reviewing all applications for permits necessary to comply with the requirements of this Consent Decree.

43. In addition to having first obtained any required preconstruction permits or other approvals pursuant to Paragraph 42 above, Defendant, in accordance with the applicable provisions of each Plaintiff-State's federally-enforceable operating permit regulations, shall apply to permanently include the requirements and limitations enumerated in this Paragraph into (i) a federally-enforceable permit (other than a Title V operating permit) or request a site-specific amendment to the applicable SIP, such that the requirements and limitations enumerated in this Paragraph become and remain 'applicable requirements' as that term is defined in 40 C.F.R. Part 70.2 and these requirements shall survive the termination of this Consent Decree in accordance with Section XXVIII (Termination) in the form of a federally-enforceable permit (other than a Title V operating permit) or a site-specific amendment to the applicable SIP or (ii) for the

consolidated Title V construction and operating permit program in Louisiana (for Addis), into a consolidated permit, such that the requirements and limitations enumerated in this Paragraph become and remain ‘applicable requirements’ as that term is defined in 40 C.F.R. Part 70.2 and shall survive the termination of this Consent Decree in accordance with Section XXVIII (Termination). The permit, approval or SIP amendment shall require compliance with the following requirements of this Consent Decree: any applicable (a) 7-day Rolling Average Emissions Limit for SO₂ or NO_x, (b) 365-day Rolling Average Emissions Limit for SO₂ or NO_x, (c) 365-day Rolling Sum Emissions Limit, (d) 365-day Rolling Average Sulfur Content Weight Percent, (e) PM Control Technology, Emissions Limits, Best Management Practices, and Early Warning System Requirements required by Section VIII, (f) Caps, and (g) requirements specified in Paragraphs 20 (SO₂ Monitoring Requirements), 22 (Feedstock Sulfur Content Monitoring Requirements), 30 (NO_x Monitoring Requirements), and 37 (Prohibition on Use of Flares). Following submission of an application for any permit or approval, Defendant shall cooperate with the appropriate permitting authority by promptly submitting the information that such permitting authority seeks that is necessary for incorporating the preceding list of requirements into a permit following its receipt of the application for the permit. Defendant agrees not to contest the submittal to EPA of any such proposed SIP revision that incorporates the requirements listed in this Paragraph 43 of this Consent Decree, or EPA’s approval of such submittal, or the incorporation of the requirements listed in this Paragraph 43 of this Consent Decree through these SIP requirements into Title V permits.

44. Unless Defendant has already complied with the requirement to include the provisions listed in Paragraph 43(ii) in a permit through its Title V permit, upon issuance of a

permit, approval or SIP amendment pursuant to the terms of Paragraph 43 of this Section, or in conjunction with the issuance of such permit, approval or SIP amendment, Defendant shall file any applications necessary to incorporate the requirements of the permit into the Title V operating permit for the relevant Facility. Defendant shall not challenge the inclusion in any such permit of the following terms, to the extent expressly imposed by this Consent Decree (a) 7-day Rolling Average Emissions Limit for SO₂ or NO_x, (b) 365-day Rolling Average Emissions Limit for SO₂ or NO_x, (c) 365-day Rolling Sum Emissions Limit, (d) 365-day Rolling Average Sulfur Content Weight Percent, (e) PM Control Technology, Emissions Limits, Best Management Practices, and Early Warning System Requirements required by Section VIII, (f) Caps, and (g) requirements specified in Paragraphs 20 (SO₂ Monitoring Requirements), 22 (Feedstock Sulfur Content Monitoring Requirements), 30 (NO_x Monitoring Requirements) , and 37 (Prohibition on Use of Flares). Notwithstanding the foregoing, nothing in this Consent Decree is intended nor shall it be construed to require the establishment of Emissions Limits or limits on the sulfur content of carbon black feedstock other than those Emissions Limits, and/or 365-day Rolling Average Sulfur Content Weight Percent, expressly prescribed in this Consent Decree nor to preclude Defendant from challenging any more stringent Emissions Limits, and/or 365-day Rolling Average Sulfur Content Weight Percent, should they be proposed for or included in a Title V operating permit or any other permit necessary to implement any compliance obligations under this Decree.

45. When permits or SIP amendments are required, Defendant shall complete and submit applications for such permits or SIP amendments to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit application or

application for a SIP amendment, including requests for additional information by the permitting authorities that are necessary to process an application for a permit to satisfy the compliance obligations established by this Decree. Any failure by Defendant to submit a timely and complete permit application or application for a SIP amendment shall bar any use by Defendant of Section XVI (Force Majeure), where a Force Majeure claim is based on permitting delays or delays associated with issuance of a SIP amendment.

46. Defendant shall provide EPA with a copy of each application for a permit to address or comply with any provision of this Consent Decree, 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.

47. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act and its implementing regulations. Such Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term or limit has or will become part of a Title V permit, subject to the terms of Section XXVIII (Termination).

48. Prior to Termination pursuant to the terms of Section XXVIII (Termination), Defendant shall ensure that the requirements and limitations enumerated in this Paragraph are included in the applicable Title V permit including any applicable (a) 7-day Rolling Average Emissions Limit for SO₂ or NO_x, (b) 365-day Rolling Average Emissions Limit for SO₂ or NO_x, (c) 365-day Rolling Sum Emissions Limit, (d) 365-day Rolling Average Sulfur Content Weight Percent, (e) PM Control Technology, Emissions Limits, Best Management Practices, and Early

Warning System Requirements required by Section VIII, (f) Caps, and (g) requirements specified in Paragraphs 20 (SO₂ Monitoring Requirements), 22 (Feedstock Sulfur Content Monitoring Requirements), 30 (NO_x Monitoring Requirements), and 37 (Prohibition on Use of Flares). For avoidance of doubt, the provisions of this Consent Decree in sections XVI (Force Majeure) and XVII (Affirmative Defenses to Certain Stipulated Penalties) are applicable to compliance with this Consent Decree only and shall not be incorporated into any permits or approvals obtained in compliance with this Consent Decree.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

49. Defendant shall submit each plan, report, or other submission required by this Consent Decree to the EPA and, as applicable, to the Plaintiff-State in which the Facility is located, whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. Whenever approval of such document is required pursuant to this Consent Decree, EPA, after consultation with Plaintiff-State(s), as applicable, shall in writing: a) approve the submission; b) approve the submission upon specified conditions; c) approve part of the submission and disapprove the remainder; or d) disapprove the submission, identifying the reasons for such disapproval.

50. If the submission is approved pursuant to Paragraph 49.a., Defendant shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 49.b. or .c., Defendant shall, upon written direction from EPA after consultation with the applicable Plaintiff-State, take all actions required by the approved plan, report, or other item that EPA determines are

technically severable from any disapproved portions, subject to Defendant's right to dispute only the specified conditions or the disapproved portions, under Section XVIII of this Decree (Dispute Resolution)

51. If the submission is disapproved in whole or in part pursuant to Paragraph 49.c. or .d., Defendant shall, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Defendant shall proceed in accordance with the preceding Paragraph. Any stipulated penalties applicable to the original submission, as provided in Section XV (Stipulated Penalties) of this Decree, shall accrue during the 45 Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendant's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

52. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA after consultation with the applicable Plaintiff-State may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any deficiencies, subject to Defendant's right to invoke Dispute Resolution and the right of EPA and the applicable Plaintiff-State to seek stipulated penalties as provided in the preceding Paragraphs.

XIV. RECORDKEEPING AND REPORTING REQUIREMENTS

53. Within 30 Days after the end of each half calendar year (i.e., by January 30th and July 30th) after the Effective Date, until termination of this Decree pursuant to Section XXVIII (Termination), Defendant shall submit a semi-annual report to EPA and Plaintiff-States for the immediately preceding half calendar year period that shall contain the information described in this Paragraph 53.a.-j. for such immediately preceding half calendar year period:

- a. A description of the progress of the construction of the Control Technologies, CEMS, and PM Early Warning Systems required by this Consent Decree, including:
 - i. if construction is not underway, any available information concerning the construction schedule and the execution of major contracts;
 - ii. if construction is underway, the estimated percent of installation as of the end of the reporting period, the current estimated construction completion date, and a brief description of completion of significant milestones during the reporting period;
 - iii. any information indicating that installation and commencement of operation may be delayed, including the nature and cause of the delay, and any steps taken by Defendant to mitigate such delay;
 - iv. once construction is complete, the dates the equipment was placed in service and/or commenced Continuous Operation and the dates of any testing that was performed during the period;

- b. All information necessary to demonstrate compliance with all applicable Emissions Limits, Caps, 365-day Rolling Average Sulfur Content Weight Percent, and other provisions in Sections VI (SO₂ Control Technology, Emissions Limits, and Monitoring Requirements), VII (NO_x Control Technology, Emissions Limits, and Monitoring Requirements), VIII (PM Control Technology, Emissions Limits, Best Management Practices, and Early Warning System Requirements), and Section IX (Prohibition on Use of Flares);
- c. All data collected for the Big Spring Process System, from the time any 365-day Rolling Average Sulfur Content Weight Percent is exceeded until compliance is achieved, and an explanation of any periods of downtime of any relevant equipment that prohibited the collection of such data;
- d. All CEMS data collected for each Process System, from the time any Emissions Limit and Caps in Sections VI (SO₂ Control Technology, Emissions Limits, and Monitoring Requirements) and VII (NO_x Control Technology, Emissions Limits, and Monitoring Requirements) is exceeded until compliance is achieved, and an explanation of any periods of downtime of such CEMS;
- e. A copy of the protocol for any PM stack tests performed in accordance with the requirements of Paragraph 33;
- f. All PM Early Warning System data collected, from the time a PM Early Warning System alarm is triggered until the PM Early Warning System

data have returned to below the action levels triggering an alarm condition, and an explanation of any periods of PM Early Warning System downtime;

- g. A description of any potential violation of the requirements of this Consent Decree, including any exceedance resulting from Malfunctions, any exceedance of an Emissions Limit, any exceedance of the Caps, any exceedance of a 365-day Rolling Average Sulfur Content Weight Percent, or any failure to install, commence operation or Continuously Operate any Control Technology or any PM Early Warning System, which includes:
 - i. the date and duration of, and the quantity of any emissions related to, the potential violation;
 - ii. a full explanation of the primary cause and any other significant contributing cause(s) of the potential violation;
 - iii. an analysis of all reasonable interim and long-term remedial steps or corrective actions, including all design, operation, and maintenance changes consistent with good engineering practices, if any, that could be taken to reduce or eliminate the probability of recurrence of such potential violation, and, if not already completed, a schedule for its (their) implementation, or, if Defendant concludes that remedial steps or corrective actions should not be conducted, the basis for that conclusion;
- h. If no violations occurred during a reporting period, a statement that no

violations occurred;

- i. A description of the status of any permit applications and any proposed SIP revisions required under this Consent Decree; and
- j. A summary of all actions undertaken and Project Dollars expended during the reporting period, as well as any cumulative Project Dollars expended, and the estimated environmental benefits achieved to date in satisfaction of the requirements of Section V (Environmental Mitigation) and Appendix A.

54. If Defendant violates, or has reason to believe that it may violate, any requirement of this Consent Decree, including any exceedance resulting from Malfunctions, any exceedance of an Emissions Limit, any exceedance of the Caps, any exceedance of a 365-day Rolling Average Sulfur Content Weight Percent, any failure to install, commence operation or Continuously Operate any Control Technology or any PM Early Warning System, or any event that triggers a PM Early Warning System alarm, Defendant shall notify EPA and the applicable Plaintiff-State of such event, and its likely duration, in writing, within 30 Business Days of the Day Defendant first becomes aware that it has violated or may violate the Decree, with an explanation of the likely cause of the event, remedial steps or corrective action taken, or to be taken, including all design, operation, and maintenance changes consistent with good engineering practices, if any, to reduce or eliminate the probability of recurrence of such violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section XVI (Force Majeure) if Defendant contends a Force Majeure event occurred.

55. Whenever any violation of this Consent Decree, or of any applicable permits required under this Consent Decree, or any other event affecting Defendant's performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA and the applicable Plaintiff-State, orally or by electronic or facsimile transmission as soon as possible, but no later than seven Days after Defendant first knew, or should have known, of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

56. Within 60 Days following the completion of each Environmental Mitigation Project required under this Consent Decree, Defendant shall submit to the EPA and the applicable Plaintiff-State a report that documents the date that the Environmental Mitigation Project was completed, the results from implementing the Environmental Mitigation Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendant in implementing the Environmental Mitigation Project.

57. All reports shall be submitted as set forth in Section XXII (Notices). All data shall be reported using the number of significant digits in which the pertinent standard or limit is expressed.

58. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted 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 fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

59. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

60. Any information provided pursuant to this Consent Decree may be used by the Plaintiffs in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

61. Defendant may also assert that information required to be provided under this Section is protected as “Confidential Business Information” (“CBI”) under 40 C.F.R. Part 2 or any applicable state laws. If the Defendant elects to do so, it shall designate any such information as CBI subject to 40 C.F.R. Part 2 or the applicable state law, and follow the requirements of 40 C.F.R. Part 2 or the applicable state law for the protection of such information, including by segregating the CBI material from the rest of the report, and, upon request of EPA, substantiating each element of each CBI claim in the report. Any information to be provided to LDEQ that Defendant wishes to protect as CBI shall follow the law and procedures set forth in the applicable provisions of La. R.S. 30:2030; La. R.S. 30:2074.D, and LA ADMIN CODE tit. 33, Pt. I, Chapter 5. Any information to be provided to TCEQ that Defendant wishes to protect as CBI shall follow the law and procedures set forth in the applicable provisions of Tex Gov't Code § 552.110 and Tex Gov't Code § 552.305. No

monitoring data or other data evidencing the amount or content of emissions from any Facility shall be considered as CBI or subject to any privilege, provided, however, that nothing within this provision prohibits Defendant from invoking Paragraph 94 and the confidential business determination process specified therein, including over feedstock information. Plaintiffs reserve all rights to dispute such a claim.

XV. STIPULATED PENALTIES

62. Defendant shall be liable for stipulated penalties jointly to the United States and the applicable Plaintiff-State for violations of this Consent Decree with respect to Addis, Big Spring and Borger, as specified in the table below, unless excused under Section XVI (Force Majeure) or Defendant establishes a defense under Section XVII (Affirmative Defense to Certain Stipulated Penalties). For violations of this Consent Decree that only concern Addis, Defendant shall be liable for stipulated penalties jointly to the United States and LDEQ. For violations of the Consent Decree that only concern Big Spring or Borger, Defendant shall be liable for stipulated penalties jointly to the United States and the State of Texas. Violation of any Emissions Limit, or 365-day Rolling Average Sulfur Content Weight Percent is a violation on every Day on which the average or sum is based and each subsequent Day of violation of such Emissions Limit, or 365-day Rolling Average Sulfur Content Weight Percent is subject to the corresponding penalty per Day as specified in the table below, provided that, when a violation of an Emissions Limit (for the same pollutant and from the same source), or 365-day Rolling Average Sulfur Content Weight Percent recurs within periods of less than seven Days, Defendant shall not pay a second or multiple daily stipulated penalty for any Day of recurrence for which a stipulated penalty is already payable. Stipulated penalties may only be assessed once for a given

Day within any averaging or summation period for violation of any particular Emissions Limit, Caps, or 365-day Rolling Average Sulfur Content Weight Percent.

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section IV (Civil Penalty)	\$5,000 per Day
b. Failure to comply with any applicable Emissions Limit, Caps, or 365-day Rolling Average Sulfur Content Weight Percent, where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$1,000 per Day per violation
c. Failure to comply with any applicable Emissions Limit, Caps, or 365-day Rolling Average Sulfur Content Weight Percent, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$2,000 per Day per violation
d. Failure to comply with any applicable Emissions Limit, Caps, or 365-day Rolling Average Sulfur Content Weight Percent, where the violation is greater than 10% in excess of the limits set forth in this Consent Decree	\$3,000 per Day per violation
e. Failure to install, commence operation, or Continuously Operate a Control Technology required under this Consent Decree	\$5,000 per Day per violation during the first 30 Days, \$10,000 per Day per violation for the next 30 Days, and \$37,500 per Day per violation thereafter
f. Failure to install, commence operation, or Continuously Operate a PM Early Warning System as required under this Consent Decree	\$1,000 per Day per violation
g. Failure to install or operate a CEMS as required in this Consent Decree	\$1,000 per Day per violation
h. Failure to apply for any permit required by Section XII (Permits)	\$1,000 per Day per violation

Consent Decree Violation	Stipulated Penalty
i. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required in this Consent Decree	\$750 per Day per violation during the first ten Days, \$1,000 per Day per violation thereafter
j. Failure to timely submit, modify, or implement, as approved, a report, plan, study, analysis, protocol, or other submittal required with respect to Environmental Mitigation Projects prescribed in Section V (Environmental Mitigation) or Appendix A	\$750 per Day per violation during the first ten Days, \$1,000 per Day per violation thereafter
k. Any other violation of this Consent Decree	\$1,000 per Day per violation

63. Subject to the provisions of Paragraph 62 above, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree. The United States or Plaintiff-State(s), or any of the foregoing, may seek stipulated penalties under this Section with respect to violations involving Addis (US and LDEQ), Big Spring and Borger (US and TCEQ only). Where the United States and a Plaintiff-State seek stipulated penalties for the same violation of this Consent Decree, Defendant shall pay 50% to the United States and 50% to the Plaintiff-State. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiffs.

64. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' and/or Plaintiff-State's written demand, unless Defendant elects within 20 Days of receipt of written demand to dispute the imposition or accrual of stipulated penalties in accordance with the provisions in Section XVIII (Dispute Resolution) of this Consent Decree.

65. EPA and Plaintiff-State may, in the unreviewable exercise of their collective or individual discretion, reduce or waive their portion of stipulated penalties otherwise due to either the United States or Plaintiff-State under this Consent Decree.

66. Stipulated penalties shall continue to accrue as provided in this Section during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

- a. If the dispute is resolved by agreement between the Parties or by a decision of the United States and/or Plaintiff-State that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest accruing from the 31st Day after the written demand in Paragraph 65, within 30 Days of the effective date of the agreement or the receipt of EPA's and/or Plaintiff-State's decision or order.
- b. If the dispute is appealed to the Court and the United States and/or Plaintiff-State are the prevailing party, in whole or in part, as may be determined by the Court, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest accruing from the 31st Day after the written demand in Paragraph 64, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.
- c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest accruing

from the 31st Day after the written demand in Paragraph 64, within 15 Days of receiving the final appellate court decision.

67. Defendant shall pay stipulated penalties owing to the United States and/or Plaintiff-State in the manner set forth and with the confirmation notices to the persons specified in Section IV (Civil Penalty), except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

68. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States and/or Plaintiff-States from securing any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

69. 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 and/or Plaintiff-States for Defendant's violation of this Consent Decree or applicable law, except that for any violation of this Consent Decree that is also a violation of any applicable statute or regulation, Defendant shall be allowed a credit, dollar for dollar, for any stipulated penalties paid, against any statutory penalties imposed for such violation, including penalties resulting from enforcement pursuant to Paragraphs 62 and 68.

XVI. FORCE MAJEURE

70. "Force Majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant, its Contractors, or entity controlled by Defendant that causes a delay or impediment to performance in complying with any obligation

under this Consent Decree despite Defendant's best efforts to fulfill the obligation including, but not limited to, delays caused by labor strikes, transport delays, and civil unrest, depending on the circumstances of the particular claim. The requirement that Defendant exercises 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 and/or violation and/or emissions during such event to the greatest extent possible. Force Majeure does not include Defendant's financial inability to perform any obligation under this Consent Decree. Unanticipated or increased costs or expenses associated with the performance of Defendant's obligations under this Consent Decree shall not constitute circumstances beyond Defendant's control, nor serve as the basis for an extension of time under this Section, and shall not constitute an event of Force Majeure.

71. If any event occurs or has occurred that may delay or prevent compliance with the performance of any obligation under this Consent Decree, as to which Defendant intends to assert a claim as an event of Force Majeure, Defendant shall provide notice orally or by electronic or facsimile transmission to the representatives of EPA and Plaintiff-States designated to receive notice pursuant to Section XXII (Notices) as soon as practicable but no later than seven Business Days following the date Defendant first knew that the claimed Force Majeure event may cause such delay and give rise to a claim of Force Majeure. Defendant shall provide written notice of the event as soon as practicable, but in no event later than 21 Business Days following the date when Defendant first knew that the event might cause such delay. The written notice shall reference this Paragraph of the Consent Decree and explain and describe the reasons for the delay, the anticipated duration of the delay, all actions taken or to be taken to prevent or

minimize the delay, a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay, and Defendant's rationale for attributing such delay to a Force Majeure event if it intends to assert such a claim. Defendant shall include with any written notice all available documentation supporting the claim that the delay was attributable to a Force Majeure event. Defendant shall be deemed to know of any circumstance of which Defendant's Contractors, or any entity controlled by it, knew or should have known.

72. Failure by Defendant to comply with the notice requirements of Paragraph 71 renders this Section voidable by EPA, as to the specific event for which Defendant has failed to comply with such notice requirement. If so voided, it shall be of no effect as to the particular event involved.

73. If EPA, after consultation with the applicable Plaintiff-State, agrees that the delay or anticipated delay is attributable to a Force Majeure event, the Parties may reach agreement and stipulate in writing to an extension of the required deadline(s) for all requirement(s) affected by the Force Majeure event for a period equivalent to the delay actually caused by the Force Majeure event, or such other period as may be appropriate in light of the circumstances. If such stipulation results in a material change to the terms of the Consent Decree, the stipulation shall be filed as a modification to the Consent Decree pursuant to Section XXV (Modification). 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. If the Parties do not reach agreement on the appropriate extension of any deadlines affected by a Force Majeure event, EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the Force Majeure event. Defendant shall comply

with the extended deadlines specified in the notice from EPA, subject to the provisions of Section XVIII (Dispute Resolution).

74. If EPA, after consultation with the applicable Plaintiff-State, does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, EPA will notify Defendant in writing of its decision.

75. If Defendant elects to invoke the formal dispute resolution procedures set forth in Section XVIII (Dispute Resolution), it shall do so no later than 45 Days after receipt of EPA's notice pursuant to Paragraph 73 or Paragraph 74, whichever applies, and shall first comply with the provisions for informal dispute resolution contained in Section XVIII (Dispute Resolution) before proceeding to formal dispute resolution. In any such proceeding in accordance with formal dispute resolution procedures, Defendant shall have the burden of demonstrating 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 Defendant complied with the requirements of Paragraphs 70-71, above. If Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

76. This Court shall not draw any inferences nor establish any presumptions adverse to any Party as a result of Defendant delivering a notice of Force Majeure or the Parties' inability to reach agreement.

XVII. AFFIRMATIVE DEFENSES TO CERTAIN STIPULATED PENALTIES

77. If any of Defendant's Process Systems exceeds a 3-hour Average Emissions Limit, or a 7-day Rolling Average Emissions Limit due to a Malfunction, Defendant, bearing the burden of proof by a preponderance of the evidence, has an affirmative defense to a claim for stipulated penalties under this Consent Decree, if Defendant complies with the notice and reporting requirements of Paragraph 78 of this Section, and demonstrates all of the following:

- a. The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond Defendant's control;
- b. The excess emissions did not stem from any activity or event that was foreseeable and avoidable, nor could have been avoided by operation and maintenance practices in accordance with manufacturers' specifications and good engineering and maintenance practices;
- c. The air pollution control equipment and processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
- d. Repairs were made as expeditiously as practical when Defendant knew or should have known that the applicable 3-hour Average Emissions Limit, or a 7-day Rolling Average Emissions Limit was being or would be exceeded;
- e. Defendant took measures to limit the amount and duration of the excess emissions (including any bypass) in a manner consistent with good practice for minimizing emissions;

- f. All practical steps were taken to minimize the impact of the excess emissions on ambient air quality;
- g. Relevant emission monitoring systems were kept in operation to the extent practical;
- h. Defendant's actions in response to the excess emissions were documented by properly signed or otherwise validated contemporaneous operating logs, if applicable, or other relevant evidence;
- i. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- j. Defendant properly and promptly notified Plaintiffs as required by this Consent Decree.

78. To assert an affirmative defense for Malfunction under Paragraph 77, Defendant shall provide notice to the Plaintiffs in writing of Defendant's intent to assert an affirmative defense in Defendant's semi-annual progress reports required by Paragraph 53. The notice shall contain:

- a. The identity of each stack or other emission point where the excess emissions occurred;
- b. The magnitude of the excess emissions expressed in the units of the applicable Emissions Limits and the operating data and calculations used in determining the magnitude of the excess emissions;
- c. The time and duration or expected duration of the excess emissions;
- d. The identity of the equipment from which the excess emissions emanated;

- e. The nature and cause of the emissions;
- f. The steps taken to remedy the Malfunction and the steps taken or planned to prevent the recurrence of the Malfunctions;
- g. The steps that were or are being taken to limit the excess emissions; and
- h. If Defendant's permit contains procedures governing source operation during periods of Malfunction and the excess emissions resulted from Malfunction, a list of the steps taken to comply with the permit procedures.

79. The affirmative defense provided herein is only an affirmative defense to stipulated penalties for violations of this Consent Decree, and not a defense to any civil or administrative action for injunctive relief. A Malfunction shall not constitute a Force Majeure Event unless the Malfunction also meets the definition of a Force Majeure Event, as provided in Section XVI (Force Majeure).

XVIII. DISPUTE RESOLUTION

80. The dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree, including, but not limited to, Section XV (Stipulated Penalties) and Section XVI (Force Majeure). Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action to enforce any obligation of Defendant arising under this Decree.

81. 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

Defendant sends the United States, and the applicable Plaintiff-State, a written notice of dispute. Such notice of dispute shall clearly describe the nature of the dispute and shall state Defendant's position with regard to such dispute. The Parties shall expeditiously schedule a meeting to discuss the dispute informally not later than 10 days after the receipt of such notice. The period of informal negotiations shall not exceed 20 Days from the date of sending the notice of dispute, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States and the applicable Plaintiff-State, shall be considered binding unless, within 20 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

82. Defendant may invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the applicable Plaintiff-State, in accordance with Section XXII (Notices), a written statement of position regarding the matter in dispute. The statement of position shall include, but may not necessarily be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

83. The Plaintiffs shall serve their statement of position within 45 Days of receipt of Defendant's statement of position. The Plaintiffs statement of position shall include, but may not necessarily be limited to, any factual data, analysis, or opinion supporting its position and any supporting documentation relied upon by the Plaintiffs. The statement of position of the Plaintiffs shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

84. Defendant may seek judicial review of the dispute by filing with the Court, and serving on the United States and the applicable Plaintiff-State, in accordance with Section XXII (Notices), a motion requesting judicial resolution of the dispute. The motion shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree. The Plaintiffs shall file their response to Defendant's motion within 21 Days of the date of service of the motion, which shall be served on Defendant in accordance with Section XXII (Notices) and the electronic case filing (ECF) requirements of the Court. Defendant may file a reply within 7 Days of the date of service of the response in accordance with Section XXII (Notices) and the ECF filing requirements of the Court.

85. Except as otherwise provided in this Consent Decree, the Court shall decide all disputes pursuant to applicable principles of law. The disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute in the Parties' initial filings with the Court under Paragraph 84. Except as otherwise provided in this Consent Decree, in any dispute brought under this Section XVIII (Dispute Resolution), Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree.

86. The time periods set out in this Section may be shortened or lengthened by a joint motion among the Parties or upon motion to the Court by one of the Parties to the dispute, explaining the basis for seeking such a scheduling modification.

87. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant 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 and in accordance with any extension or modification of the schedule for completion of work as provided in Paragraph 73. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XV (Stipulated Penalties).

88. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, in writing, or this Court may order, an extension or modification of the schedule for the completion of the work required under this Consent Decree. Defendant shall be liable for stipulated penalties pursuant to Section XV (Stipulated Penalties) for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that Defendant shall not be precluded from asserting that an event of Force Majeure has caused or may cause a delay in complying with the extended or modified schedule.

89. Issuance, renewal, modification, denial or revocation of a permit and issuance of orders or other actions by state agencies are not themselves subject to dispute resolution under this Consent Decree. However, subject to Section XII (Permits) and XVI (Force Majeure), this Paragraph in no way limits Defendant's right to assert in a dispute under this Decree that a State's action or inaction (on a permit application or any other request by Defendant) prevented Defendant from complying with an obligation under this Decree.

XIX. INFORMATION COLLECTION AND RETENTION

90. The United States, and its authorized representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree, and LDEQ (as to Addis only) and TCEQ (as to Big Spring and Borger only) and its authorized representatives, including attorneys, contractors, and consultants, shall have the right of entry, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States or LDEQ or TCEQ in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, Contractors, or consultants;
- d. obtain copies of documents, including photographs and similar data, relating to activities required under this Consent Decree; and
- e. assess Defendant's compliance with this Consent Decree.

91. Until five years after the complete termination of this Consent Decree, Defendant shall retain in electronic form, and shall instruct its Contractors and agents to preserve in electronic form, all non-identical copies of all documents and records in its or their Contractors' or agents' possession or control, or that come into its or their Contractors' or agents' possession or control, and that relate to Defendant's performance of its 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, upon request by the United States or the applicable Plaintiff-State, Defendant shall provide

copies of any documents, records, or other information required to be maintained under this Paragraph.

92. At the conclusion of the information-retention period provided in Paragraph 91 above, Defendant shall notify the United States and the applicable Plaintiff-State at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of Paragraph 91 and, upon request by the United States or the applicable Plaintiff-State, Defendant shall deliver any such documents, records, or other information to EPA or the applicable Plaintiff-State.

93. Defendant may assert that documents, records, or other information requested by the United States or Plaintiff-State under this Decree are privileged under the attorney-client privilege or any other privilege recognized by federal law, Louisiana law, or Texas law. If 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 basis of the privilege asserted by Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

94. All information and documents submitted by Defendant to EPA or LDEQ pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) Defendant claims and substantiates in accordance with 40 C.F.R.

Part 2 and any applicable State law that the information and documents contain confidential business information. All information and documents submitted by Defendant to TCEQ or the State of Texas pursuant to this Consent Decree shall be subject to any applicable law providing public disclosure of documents, including but not limited to the Freedom of Information Act, 5 U.S.C. § 552, and the Texas Public Information Act, Tex. Gov't Code ch. 552. As to any such information that Defendant seeks to protect as confidential business information and/or confidential trade secret, commercial, or financial information, Defendant shall follow the procedures set forth in the applicable law, including 40 C.F.R. Part 2 and Tex. Gov't Code § 552.305.

95. 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 applicable Plaintiff-State pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XX. EFFECT OF SETTLEMENT / RESERVATION OF RIGHTS

96. Entry of this Consent Decree shall resolve:
- a. All civil claims of the United States and LDEQ arising under Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 to 7492, §§ 7501 to 7515, the regulations promulgated thereunder at 40 C.F.R. §§ 52.21, 51.165 and 51.166, the portions of applicable SIPs and related rules adopted pursuant to 40 C.F.R. §§ 51.165 and 51.166, and under Subchapter V of the Clean Air Act, §§ 7661 to 7661f and the regulations promulgated thereunder, with

respect to SO₂, NO_x and PM and any permit condition that incorporates one or more of the foregoing regulatory provisions, that arose from modifications of the Process Systems covered by this Consent Decree that commenced prior to the Date of Lodging of this Consent Decree, including without limitation the allegations of noncompliance set forth in the Complaint and in the Notices of Violation issued by EPA to Defendant. Entry of this Consent Decree shall resolve all civil claims of the United States and LDEQ arising from the facts and circumstances otherwise set forth in the Notices of Violation issued by EPA to Defendant or in the Complaint, including claims arising from violations of the Clean Air Act occurring prior to the Date of Lodging, including from the facts and circumstances identified in the following EPA inspections of the Facilities: at Borger, on August 16, 2017, October 17 and 18, 2017; at Big Spring, on March 15 and 16, 2016; and at Addis, on August 1, 2011.

- b. The civil claims of the State of Texas through the Date of Lodging of this Consent Decree for: (i) the violations alleged in the Complaint filed in this action; (ii) the violations alleged in the Notices of Violation issued by the EPA to Defendant on September 18, 2012, January 11, 2013, and September 26, 2017 for Big Spring and Borger; (iii) the violations identified in EPA Air Inspection Reports of Borger dated September 9, 2017 and October 30, 2017, as well as violations identified in the EPA Air Inspection Report of Big Spring for inspection dates March 15 through 17, 2016; and (iv) exceeding the Title

V and PSD permit limit for NO_x emissions for the Plant 2 Dryer Stack (EPN 122) at Borger from March 30, 2017 through September 28, 2017, in violation of 30 TAC §§, 116.115(b)(2)(F), 116.115(c), Special Condition 1A of TCEQ Air Permit Numbers 1867A and PSDTX 1032, and Title V Permit O-1414. The aforementioned Notices of Violation, EPA Air Inspection Reports, Air Permit Numbers 1867A and PSDTX 1032, and Title V Permit O-1414 are incorporated into this paragraph 96(b) of this Consent Decree by reference and made a part hereof.

97. Notwithstanding the resolution of liability in Paragraph 96, nothing in this Consent Decree precludes the United States and/or Plaintiff-States from seeking from Defendant injunctive relief, penalties, or other appropriate relief for violations by Defendant of the regulatory requirements identified in Paragraph 96 resulting from (1) construction or modification that commenced prior to the Date of Lodging of the Consent Decree, if the resulting violations do not relate to the Process Systems covered by this Consent Decree or do not relate to NO_x, SO₂ or PM or (2) any construction or modification that commences after the Date of Lodging of the Consent Decree. Nothing in this Consent Decree limits or restricts any defenses otherwise available to Defendant in responding to any enforcement action addressed by this Paragraph.

98. The United States and Plaintiff-States reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or Plaintiff-States 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 96. The United States and Plaintiff-States 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, one or more of Defendant's Facilities, whether related to the violations addressed in this Consent Decree or otherwise.

99. In any subsequent administrative or judicial proceeding initiated by the United States or Plaintiff-States for injunctive relief, civil penalties, or other appropriate relief relating to the Facilities or to Defendant's violations, Defendant 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 Plaintiff-States 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 96 of this Section.

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

101. This Consent Decree does not limit or affect the rights of Defendant or of the United States or Plaintiff-States 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 Defendant, except as otherwise provided by law.

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

XXI. COSTS

103. Within 30 Days after the Effective date of this Consent Decree, Defendant shall pay \$10,000 attorney's fees to the State of Texas. If any portion of such attorney's fees due to the State is not paid when due, Defendant shall pay interest on the amount past due, accruing from the Effective Date through the date of payment at the rate specified in Paragraph 9 above. All payments under this paragraph shall be made by wire transfer to the Texas Comptroller of Public Accounts—Federal Reserve Clearing Account for the Office of the Attorney General, as provided in Appendix G. Otherwise, the Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and Plaintiff-States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

XXII. NOTICES

104. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by the Consent Decree, they shall be made in writing and addressed as follows:

To EPA:

Director, Air Enforcement Division
U.S. Environmental Protection Agency
MC 2242A
1200 Pennsylvania Ave. NW
Washington, D.C. 20460

and

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

To the United States (in addition to the EPA addresses above):

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-10663

For all submissions referring to the Addis Facility, to LDEQ:

Brandon B. Williams, LA BAR Roll# 27139
Attorney
Office of the Secretary, Legal Division
Louisiana Department of Environmental Quality
P.O. Box 4302
Baton Rouge, Louisiana 70821-4302

and

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

For all submissions referring to the Big Spring or Borger Facilities, to TCEQ:

Director of Litigation
Litigation Division, MC-175
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

For all submission referring to the Big Spring or Borger Facilities, to the State of Texas (in addition to the TCEQ address above):

Division Chief
Environmental Protection Division
Office of the Attorney General of Texas
P.O. Box 12548, MC 066
Austin, Texas 78711-2548
Reference AG # CX9078975896
To Defendant:

Wesley A. Wampler
Vice President – Research & Environmental Affairs and
Thomas W. White
Vice President
Sid Richardson Carbon, Ltd.
201 Main Street, Suite 3000
Fort Worth, Texas 76102

and

Robert T. Stewart
Kelly Hart & Hallman LLP
303 Colorado Street, Suite 2000
Austin, Texas 78701

105. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address or means of transmittal provided in this Section XXII.

106. All notifications, communications, or submissions made pursuant to this Section shall be sent as follows: (a) by overnight mail or overnight delivery service to the EPA, and by overnight mail to the United States (in addition to the EPA, as set forth in paragraph 104), with a

copy by electronic mail if practicable; (b) by overnight mail or overnight delivery service to the TCEQ, and by overnight mail to the State of Texas (in addition to the TCEQ, as set forth in paragraph 104), with a copy by electronic mail if practicable; (c) by electronic mail to all Plaintiffs, if practicable, but if not practicable, then by overnight mail or overnight delivery service to Plaintiff-States; and (d) if to Defendant, by overnight mail or overnight delivery service, with a copy by electronic mail if practicable.

107. Notices submitted pursuant to this Section shall be deemed submitted upon delivery to the overnight delivery service, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XXIII. EFFECTIVE DATE

108. 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.

XXIV. RETENTION OF JURISDICTION

109. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XVIII (Dispute Resolution) and XXV (Modification), or effectuating or enforcing compliance with the terms of this Decree.

XXV. MODIFICATION

110. The terms of this Consent Decree, including the Appendices, may be modified only by a subsequent written agreement signed by the Plaintiffs and Defendant. Where the

modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

111. Any disputes concerning modification of this Decree or the issue of the materiality of any modification of this Decree shall be resolved pursuant to Section XVIII (Dispute Resolution) of this Decree, 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).

XXVI. SALES OR TRANSFER OF OPERATIONAL OR OWNERSHIP INTERESTS

112. At least 60 Days prior to any transfer of ownership or operation of any Facility, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, to EPA, the United States, and Plaintiff-States in accordance with Section XXII (Notices) of this Consent Decree, and subject to the provisions of Paragraph 94 of this Consent Decree. No transfer of ownership or operation of a Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Consent Decree are implemented, unless and until:

- a. the transferee agrees, in writing, to undertake the obligations required by Sections V (Environmental Mitigation), VI (SO₂ Control Technology, Emissions Limits, And Monitoring Requirements), VII (NO_x Control Technology, Emissions Limits, And Monitoring Requirements), VIII (PM Control Technology, Emissions Limits, Best Management Practices, and

Early Warning System Requirements), IX (Prohibition on Use of Flares), XI (Prohibition on Netting Credits or Offsets), XII (Permits), XIII (Review and Approval of Submittals), XIII (Reporting and Recordkeeping Requirements), XV (Stipulated Penalties), XVI (Force Majeure), XVIII (Dispute Resolution), and XIX (Information Collection and Retention) applicable to such Facility, and to be substituted for Defendant as a Party under the Decree with respect to such Facility and thus to become bound by the terms thereof;

- b. the United States and Plaintiff-States consent, in writing, to relieve Defendant of its Consent Decree obligations applicable to such Facility, and
- c. the transferee becomes a party to this Consent Decree with respect to the transferred Facility, pursuant to Section XXV (Modification).

113. Any attempt to transfer ownership or operation of any of the Facilities or any portion thereof, without complying with Paragraph 112(a)-(c) above constitutes a violation of this Consent Decree.

XXVII. PUBLIC PARTICIPATION

114. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree are subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate,

improper, or inadequate. Further, the Parties agree and acknowledge that final approval by the State of Texas is subject to the requirements of Tex. Water Code § 7.110, which provides for public notice of this Consent Decree in the Texas Register, an opportunity for public comment, and the right of the State of Texas to withdraw or withhold consent to the Consent Decree if the comments disclose facts or considerations that indicate that the Consent Decree is inappropriate, improper, or inadequate. The Defendant shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified the Defendant, in writing, that the United States no longer supports entry of the Consent Decree. Further, the Parties agree and acknowledge that final approval by LDEQ and entry of this Consent Decree is subject to the requirements of La. R.S. 30:2050.7, which provides for public notice of this Consent Decree in newspapers of general circulation and the official journals of parishes in which the Defendant's facilities are located, an opportunity for public comment, consideration of any comments, and concurrence by the State Attorney General. LDEQ reserves the right to withdraw or withhold consent if the comments regarding this Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper or inadequate.

XXVIII. TERMINATION

115. Termination as to an Individual Facility. After Defendant has paid the Section IV civil penalties, the Paragraph 103 State of Texas's attorney's fees, and any stipulated penalties due under this Consent Decree, and satisfied the requirements of Sections VI (SO₂ Control Technology, Emissions Limits, and Monitoring Requirements), VII (NO_x Control Technology, Emissions Limits, and Monitoring Requirements), VIII (PM Control Technology, Emissions

Limits, Best Management Practices, and Early Warning System Requirements), IX (Prohibition on Use of Flares), XI (Prohibition on Netting Credits or Offsets), and XII (Permits) of this Decree and has maintained operation of any Control Technology as required by this Consent Decree for a period of 24 consecutive Months at an individual Facility, Defendant may serve upon the United States and the applicable Plaintiff-State a Request for Termination pursuant to the requirements of Paragraph 119. With respect to the SO₂ Emissions Limits at Addis and Borger, Defendant shall maintain operation of any WGS as required by this Consent Decree and achieve and maintain the Final 7-day Rolling Average Emissions Limit for SO₂ and Final 365-day Rolling Average Emissions Limit SO₂, and with respect to the NO_x Emissions Limits at Big Spring and Borger, Defendant shall maintain operation of the SCR as required by this Consent Decree and achieve and maintain the Final 7-day Rolling Average Emissions Limit for NO_x and Final 365-day Rolling Average Emissions Limit NO_x, for a period of 12 consecutive Months at an individual Facility, prior to serving upon the United States and the applicable Plaintiff-State a Request for Termination pursuant to the requirements of Paragraph 119. If the United States and the applicable Plaintiff-State agree that the Decree as it relates to an individual Facility may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating those provisions of the Decree.

116. Termination as to Environmental Mitigation. After Defendant has paid the Section IV civil penalty, the Paragraph 103 State of Texas's attorney's fees, and any stipulated penalties with respect to Environmental Mitigation due under this Consent Decree, and satisfied the requirements of Section V (Environmental Mitigation), Defendant may serve upon the United States and Plaintiff-States a Request for Termination pursuant to the requirements of

Paragraph 119. If the United States and Plaintiff-States agree that the Decree as it relates to the requirements of Section V (Environmental Mitigation) may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating those provisions of the Decree.

117. Complete Termination. After Defendant has satisfied the requirements of Sections IV (Civil Penalty), V (Environmental Mitigation), VI (SO₂ Control Technology, Emissions Limits, and Monitoring Requirements), VII (NO_x Control Technology, Emissions Limits, and Monitoring Requirements), VIII (PM Control Technology, Emissions Limits, Best Management Practices, and Early Warning System Requirements), IX (Prohibition on Use of Flares), XI (Prohibition on Netting Credits or Offsets), and XII (Permits) of this Decree and has maintained satisfactory compliance with the obligation to operate the Control Technology as required by this Consent Decree for a period of 24 consecutive Months at all Facilities, has complied with all other requirements of this Consent Decree, and has paid the civil penalties, attorney's fees, and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States and the Plaintiff-States a Request for Termination pursuant to the requirements of Paragraph 119. With respect to the SO₂ Emissions Limits at Addis and Borger, Defendant shall maintain operation of any WGS as required by this Consent Decree and achieve and maintain the Final 7-day Rolling Average Emissions Limit for SO₂ and Final 365-day Rolling Average Emissions Limit SO₂, and with respect to the NO_x Emissions Limits at Big Spring and Borger, Defendant shall maintain operation of the SCR as required by this Consent Decree and achieve and maintain the Final 7-day Rolling Average Emissions Limit for NO_x and Final 365-day Rolling Average Emissions Limit NO_x, for a period of 12 consecutive Months at an individual Facility, prior to serving upon the United States and Plaintiff-States a

Request for Termination pursuant to the requirements of Paragraph 119. If the United States and the Plaintiff-States agree that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

118. Effect of Shutdown. The permanent Shutdown of a Facility and the surrender of all permits related to its operation as a facility for the manufacture of carbon black shall be deemed to satisfy all requirements of this Consent Decree applicable to that Facility. After Defendant has permanently Shutdown a Facility and surrendered all permits related to its operation for the manufacture of carbon black, Defendant may serve upon the United States and the applicable Plaintiff-State a Request for Termination pursuant to the requirements of Paragraph 119. If the United States and the applicable Plaintiff-State agree that the terminated Facility is Shutdown and all permits related to its operation for the manufacture of carbon black have been surrendered, the Parties shall submit, for the Court's approval, a joint stipulation terminating those provisions of the Decree.

119. Request for Termination. If Defendant elects to terminate this Consent Decree in whole or part, Defendant shall submit a written report to EPA and Plaintiff-States, as set forth in Section XXII (Notices), that (a) describes the activities undertaken, (b) attaches any applicable permits or SIP amendments obtained pursuant to the requirements of Section XII (Permits) that incorporate the requirements that will survive termination of this Consent Decree that are listed in Paragraph 43, and (c) certifies that each of the applicable Sections listed Paragraphs 115 - 118 have been completed in full satisfaction of the requirements of this Consent Decree and that Defendant is in full compliance with those Sections of the Consent Decree. The report will contain the following certification, signed by an official of Defendant:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted 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 fine and imprisonment for knowing violations.”

120. If the United States and Plaintiff-States do not agree that the Consent Decree as a whole or as it relates to an individual Facility may be terminated, Defendant may invoke dispute resolution under Section XVIII (Dispute Resolution) of this Decree. However, Defendant shall not seek resolution of any dispute regarding termination under Section XVIII (Dispute Resolution) until 60 Days after service of its Request for Termination.

XXIX. SIGNATORIES/SERVICE

121. Each undersigned representative of Defendant and Plaintiff-States, and the Assistant Attorney General for the Environment and Natural Resources Division of the United States 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 Party he or she represents to this document.

122. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in 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. All Parties agree that Defendant need not file an answer or otherwise respond to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXX. INTEGRATION

123. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the 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 Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

XXXI. FINAL JUDGMENT

124. 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 Plaintiffs and Defendant.

XXXII. APPENDICES

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

“Appendix A” contains the requirements of the Environmental Mitigation Projects.

“Appendix B” contains the Other PM Control Requirements.

“Appendix C” contains the Particulate Emissions Best Management Practices Control Plan.

“Appendix D” contains the PM Early Warning System requirements.

“Appendix E” contains the Protocol For Setting Final SO₂ Emission Limits.

“Appendix F” contains the Methodology For Determining Compliance With Caps.

All terms in the Appendices shall be construed in a manner consistent with this Decree.

“Appendix G” contains Instructions For Payment Of Civil Penalty To State Of Texas.

Dated and entered this ____ Day of _____, _____.

United States District Court Judge

Signature Page for *United States of America et al v. Defendant Sid Richardson Carbon, Ltd.*,
Consent Decree

FOR PLAINTIFF UNITED STATES OF AMERICA:

[Redacted Signature]

Date: 12/21/17

JEFFREY H. WOOD
Acting Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

[Redacted Signature]

Date: 12/21/17

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Signature Page for *United States of America et al v. Defendant Sid Richardson Carbon, Ltd.*,
Consent Decree

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

[Redacted Signature]

Date: 12/20/2017

ba LAWRENCE STARFIELD
Acting Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

[Redacted Signature]

Date: 12/20/17

PHILLIP A. BROOKS
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

[Redacted Signature]

Date: 12-19-17

KELLIE ORTEGA
Attorney-Advisor, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

Signature Page for *United States of America et al. v. Defendant Sid Richardson Carbon, Ltd.*,
Consent Decree

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:



Date: 12/18/17

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

Signature Page for *United States of America et al. v. Defendant Sid Richardson Carbon, Ltd.*,
Consent Decree

FOR PLAINTIFF THE STATE OF TEXAS

Date: December 20, 2017

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JEFFREY MATEER
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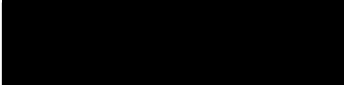


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Signature Page for *United States of America et al. v. Defendant Sid Richardson Carbon, Ltd.*,
Consent Decree, subject to the public notice and comment requirements of La.R.S. 30:2050.7

FOR LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY



LOURDES ITURRALDE
Assistant Secretary
Office of Environmental Compliance
Louisiana Department of Environmental Quality
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312

Date 12/20/17



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Date 12/20/17

Signature Page for *United States of America et al. v. Defendant Sid Richardson Carbon, Ltd.*,
Consent Decree

FOR DEFENDANT, SID RICHARDSON CARBON, LTD.



Date 12-18-2017

William R Jones, President
Sid Richardson Carbon, Ltd.
201 Main Street, Suite 3000
Fort Worth, Texas 76102

APPENDIX A: ENVIRONMENTAL MITIGATION PROJECTS

- A. Defendant shall spend at least \$490,000, and shall comply with the requirements of this Appendix and with Section V (Environmental Mitigation) of the Consent Decree, to implement and secure the environmental benefits of the Environmental Mitigation Projects described below. Nothing in the Consent Decree or this Appendix shall require Defendant to spend any more than a total of \$490,000 on Environmental Mitigation Projects.
- B. Defendant shall ensure the implementation of the following Environmental Mitigation Projects to minimize PM emissions: at least \$490,000 in Project Dollars shall be spent, approximately equally at Addis and Big Spring, on systems that reduce PM emissions at locations such as the loading of hopper cars/hopper trucks and the carbon black storage tanks. Other projects may also be implemented if they are first approved in writing by the EPA pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree.
- C. Each Environmental Mitigation Project shall be completed by no later than four years from the Date of Entry of the Consent Decree. Any funds designated for a specific Environmental Mitigation Project that are left unspent, or are projected to be left unspent, after three years from the Date of Entry of the Consent Decree may be redirected by Defendant, after consultation with and approval by EPA and the applicable Plaintiff-State, to one or more projects of the type listed in Paragraph B of this Appendix. Any such redirected funds shall be spent by no later than five years from the Date of Entry of the Consent Decree.

APPENDIX B: OTHER PM CONTROL REQUIREMENTS

PM Emissions Equipment	PM Reduction Mechanism	Method for Managing PM Emissions
Carbon Black Product Storage Tank, Silo or Bin	PM emissions shall be directed to either (a) a fabric filtration device that is equipped with filters specified by their supplier to achieve a PM collection efficiency of at least 99%, (b) a cartridge device that achieves a PM collection efficiency of at least 99%, or (c) a vacuum collection system that routes back to a Process Filter.	Provisions in Paragraphs 34 (Other PM Control Requirements) of this Consent Decree
Carbon Black Pellet Dryer	All PM emissions shall be directed to the Dryer Exhaust Bag Filter (for recovery of product).	Provisions in Paragraphs 34 (Other PM Control Requirements) of this Consent Decree
Reactor	All carbon black product and PM emissions generated by the reactor shall be vented to a Main Bag Filter, or, during periods of Startup and Shutdown, a water spray system. Direct venting to the atmosphere of any carbon black product or PM emissions generated by the reactor is prohibited at all times.	Provisions in Paragraph 34 (Other PM Control Requirements) of this Consent Decree and manually verify or a distributed control system interlocks to verify that the flow of water to the Reactor Vent Scrubber has been initiated.
Main Bag Filters	During periods other than Heat Load Operation, reactor Startup and Shutdown and Malfunctions, the Main Bag Filter Heat Load Vents shall be closed.	Provisions in Paragraphs 34 (Other PM Control Requirements) and 36 (PM Early Warning System) of this Consent Decree
Dryer Exhaust Bagfilter	All PM emissions shall be handled as part of the inherent process unit operations that employ fabric filtration to separate carbon black product, in accordance with the Compliance Assurance Monitoring Regulations under 40 C.F.R. Part 68.	Provisions in Paragraphs 34 (Other PM Control Requirements) and 36 (PM Early Warning System) of this Consent Decree
Process Secondary Bagfilter	All PM emissions shall be handled as part of the inherent process unit operations that employ fabric filtration to separate carbon black product, in accordance with the Compliance Assurance Monitoring Regulations under 40 C.F.R. Part 68.	Provisions in Paragraph 34 (Other PM Control Requirements)

APPENDIX C: PARTICULATE EMISSIONS BEST MANAGEMENT PRACTICES CONTROL PLAN

The best management practices for minimizing particulate emissions described in this plan shall be followed at each of the Facilities at all times.

1. All operations and maintenance personnel shall be trained to both recognize leaks and spills of carbon black, and to report them to the proper plant personnel for response. Visual observation of the physical condition of plant process equipment that conveys, stores, loads, unloads, and packages carbon black, including at connection points between equipment and/or sections of piping, and of the physical condition of containers and bags used to package carbon black, shall be part of the daily responsibilities of the operations and maintenance personnel to help ensure that potential leaks are addressed before they occur.
2. All carbon black product shall be stored in tanks, silos, or closed bags. No carbon black product shall be stored in open piles.
3. All product and off-quality carbon black shall be shipped off-site in closed bags, sealed cardboard boxes (for landfill), or sealed rail cars, hoppers, or bulk transport trucks.
4. All process equipment at the Facilities shall be designed, operated, and maintained in a manner intended to minimize leaks and spills of carbon black and fugitive particulate emissions. In addition, the Facilities shall develop and implement practices to collect carbon black dust otherwise emitted from product conveyance, packaging, and storage operations, and either recycle it back into the manufacturing process or convey it to a packaging system. Where practicable, the operation of such equipment, including carbon black product conveyors, elevators, and packing units, shall be conducted under negative pressure and served by vacuum systems that collect carbon black.
5. All process equipment shall be located either indoors or in outdoor areas that have paved, caliche, or rock/gravel ground surfaces.
6. Events that trigger the PM Early Warning System shall be handled pursuant to the protocol in Appendix D (PM Early Warning System) of this Consent Decree. Leaks and spills of all carbon black that are otherwise identified shall be investigated and addressed (cleaned up and repaired) either immediately upon discovery or as quickly as practicable. When immediate repair or isolation is not feasible, the actions taken to complete the repair shall be documented. Incident reports for spills or leaks of carbon black shall be created to document cause and corrective actions.
7. Special precautions shall be taken during maintenance actions to minimize particulate emissions from the equipment on which maintenance is being performed. Prior to conducting maintenance or baghouse bag replacement on equipment that is prone to accumulation of carbon black on its interior surfaces, including, but not limited to, on the Main Bag Filters, Process Filters, Purge Filters, elevators and conveyors, and storage

tanks and silos, the responsible maintenance personnel shall identify and take steps necessary to minimize the generation of particulate emissions at the equipment being maintained during the maintenance or bag replacement activity. The specific approaches taken to minimize particulate emissions during maintenance or bag replacement shall be developed on a case-specific basis based on the judgment of the maintenance personnel and shall include, as relevant, but need not be limited to, activities such as the following:

- vacuuming carbon black from the equipment prior to beginning the maintenance,
 - vacuuming or washing down the equipment when an appropriate stage in the maintenance activity has been reached,
 - if units are equipped with vents, closing vents during maintenance to prevent drafting of PM, except when Defendant conducts a safety or hazard analysis and concludes in writing that closing the vent would create an unsafe or unhealthy work atmosphere, and
 - sealing filter bags removed from Main Bag Filters inside plastic bags.
8. Accessible floor and/or ground surfaces in the carbon black production areas shall be swept or washed as needed in order to minimize particulate emissions attributable to leaks or spills of carbon black that are not otherwise identified and/or addressed during the daily visual assessments conducted pursuant to Paragraph 34 of this Consent Decree. All material collected through these actions shall either be incorporated into the production process/used as product for commercial distribution or properly disposed of in accordance with applicable regulatory standards.

APPENDIX D: PM EARLY WARNING SYSTEM

1. Defendant shall install a PM Early Warning System at each of its Facilities to monitor the PM emitted from each PM Monitor Point. Each PM Monitor Point shall be set to a specific alarm action level, such that an alarm is triggered when the PM at a PM Monitor Point exceeds the normal range of PM according to the manufacturer's recommendations during operation of the Process System.
2. By the dates in the table below, Defendant shall submit for Plaintiffs' approval, alarm action levels for each PM Monitor Point, in accordance with Paragraph 1 of this Appendix D, and Defendant shall set each PM Early Warning System to such alarm action levels:

Process System	Action Level Approval Date	Action Level Set Date
Addis Process System	3/31/2019	4/30/19
Big Spring Process System	3/31/2019	4/30/19
Borger Process System	3/31/2019	4/30/19

3. Defendant shall operate each PM Early Warning System at all times of Heat Load Operation and Process System Operation, except for during system breakdowns, repairs, maintenance, calibration checks, and zero and span adjustments of the applicable PM Early Warning System. For purposes of demonstrating compliance with the requirements in Paragraph 2 of this Appendix D, the minimum degree of data availability shall be at least 90 percent for the first three years following the Effective Date of the Consent Decree, and 95% thereafter, based on a quarterly average of the operating time of the emission unit or activity being monitored.
4. In the event that an alarm is triggered for any PM Early Warning System, Defendant shall investigate the cause of the alarm as expeditiously as practicable by performing each of the following tasks:
 - a. Reviewing the data output for the relevant PM Early Warning System to determine whether the alarm corresponds to an actual exceedance of the alarm action level.

- b. If review of the data confirms an exceedance of the alarm action level, Defendant shall conduct a visual assessment (Method 22) of the equipment monitored by the pertinent PM Early Warning System to determine if there are any detectable visual emissions. Defendant shall also conduct an appropriate equipment inspection to seek to identify the source of the alarm.
 - c. If the visual assessment or other observations identify a process, equipment or other condition(s) causing an increase in PM emissions that may be responsible for triggering the relevant alarm, determining whether the relevant equipment can be isolated to reduce the excess PM emissions below alarm levels, without requiring a Process System Shutdown.
 - d. If the relevant equipment can be isolated without requiring Process System Shutdown, isolating and repairing such equipment prior to returning it to service.
 - e. If the relevant equipment cannot be isolated without requiring Process System Shutdown, such as if there is a leak from a dryer, a broken bag in a baghouse, or a Malfunction of any other component that cannot be isolated to the extent necessary to prevent continued excess PM emissions, shutting down the relevant equipment and only returning it to service after it has been repaired.
 - f. If the triggering event has not been identified and resolved within 24 hours, having a Method 9 Trained Observer (i) conduct a visual assessment of the equipment monitored by the pertinent PM Early Warning System to determine if there are any detectable visual emissions, and, (ii) in the event that any such visible emissions are observed, conduct a six minute observation in accordance with Method 9 to determine if opacity levels are greater than 20%, and (iii) if opacity levels are greater than 20%, conduct a six minute observation in accordance with Method 9 once every 8 hours (during daylight hours) until visible emissions are less than 20% of opacity levels.
 - g. If, after investigation, the source of any elevated PM emissions cannot be identified, shutting down the subject equipment as soon as practicable to prevent further alarms and to minimize emissions and ensure the safety of employees and the community and only returning the equipment to service after the source of the excess emissions has been identified and repaired.
5. Notwithstanding the foregoing, to the extent that recorded information for the relevant PM Early Warning System indicates that operations have returned to normal operating ranges, below levels triggering an alarm condition, Defendant is not otherwise obligated to continue with implementation of the steps listed above, and may continue operation of the relevant equipment.

6. Defendant shall maintain a record of any event that triggers the alarm for any PM Early Warning System sufficient to meet the requirements in Section XIV (Recordkeeping and Reporting Requirements) of this Consent Decree.
7. Defendant shall perform routine maintenance of each PM Early Warning System installed pursuant to this Appendix D and Paragraph 36 of this Consent Decree in accordance with any manufacturer recommendations and the following requirements:
 - a. On at least a semiannual basis, Defendant shall visually inspect and clean each sensor within the PM Early Warning System, in accordance with manufacturer recommendations, to ensure continued effective operation of the PM Early Warning System.
 - b. On at least an annual basis, Defendant shall comprehensively inspect the PM Early Warning System and make any necessary repairs.
8. The PM Early Warning System shall not be required to quantitatively measure PM emissions.

APPENDIX E: PROTOCOL FOR SETTING FINAL SO₂ EMISSION LIMITS

1. If Defendant elects to comply with the applicable Final 7-day Rolling Average Emissions Limits and Final 365-day Rolling Average Emissions Limits for SO₂ set forth in Section VI (SO₂ Control Technology, Emissions Limits, and Monitoring Requirements) of this Consent Decree, pursuant to Option B, the Parties shall follow the protocol specified in this Appendix E.
2. Design Considerations. Defendant's proposed design for each WGS shall consider, at a minimum, the following parameters:
 - a. Absorber Vessel
 - i. Volume
 - ii. Dimensions
 - iii. Pressure Drop
 - iv. Internal Configuration
 - v. Location in Process Train
 - b. Scrubbing Liquor (for WGS only)
 - i. Scrubbing Liquor Blowdown/Makeup
 - ii. Scrubbing Liquor Circulation Rate
 - iii. Scrubbing Liquor pH
 - c. Flue Gas Characteristics
 - i. Inlet/Outlet SO₂/SO₃ Concentrations
 - ii. Flue Gas Volumetric Flow
 - iii. Inlet/Outlet Temperature Range
 - iv. Inlet/Outlet Particulate Loading and Characteristics
 - d. Designed to Removal Efficiency
 - e. Safety Considerations

If Defendant elects to pursue installation of an Alternative Equivalent Pollution Control Technology, Defendant shall propose a list of design considerations and operating parameters with supporting rationale for use in lieu of those listed in Paragraphs 2 and 3 of this Appendix E for the Alternative Equivalent Pollution Control Technology that includes design considerations and operating parameters that have a significant effect on percent removal of SO₂. Defendant shall submit this information when Defendant submits the proposal for approval of the Alternative Equivalent Pollution Control Technology in accordance with Paragraph 19 of this Consent Decree.

3. Optimization and Demonstration Study. Defendant shall conduct an 18 Month Optimization and Demonstration Study, which shall begin no later than the applicable Date of Continuous Operation set forth in Paragraph 17 of this Consent Decree. Defendant shall submit a protocol consistent with the applicable design considerations for each Optimization and Demonstration Study to EPA no later than 3 Months prior to commencement of the Optimization and Demonstration Study, which shall identify, at a minimum, the operating parameters set forth in 3.a. and 3.b. below. During the first 3 Months of each Optimization and Demonstration Study, Defendant shall operate the applicable WGS or Alternative Equivalent Pollution Control Technology consistent with the protocol submitted by Defendant, with the objective of establishing optimum operating levels to minimize SO₂ emissions for, at a minimum, the following parameters:
 - a. Scrubbing Liquor (for WGS only)
 - i. Scrubbing Liquor/Caustic Blowdown/Makeup
 - ii. Scrubbing Liquor Circulation Rate
 - iii. Scrubbing Liquor pH
 - b. Pressure drop
 - c. Emission Rates
 - i. Outlet SO₂ Concentration
 - ii. Actual Removal Efficiency

Within 30 Days of completion of the first 3 Months of each Optimization and Demonstration Study, Defendant shall submit to EPA a written report that documents any conclusions that it reached in its analysis of the data from that period, and provides any relevant data supporting those conclusions.

During the last 15 Months of each Optimization and Demonstration Study, Defendant shall operate the applicable WGS or Alternative Equivalent Pollution Control Technology in a manner consistent with the conclusions reflected in the written report of the Optimization and Demonstration Study, with the objective of minimizing SO₂ emissions to the extent practicable based on the design criteria.

4. Optimization and Demonstration Study Report. Defendant shall submit the results of the complete Optimization and Demonstration Study to EPA in a written report no later than 60 Days after the completion of the Optimization and Demonstration Study. The report shall include the following information:

- a. Each hourly average SO₂ and O₂ concentration at the point of emission to the atmosphere and at the inlet to the WGS or Alternative Equivalent Pollution Control Technology, as measured by a CEMS during the Optimization and Demonstration Study, and each hourly average value for each of the operating parameters listed in Paragraph 3 of this Appendix E.
- b. An evaluation of the effect, and identification of the optimum operating level, of each operating parameter listed in Paragraph 3 of this Appendix E, on the minimization of SO₂ emissions from the relevant Process System.
- c. A proposed final 7-day Rolling Average Emissions Limit (in ppmvd, at 0% oxygen), and a proposed final 365-day Rolling Average Emissions Limit for SO₂ (in ppmvd, at 0% oxygen), within the range set forth for Option B in the applicable cell in the table in Paragraph 17, to optimize operation of the WGS or Alternative Equivalent Pollution Control Technology and minimize SO₂ emissions to the extent practicable.

Defendant shall supplement the report with any other information that EPA identifies as relevant to its evaluation of the Optimization and Demonstration Study.

5. Compliance with Proposed Final Emissions Limits. Defendant shall immediately upon submission of the Optimization and Demonstration Study to EPA, and, continuing thereafter, until such time as Defendant is required to comply with the applicable Final 7-day Rolling Average Emissions Limit and Final 365-day Rolling Average Emissions Limit established pursuant to Paragraphs 6 and 7 of this Appendix E, Continuously Operate, a WGS or Alternative Equivalent Pollution Control Technology on each Process System specified in the table in Paragraph 17 to this Consent Decree, so as to achieve and maintain the applicable proposed final 7-day Rolling Average Emissions Limit and proposed final 365-day Rolling Average Emissions Limit.
6. EPA Establishment of Final Emission Limits. EPA, after consultation with the applicable Plaintiff-State, shall establish Final 7-day Rolling Average Emissions Limits and Final 365-day Rolling Average Emissions Limits for SO₂ within the range set forth for Option B in the applicable cell in the table in Paragraph 17 to this Consent Decree. EPA shall base its determination on: (i) the level of performance of the applicable WGS or Alternative Equivalent Pollution Control Technology during the Optimization and Demonstration Study; (ii) a reasonable certainty of compliance; and (iii) any other available and relevant information.
7. Compliance with Final Emission Limits. Defendant shall immediately, or, if the EPA-established Final 7-day Rolling Average Emissions Limit or Final 365-day Rolling Average Emissions Limit for SO₂ for the applicable Process System is different from Defendant's proposed final Emissions Limits, no later than 30 Days after receipt of written notice from EPA, and, continuing thereafter, Continuously Operate, a WGS or Alternative Equivalent Pollution Control Technology on each Process System specified

in the table in Paragraph 17 to this Consent Decree, so as to achieve and maintain the applicable Final 7-day Rolling Average Emissions Limit and Final 365-day Rolling Average Emissions Limit.

8. Emissions Limits Option. At any time, Defendant may notify the EPA and the applicable Plaintiff-State in writing in accordance with the notice provisions of Section XXII (Notices) of this Consent Decree that it will accept and agree to immediately, and continuing thereafter Continuously Operate, a WGS or Alternative Equivalent Pollution Control Technology on each Process System specified in the table in Paragraph 17 of this Consent Decree, so as to achieve and maintain the Final 7-day Rolling Average Emissions Limits and Final 365-day Rolling Average Emissions Limits for SO₂ set forth for Option A in the applicable cell in the table in Paragraph 17.

APPENDIX F: METHODOLOGY FOR DETERMINING COMPLIANCE WITH CAPS

1. NO_x Caps. Compliance with the Caps in Paragraph 31 shall be determined as follows:

a. Addis NO_x Cap (Paragraph 31.a.).

Total NO_x emissions from Flares in tpy = NO_x emissions from Flare 1 + NO_x emissions from Flare 2 + NO_x emissions from Flare 3

Where:

NO_x emissions from Flare 1 in tpy = ((0.068 lbs NO_x/MMBtu) (64.3 Btu/scf) (MMBtu/1,000,000 Btu) (178 scf/lb carbon black) (lbs carbon black produced) (0.70)) / 2000

NO_x emissions from Flare 2 in tpy = ((0.068 lbs NO_x/MMBtu) (62.8 Btu/scf) (MMBtu/1,000,000 Btu) (216.6 scf/lb carbon black) (lbs carbon black produced) (0.70)) / 2000

NO_x emissions from Flare 3 in tpy = ((0.068 lbs NO_x/MMBtu) (56.7 Btu/scf) (MMBtu/1,000,000 Btu) (142.5 scf/lb carbon black) (lbs carbon black produced) (0.70)) / 2000

Where:

1) 0.068 lbs/MMBtu factor is from AP-42 Section 13.5 (Industrial Flares) Table 13.5-1 (9/91)

2) Heating values of 64.3 Btu/scf, 62.8 Btu/scf, and 56.7 Btu/scf are based on heating content analyses of different grades of Tail Gas.

3) Tail Gas production ratios of 178 scf/lb, 216.6 scf/lb, and 142.5 scf/lb per pound of carbon black produced are based on variation in the operation of the three units that each have a dedicated Flare.

4) Factor of .70 is the 70%/30% split between the flares and the dryers.

b. Borger NO_x Cap (Paragraph 31.b.).

Total NO_x in tpy = Total NO_x emissions from Flares in tpy + Total NO_x emissions from Dryers in tpy + Total NO_x emission from Borger Common Stack in tpy

Where:

Total NO_x emissions from Flares in tpy = NO_x emissions from Flare 1 + NO_x emissions from Flare 2 + NO_x emissions from Flare 3 + NO_x emissions from Flare 4

Where:

NO_x emissions from each Flare 1 – 4 in tpy = ((0.068 lbs NO_x/MMBtu) (67.7 Btu/scf) (MMBtu/1,000,000 Btu) (219 scf/lb carbon black) (lbs carbon black produced)) / 2000

Where:

- 1) 0.068 lbs/MMBtu factor is from AP-42 Section 13.5 (Industrial Flares) Table 13.5-1 (9/91).
- 2) Heating value of 67.7 Btu/scf, is based on a heating content analysis of the Tail Gas.
- 3) Tail Gas production ratio of 219 scf/lb of carbon black is based on the air rate and the carbon grade produced at the unit.
- 4) All of the Tail Gas produced from the unit goes through the Flare stack when it is in operation.

Total NO_x emissions from Dryers in tpy = ((12.8 lbs NO_x/tons carbon black produced) (tons carbon black produced) (0.35)) / 2000

Where:

- 1) Factor of 12.8 lbs NO_x/ton product is from Condition 3 of the Borger NSR permit dated January 17, 2012.
- 2) Factor of 0.35 is the 35%/65% split between the Dryers and the boilers.

Total NO_x emissions from the Borger Common Stack = total lb/hr of NO_x, measured in ppm using the CEMS in accordance with Paragraph 30, based on the calculated exhaust flow rate from the flow monitor and associated software, with the data recorded daily, and summed monthly and annually in tpy.

c. Big Spring NO_x Cap (Paragraph 31.c.)

Total NO_x emissions from Flares in tpy = (NO_x emissions from Flare 1 + NO_x emissions from Flare 2 + NO_x emissions from Flare 3) / 2000

Where:

NO_x emissions from each Flare 1 – 3 in tpy = NO_x emission factor (lbs/hr)
(hours of Flare use)

Where:

NO_x emission factors for Flares 1, 2, and 3, in lbs/hr = 8.3, 6.7, and 5.6, lbs/hr, respectively. These factors represent the lbs/hr limits that are noted in the MAERT of the facility's NSR permit dated February 7, 2012.

2. SO₂ Caps.

a. Addis SO₂ Cap (Paragraph 23.a.).

SO_2 emissions from each Flare 1 – 3 in tpy = ((sulfur in feedstock in lbs – sulfur remaining on carbon black product in lbs) (64/32) (0.98) (0.70)) / 2000

Where:

- 1) The equation above is based on a mass balance of the sulfur going into the reactors and the amount of sulfur that remains on the product.
- 2) 64/32 represents the ratio of the molecular weight of SO₂ to the molecular weight of sulfur.
- 3) 98% represents the 98% conversion rate of S to SO₂ for purposes of this Appendix..
- 4) Factor of .70 is the 70%/30% split between the flares and the dryers.
- 5) Where the sulfur in feedstock will be calculated following the equations in Paragraph 22.

b. Borger SO₂ Cap (Paragraph 23.b.).

Total SO₂ emissions in tpy = Total SO₂ emissions from Flares in tpy + Total SO₂ emissions from Dryers in tpy + Total SO₂ emissions from Borger Common Stack in tpy

Where:

SO_2 emissions from each Flare 1 – 4 in tpy = ((sulfur in feedstock in lbs – sulfur remaining on carbon black product in lbs) (64/32) (0.98)) / 2000

Where:

- 1) The equation above is based on a mass balance of the sulfur going into the reactors and the amount of sulfur that remains on the product.
- 2) 64/32 represents the ratio of the molecular weight of SO₂ to the molecular weight of sulfur.
- 3) 98% represents the conversion rate of S to SO₂ for purposes of this Appendix.
- 4) All of the Tail Gas produced from the unit goes through the Flare when it is in operation.

SO₂ emissions from Dryers in tpy = ((Lbs Sulfur in Feedstock – Lbs Remain on Carbon Black product) (64/32) (0.98) (0.35)) / 2000

Where:

Factor of 0.35 is the 35%/65% split between the dryers and the boilers.

Total SO₂ emissions from the Borger Common Stack = total lb/hr of SO₂, measured in ppm using the CEMS in accordance with Paragraph 20, based on the calculated exhaust flow rate from the flow monitor and associated software, with the data recorded daily, and summed monthly and annually in tpy.

3. When reporting compliance with the Caps, Defendant shall provide complete emission calculations that specify the equation, each unit, and the source of any emission factors used in the equation, which shall include the date of the most recent stack test, if applicable.
4. Notwithstanding the aforementioned calculations, if Defendant installs a CEMS on any unit for which a CEMS is not required under the terms of this Consent Decree, Defendant shall use the data from the CEMS in calculating compliance with the relevant Cap, rather than the emission factors specified in the calculations.
5. If Defendant believes a different emission factor should be used in calculating a Cap, other than that specified in this Appendix F, Defendant may request approval to use the alternative emission factor, provided there has been a prior written request by Defendant, which specifies the basis for the derivation of such revised factor, an explanation (including any relevant data) of why the factor most closely represents the actual emissions rate from the unit, and written approval by EPA of such revised factor pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree.

**APPENDIX G: INSTRUCTIONS FOR PAYMENT OF CIVIL PENALTY TO
STATE OF TEXAS**

Defendant shall make full payment of the civil penalty specified in Paragraph 11 to the State of Texas, by wire transfer to the Texas Comptroller of Public Accounts – Federal Reserve Clearing Account for the Office of the Attorney General, as provided below:

Financial Institution:	TX COMP AUSTIN
Routing Number:	114900164
Account Name:	Comptroller of Public Accounts Treasury Operations
Account Number to Credit:	463600001
Reference:	Sid Richardson Carbon, Ltd., AG Case# <u>CX9078975896</u> , Priscilla Hubenak, Chief, Environmental Protection Division
Attention:	Office of the Attorney General, Kristy Lerma, Financial: Rptg

At the time of payment, Defendant shall send by notice to the State, in accordance with Section XXII (Notices), a copy of the wire transfer authorization form and the wire 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 the *United States and the States of Louisiana and Texas v. Sid Richardson Carbon, Ltd.*, and shall reference the civil action number and Reference: CX9078975896.