

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
EL PASO DIVISION

UNITED STATES OF AMERICA,                  )  
    )  
Plaintiff,                                 )      No. 3:11-cv-276  
    )  
v.    )  
    )  
WESTERN REFINING COMPANY, L.P.,        )  
    )  
Defendant.                                 )  
\_\_\_\_\_)

**CONSENT DECREE**

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## **CONSENT DECREE**

WHEREAS, plaintiff the United States of America (“Plaintiff” or the “United States”), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the United States Environmental Protection Agency (“EPA”), has simultaneously filed a Complaint and lodged this Consent Decree against defendant Western Refining Company, L.P. (“Western”) for alleged environmental violations at Western’s petroleum refinery located at 6500 Trowbridge, El Paso, Texas (the “El Paso Refinery” or “Refinery”).

WHEREAS, the United States alleges on information and belief that Western has violated and/or continues to violate the following statutory and regulatory provisions:

- 1) Prevention of Significant Deterioration (“PSD”) requirements found at Part C of Subchapter I of the Clean Air Act (the “Act”), 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21 (the “PSD Rules”); and “Plan Requirements for Non-Attainment Areas” found at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7502-7503, and the regulations promulgated thereunder at 40 C.F.R. § 51.165(a) and (b), 40 C.F.R. Part 51, Appendix S, and 40 C.F.R. § 52.24 (the “NSR Regulations”) (collectively the “PSD/NSR Regulations”), for fuel gas combustion devices and fluid catalytic cracking unit catalyst regenerators for NO<sub>x</sub>, SO<sub>2</sub>, CO, and PM;
- 2) New Source Performance Standards (“NSPS”) found at 40 C.F.R. Part 60, Subparts A and J (“Refinery NSPS Regulations”), promulgated under Section 111 of the Act, 42 U.S.C. § 7411, for sulfur recovery plants, fuel gas combustion devices, and fluid catalytic cracking unit catalyst regenerators;

- 3) Leak Detection and Repair (“LDAR”) requirements promulgated pursuant to Sections 111 and 112 of the Act, and found at 40 C.F.R. Part 60, Subpart GGG; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC (“LDAR Regulations”); and
- 4) National Emission Standards for Hazardous Air Pollutants (“NESHAP”) for Benzene Waste Operations promulgated pursuant to Section 112(e) of the Act, and found at 40 C.F.R. Part 61, Subpart FF (“Benzene Waste NESHAP”).

WHEREAS, the United States also alleges with respect to the El Paso Refinery that, upon information and belief, Western has been and/or continues to be in violation of the Texas state implementation plan (“SIP”), approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410, to the extent that such plan implements, adopts, or incorporates the above-described federal requirements.

WHEREAS, with respect to the provisions of Subsection V.J (“Control of Acid Gas Flaring Incidents”) of this Consent Decree, EPA maintains that “[i]t is the intent of the proposed standard [subsequently codified in part at 40 C.F.R. § 60.104] that hydrogen-sulfide-rich gases exiting the amine regenerator [or sour water stripper gases] be directed to an appropriate recovery facility, such as a Claus sulfur plant,” see, Office of Air Quality Planning and Standards, U.S. EPA, Background Information for Proposed New Source Performance Standards: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants (Vol. 1: Main Text), 28 (1973).

WHEREAS, EPA further maintains that the failure to direct hydrogen-sulfide-rich gases to an appropriate recovery facility – and the practice of instead flaring such gases under circumstances that are not sudden or infrequent or that are reasonably preventable – circumvent the purposes and intentions of the standards at 40 C.F.R. Part 60, Subpart J.

WHEREAS, EPA recognizes that “Malfunctions,” as defined in Section IV (Definitions) of this Consent Decree and 40 C.F.R. § 60.2, of “Sulfur Recovery Plants” or of “Upstream Process Units” may result in flaring of “Acid Gas” or “Sour Water Stripper Gas” on occasion, as those terms are defined herein, and that such flaring does not violate 40 C.F.R. § 60.11(d) if the owner or operator, to the extent practicable, maintains and operates such units in a manner consistent with good air pollution control practice for minimizing emissions during these periods.

WHEREAS, the United States further alleges on information and belief that Western has violated and/or continues to violate the reporting requirements found at Section 103(a) of the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), 42 U.S.C. § 9603(a), and Section 304(b) and (c) of the Emergency Planning and Community Right-to-Know Act (“EPCRA”), 42 U.S.C. § 11004(b) and (c), and the regulations promulgated thereunder.

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

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

WHEREAS, despite Western’s denial of the allegations in the Complaint, Western consents to the simultaneous filing of the Complaint and lodging of this Consent Decree so as to accomplish Western’s objective of cooperatively reconciling the goals of the United States and Western under the Clean Air Act, and Western therefore agrees to undertake and/or continue undertaking at the El Paso Refinery the installation of pollution control equipment and the enhancements to its air pollution management practices set forth in this Consent Decree to reduce air emissions through participation in the Global Settlement Strategy.

WHEREAS, prior to entry of this Consent Decree, Western has commenced or completed installation, operation, and/or implementation of certain emission control technologies or work practices at the El Paso Refinery, including: (1) installing flare gas recovery systems on the South Main Flare; (2) installing NOx controls on certain Combustion Units; and (3) shutting down the North and South Sulfur Recovery Units and the associated Tail Gas Unit and incinerators.

WHEREAS, Western estimates that, when the affirmative relief identified in Section V (Affirmative Relief) of this Consent Decree is fully implemented, annual emissions from the El Paso Refinery will be reduced by the following amounts: 1) nitrogen oxides by approximately 509 tons per year; and 2) sulfur dioxide by approximately 381 tons per year.

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

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

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

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

**I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action and over the Parties pursuant to 28 U.S.C. §§ 1331, 1345, and 1355. In addition, this Court has jurisdiction over the subject matter of this action pursuant to Sections 113(b) and 167 of the Clean Air Act, 42 U.S.C. §§ 7413(b) and 7477; Section 325(b) of EPCRA, 42 U.S.C. § 11045(b); and Section 109(c) of CERCLA, 42 U.S.C. § 9609(c). The Complaint states a claim upon which relief may be granted for injunctive relief and civil penalties against Western under the Clean Air Act, EPCRA, and CERCLA. Authority to bring this suit is vested in the United States Department of Justice. See, e.g., 28 U.S.C. §§ 516 and 519, and Section 305 of the Act, 42 U.S.C. § 7605.

2. Venue is proper in the Western District of Texas pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b); Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3); Section 113(b) of CERCLA, 42 U.S.C. § 9613(b); and 28 U.S.C. §§ 1391(b) and (c), and 1395(a). Western consents to the personal jurisdiction of this Court and waives any objections to venue in this District.

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

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

4. The provisions of the Consent Decree shall apply to Western and the El Paso Refinery. The provisions of the Consent Decree shall be binding upon the United States, Western, and Western's successors, assigns, and other entities or persons bound by law.

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

6. Western shall give written notice of, and shall provide a copy of, the Consent Decree to any successors in interest at least sixty (60) days prior to the transfer of ownership or operation of any portion of the El Paso Refinery. Western shall notify the United States, in accordance with the notice provisions set forth in Paragraph 190 (Notice), of any successor in interest at least thirty (30) days prior to any such transfer.

7. If Western intends to request that the United States agree to a transferee's assumption of any obligations of the Consent Decree, Western shall condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling, non-operational shareholder interest) in the El Paso Refinery upon the transferee's written agreement to execute a modification to the Consent Decree that shall make the terms and conditions of the Consent Decree applicable to the transferee.

8. As soon as possible prior to the transfer, (a) Western shall notify the United States of the proposed transfer and of the specific Consent Decree provisions that Western proposes the transferee assume; (b) Western shall certify that the transferee is contractually bound to assume the obligations and liabilities of this Consent Decree; and (c) the transferee shall submit to the

United States a certification that the transferee has the financial and technical ability to assume the obligations and liabilities of this Consent Decree and a certification that the transferee is contractually bound to assume the obligations and liabilities of this Consent Decree.

9. By no later than sixty (60) days after the submission to the United States of the notice and certification required by the previous Paragraph: (a) the United States shall notify Western that the United States does not agree to modify the Consent Decree to make the transferee responsible for complying with the terms and conditions of the Consent Decree or (b) the United States, Western, and the transferee shall file with the Court a joint motion requesting the Court to approve a modification substituting the transferee for Western as the Defendant responsible for complying with the terms and conditions of the Consent Decree.

10. If Western does not secure the agreement of the United States to a joint motion within the sixty-day period, then Western and the transferee may file, without the agreement of the United States, a motion requesting the Court to approve a modification substituting the transferee for Western as the Defendant responsible for complying with some or all of the terms and conditions of the Consent Decree. The United States may file an opposition to the motion. The motion to modify shall be granted unless Western and the transferee (a) fail to show that the transferee has the financial and technical ability to assume the obligations and liabilities of the Consent Decree; (b) fail to show that the modification language effectively transfers the obligations and liabilities to the transferee; or (c) the Court finds other good cause for denying the motion.

11. Except as provided in Paragraphs 7-10 above, and Section XII (Force Majeure), below, Western shall be responsible for ensuring that performance of the work contemplated under this Consent Decree is undertaken in accordance with the deadlines and requirements

contained in this Consent Decree and any attachments hereto. No later than the execution of any contract with a consulting or contracting firm that is retained to perform work required by this Consent Decree, Western shall provide a copy of this Consent Decree to the consulting or contracting firm that is retained. No later than thirty (30) days after the Date of Lodging of the Consent Decree, Western also shall provide a copy of this Consent Decree to each consulting or contracting firm that Western already has retained to perform the work required by this Consent Decree. Copies of the Consent Decree do not need to be supplied to firms who are retained to supply materials or equipment to satisfy requirements of this Consent Decree.

### **III. OBJECTIVES**

12. It is the purpose of the Parties to this Consent Decree to further the objectives of the Clean Air Act and the reporting requirements of Section 103 of CERCLA and Section 304 of EPCRA.

### **IV. DEFINITIONS**

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

- a. “7-day rolling average” and “365-day rolling average” shall mean the average emission rate during the preceding seven (7) days, or three hundred and sixty-five (365) days, as applicable, that the emission unit was operating, calculated on a daily basis, commencing seven (7) days, or three hundred and sixty-five (365) days, as applicable, following the date upon which such emission rate becomes effective under this Consent Decree.

b. "Acid Gas" or "AG" shall mean any gas that contains hydrogen sulfide and is generated at the El Paso refinery by the regeneration of an amine scrubber solution, but does not mean Tail Gas.

c. "Acid Gas Flaring" or "AG Flaring" shall mean the combustion of Acid Gas and/or Sour Water Stripper Gas in an Acid Gas Flaring Device.

d. "Acid Gas Flaring Device" or "AG Flaring Device" shall mean any device used to combust Acid Gas and/or Sour Water Stripper Gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid. The Acid Gas Flaring Devices currently in service at the El Paso Refinery are the Relief Gas Emergency Flare (EPN D-2914); the Rheniformer Emergency Flare (EPN R-2911); and the Plant Emergency/AAG/Main South Flare (EPN 112). To the extent that, during the duration of the Consent Decree, the El Paso Refinery utilizes any devices other than these three flares to combust Acid Gas and/or Sour Water Stripper Gas, those devices shall be Acid Gas Flaring Devices and shall be subject to the requirements of this Consent Decree.

e. "Acid Gas Flaring Incident" or "AG Flaring Incident" shall mean the continuous or intermittent combustion of Acid Gas and/or Sour Water Stripper Gas that results in the emission of sulfur dioxide equal to, or in excess of, five hundred (500) pounds in any twenty-four (24) hour period; provided, however, that if five hundred (500) pounds or more of sulfur dioxide have been emitted in a twenty-four (24) hour period and flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of, five hundred (500) pounds of sulfur dioxide, then only one Acid Gas Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping twenty-four (24) hour periods are measured from the initial commencement of Acid

Gas Flaring within the Acid Gas Flaring Incident. When Acid Gas Flaring occurs within a twenty-four (24) hour period at more than one Flaring Device, the quantities of sulfur dioxide emitted from each Flaring Device shall be added together for purposes of determining whether there is one Acid Gas Flaring Incident unless the root causes of the Acid Gas Flaring at the various Flaring Devices are not related to each other.

- f. "CEMS" shall mean continuous emissions monitoring system.
- g. "CO" shall mean carbon monoxide.
- h. "Combustion Units" shall mean the heaters, boilers, and other fuel gas combustion units that are listed in Appendix A (El Paso Refinery Combustion Unit Information).
- i. "Consent Decree" or "Decree" shall mean this Consent Decree, including any and all appendices attached to the Consent Decree.
- j. "Current-Generation Ultra-Low NO<sub>x</sub> Burners" shall mean those burners that are designed to achieve a NO<sub>x</sub> emission rate of 0.020 to 0.040 lb/mmBTU HHV when firing natural gas at 3% stack oxygen at full design load without air preheat, regardless of whether upon installation actual emissions exceed 0.040 lb/mmBTU HHV.
- k. "Date of Lodging" or "Date of Lodging of the Consent Decree" shall mean the date the Consent Decree is lodged with the Clerk of the Court for the United States District Court for the Western District of Texas.
- l. "Day" or "Days" (whether or not capitalized) shall mean a calendar day or days, unless "business days" are expressly specified. "Business Day" or "Business Days" (whether or not capitalized) shall mean all days other than a Saturday, Sunday, or the day set aside by federal statute for observing New Year's Day, Martin Luther King Jr.'s Birthday,

Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, or Christmas Day.

m. "El Paso Refinery" shall mean the refinery presently owned by Western and located at 6500 Trowbridge, El Paso, Texas.

n. "Entry Date" shall mean the date the Consent Decree is entered as a final judgment by the United States District Court for the Western District of Texas.

o. "FCCU" shall mean a fluidized catalytic cracking unit and its regenerator.

p. "Flaring Device" shall mean an Acid Gas Flaring Device and/or an HC Flaring Device.

q. "Flaring Incident" shall mean an Acid Gas Flaring Incident, a Tail Gas Incident, and/or a Hydrocarbon Flaring Incident.

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

s. "HHV" shall mean the theoretical total quantity of heat liberated by the complete combustion of a unit volume or weight of a fuel initially at 25 degrees C, assuming that the produced water is not vaporized, and all combustion products remain at, or are returned to, 25 degrees C.

t. "Hydrocarbon Flaring" or "HC Flaring" shall mean the combustion of refinery-generated gases, except for Acid Gas and/or Sour Water Stripper Gas and/or Tail Gas, in a Hydrocarbon Flaring Device.

u. "Hydrocarbon Flaring Device" or "HC Flaring Device" shall mean any device used to safely control (through combustion) any excess volume of a refinery-generated gas other than Acid Gas and/or Sour Water Stripper Gas and/or Tail Gas. The HC Flaring

Devices currently in service at the El Paso Refinery are the Relief Gas Emergency Flare (EPN D-2914), the Rheniformer Emergency Flare (EPN R-2911), and the Plant Emergency/AAG/Main South Flare (EPN 112). To the extent that, during the duration of the Consent Decree, the Refinery utilizes devices other than these three flares to combust any excess volume of a refinery-generated gas other than Acid Gas and/or Sour Water Stripper Gas and/or Tail Gas, those devices shall be HC Flaring Devices and shall be subject to the requirements of this Consent Decree.

v. "Hydrocarbon Flaring Incident" or "HC Flaring Incident" shall mean the continuous or intermittent combustion of refinery-generated gases, except for Acid Gas or Sour Water Stripper Gas or Tail Gas, that results in the emission of sulfur dioxide equal to, or greater than five hundred (500) pounds in a twenty-four (24) hour period; provided, however, that if five hundred (500) pounds or more of sulfur dioxide have been emitted in any twenty-four (24) hour period and flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to or in excess of five hundred (500) pounds of sulfur dioxide, then only one HC Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the HC Flaring Incident. When HC Flaring occurs within a twenty-four (24) hour period at more than one Flaring Device, the quantities of sulfur dioxide emitted from each Flaring Device shall be added together for purposes of determining whether there is one HC Flaring Incident unless the root causes of the HC Flaring at the various Flaring Devices are not related to each other.

w. “Low-NOx Combustion Promoter” shall mean a catalyst that is added to a FCCU that minimizes NOx emissions while maintaining its effectiveness as a combustion promoter.

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

y. “Natural Gas Curtailment” shall mean a restriction imposed by a natural gas supplier, which limits Western’s ability to obtain natural gas.

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

aa. “NOx” shall mean nitrogen oxides.

ab. “NOx-Reducing Catalyst Additive” shall mean a catalyst additive that is introduced to an FCCU to reduce NOx emissions.

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

ad. “Parties” shall mean the United States and Western.

ae. “PEMS” shall mean a predictive emissions monitoring system.

af. “PM” shall mean particulate matter, as measured by 40 C.F.R. Part 60,  
Appendix A-3 Method 5B.

ag. “ppmvd” shall mean parts per million by volume (dry basis).

ah. “Root Cause” shall mean the primary cause(s) of Acid Gas Flaring  
Incident(s), Hydrocarbon Flaring Incident(s), or Tail Gas Incident(s), as determined through a  
process of investigation.

ai. “Shutdown” shall mean the cessation of operation of equipment for any  
purpose.

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

ak. “SO<sub>2</sub>-Reducing Catalyst Additive” shall mean a catalyst additive that is  
introduced to an FCCU to reduce SO<sub>2</sub> emissions.

al. “Sour Water Stripper Gas” shall mean the gas produced by the process of  
stripping or scrubbing refinery sour water. (The El Paso Refinery previously operated the Sour  
Water Stripper Emergency Flare (EPN 128), which was shut down on January 9, 2009.)

am. “Startup” shall mean the setting in operation of equipment for any  
purpose.

an. “Sulfur Recovery Plant” or “SRP” shall mean a process unit that recovers  
sulfur from hydrogen sulfide by a vapor-phase catalytic reaction of sulfur dioxide and hydrogen  
sulfide. (The El Paso Refinery previously operated two SRPs: the North SRP (equipped with a  
TGU and a backup incinerator), which was shut down on October 29, 2008, and the South SRP  
(equipped with an incinerator), which was shut down on January 9, 2009.)

ao. “Tail Gas” shall mean exhaust gas from a Claus train of an SRP and/or  
from a Tail Gas Unit section of an SRP.

ap. "Tail Gas Unit" or "TGU" shall mean a control system utilizing a technology for reducing emissions of sulfur compounds from a Sulfur Recovery Plant. (The TGU on the North SRP was shutdown on October 29, 2008).

aq. "Tail Gas Incident" shall mean combustion of Tail Gas that either is:

- (1) combusted in a flare and results in 500 pounds or more of SO<sub>2</sub> emissions in any 24-hour period; or
- (2) combusted in a thermal incinerator and results in emissions of 500 pounds or more of SO<sub>2</sub> in any 24-hour period. Only those time periods which are in excess of a SO<sub>2</sub> concentration of 250 ppm (rolling 12-hour average) shall be used to determine the amount of excess SO<sub>2</sub> emissions from the incinerator.

Western shall use good engineering judgment and other monitoring data to estimate emissions during periods in which the SO<sub>2</sub> CEMS has exceeded the range of the instrument or is out of service.

ar. "TCEQ" shall mean the Texas Commission on Environmental Quality and any successor departments or agencies of the State of Texas.

as. "Total Catalyst" shall mean all forms of catalyst added to the FCCU, including but not limited to base catalyst, equilibrium catalyst, and pollutant reducing catalyst.

at. "Upstream Process Units" shall mean all amine contactors, amine absorbers, amine scrubbers, amine regenerators, and sour water strippers at the El Paso Refinery, as well as all process units at the refinery that produce gaseous or aqueous waste streams that are processed at amine contactors, amine absorbers, amine scrubbers, amine regenerators, or sour water strippers.

au. "Western" shall mean Western Refining Company, L.P., and its successors and assigns.

**V. AFFIRMATIVE RELIEF**

**A. NOx EMISSIONS REDUCTIONS FROM THE FCCU**

14. **Interim NOx Emission Limits.** By no later than the Entry Date, Western shall comply with FCCU NOx emission limits of 55 ppmvd on a 365-day rolling average, and 100 ppmvd on a 7-day rolling average, both corrected to 0% O<sub>2</sub>.

15. **Final NOx Emission Limits.** By no later than the first anniversary of the Entry Date, Western shall comply with FCCU NOx limits of 50 ppmvd on a 365-day rolling average, and 90 ppmvd on a 7-day rolling average, both corrected to 0% O<sub>2</sub>.

16. **Startup, Shutdown, and Malfunction.** NOx emissions (i) caused by or attributable to the Startup, Shutdown, or Malfunction of the El Paso Refinery FCCU, including the Praxair oxygen-supply unit, and/or (ii) during periods of Malfunction of the El Paso Refinery FCCU's NOx-Reducing Catalyst Additive system shall not be used in determining compliance with the 7-day NOx Limits established in Paragraphs 14 and 15 provided that during such periods Western implements good air pollution control practices to minimize NOx emissions. Nothing in this Paragraph shall be construed to relieve Western of any obligation under any federal, state, or local law, regulation, or permit to report emissions during periods of Startup, Shutdown, or Malfunction; to comply with emissions limits applicable during periods of Startup, Shutdown, or Malfunction; or to document the occurrence and/or cause of a Startup, Shutdown, or Malfunction event. Emissions during any such period of Startup, Shutdown, or Malfunction shall be monitored with a CEMS as provided by Paragraph 17.

17. **Demonstrating Compliance with FCCU NOx Emission Limits.** On and after the Entry Date, Western shall use NOx and O<sub>2</sub> CEMS at the El Paso Refinery FCCU to monitor performance and to report compliance with the terms and conditions of this Subsection V.A

relating to NOx emissions from the El Paso Refinery FCCU. Western shall make emissions monitoring data available to EPA as soon as practicable following an EPA request for such data. The CEMS shall be calibrated and certified in accordance with 40 C.F.R. § 60.13 and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. However, unless Appendix F is required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3, and 5.1.4, Western may conduct: (1) either a Relative Accuracy Audit (“RAA”) or a Relative Accuracy Test Audit (“RATA”) once every three (3) years; and (2) a Cylinder Gas Audit (“CGA”) each calendar quarter in which a RAA or RATA is not performed. If the CEMS must be moved because of the installation of control equipment, Western shall promptly reinstall, recalibrate, and re-certify the CEMS.

**B. SO<sub>2</sub> EMISSIONS REDUCTIONS FROM THE FCCU**

18. **SO<sub>2</sub> Emission Limits for the El Paso Refinery FCCU.** By no later than the Entry Date, Western shall comply with FCCU SO<sub>2</sub> emission limits of 25 ppmvd corrected to 0% O<sub>2</sub> on a 365-day rolling-average basis and 50 ppmvd corrected to 0% O<sub>2</sub> on a 7-day rolling-average basis.

19. **Malfunction.** SO<sub>2</sub> emissions during periods of Malfunction of (i) the El Paso Refinery’s FCCU’s wet gas scrubber and/or (ii) any FCCU SO<sub>2</sub>- Reducing Catalyst Additive system shall not be used in determining compliance with the short-term (7-day) SO<sub>2</sub> emissions limit set forth in Paragraph 18, above, provided that during such periods Western implements good air pollution control practices to minimize SO<sub>2</sub> emissions. Nothing in this Paragraph shall be construed to relieve Western of any obligation under any federal, state, or local law, regulation, or permit to report emissions during periods of Malfunction, to comply with

emissions limits applicable during periods of Malfunction, or to document the occurrence and/or cause of a Malfunction. Emissions during any such period of Malfunction shall be monitored with CEMS as provided by Paragraph 20.

**20. Demonstrating Compliance with FCCU SO<sub>2</sub> Emission Limits for the El Paso Refinery FCCU.**

**Refinery FCCU.** By no later than the Entry Date, Western shall use SO<sub>2</sub> and O<sub>2</sub> CEMS at the El Paso Refinery FCCU to monitor performance and to report compliance with the terms and conditions of this Subsection V.B relating to SO<sub>2</sub> emissions from the El Paso Refinery FCCU. Western shall make emissions monitoring data available to EPA as soon as practicable following an EPA request for such data. The CEMS shall be calibrated and certified in accordance with 40 C.F.R. § 60.13 and Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B. However, unless Appendix F is required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3, and 5.1.4, Western may conduct: (1) either a Relative Accuracy Audit (“RAA”) or a Relative Accuracy Test Audit (“RATA”) once every three (3) years; and (2) a Cylinder Gas Audit (“CGA”) each calendar quarter in which a RAA or RATA is not performed. If the CEMS must be moved because of the installation of control equipment, Western shall promptly reinstall, re-calibrate, and re-certify the CEMS.

**C. PARTICULATE MATTER EMISSIONS REDUCTIONS FROM THE FCCU**

**21. Emission Limit for PM.** By no later than the Entry Date, Western shall comply with an emission limit for the El Paso Refinery FCCU of 0.5 pounds of PM per 1,000 pounds of coke burned, on a 3-hour average based on the average of three runs.

22. **Malfunction.** PM emissions during periods of Malfunction of the El Paso Refinery FCCU's wet gas scrubber shall not be used in determining compliance with the PM emission limit set forth in Paragraph 21, provided that during such periods Western implements good air pollution control practices to minimize PM emissions. Nothing in this Paragraph shall be construed to relieve Western of any obligation under any federal, state, or local law, regulation, or permit to report emissions during periods of Malfunction, to comply with emissions limits applicable during periods of Malfunction, or to document the occurrence and/or cause of a Malfunction.

23. **PM Testing for the El Paso Refinery FCCU.** Western shall follow the test protocol specified in 40 C.F.R. § 60.106(b)(2) to measure PM emissions from the El Paso Refinery FCCU. Western shall propose and submit the test protocol to EPA for approval by no later than three (3) months after the Entry Date. Western shall conduct the first test no later than six (6) months after EPA approves the test protocol. Western shall conduct annual PM tests on the El Paso Refinery FCCU and shall submit the results in the first Semi-Annual Report due under Section VII (Reporting) three (3) months or more after the date of the PM test. Upon demonstrating through at least three (3) annual tests that the PM limit is not being exceeded at the El Paso Refinery FCCU, Western may request EPA approval to conduct tests under this Consent Decree less frequently than annually. Such approval will not be unreasonably withheld.

D. **CARBON MONOXIDE EMISSIONS REDUCTIONS FROM THE FCCU**

24. **CO Emission Limit.** By no later than the Entry Date, Western shall comply, with respect to the El Paso Refinery FCCU, with (i) a CO emission limit of 500 ppmvd CO corrected to 0% oxygen on a 1-hour average basis; and (ii) a CO emission limit of 100 ppmvd CO corrected to 0% oxygen on a 365-day rolling-average basis.

25. **Startup, Shutdown, and Malfunction.** CO emissions (i) caused by or attributable to the Startup, Shutdown, or Malfunction of the El Paso Refinery FCCU shall not be used in determining compliance with the short-term (1-hour) CO emission limit set forth in Paragraph 24, provided that during such periods Western implements good air pollution control practices to minimize CO emissions. Nothing in this Paragraph shall be construed to relieve Western of any obligation under any federal, state, or local law, regulation, or permit to report emissions during periods of Startup, Shutdown, or Malfunction, to comply with emissions limits applicable during periods of Startup, Shutdown, or Malfunction, or to document the occurrence and/or cause of a Startup, Shutdown, or Malfunction event. Emissions during any such period of Startup, Shutdown, or Malfunction shall be monitored with CEMS as provided by Paragraph 26.

26. **Demonstrating Compliance with CO Emissions Limits.** By no later than the Entry Date, Western shall use CO and O<sub>2</sub> CEMS at the El Paso Refinery FCCU to monitor emissions and to report compliance with the terms and conditions of this Subsection V.D relating to CO emissions from the El Paso Refinery FCCU. Western shall make emissions monitoring data available to EPA as soon as practicable following an EPA request for such data. The CEMS shall be calibrated and certified in accordance with 40 C.F.R. § 60.13 and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. However, unless Appendix F is required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3, and 5.1.4, Western may conduct: (1) either a Relative Accuracy Audit (“RAA”) or a Relative Accuracy Test Audit (“RATA”) once every three (3) years; and (2) a Cylinder Gas Audit (“CGA”) each calendar quarter in which a RAA or RATA is not performed. If a CEMS must be moved

because of the installation of control equipment, Western shall promptly reinstall, re-calibrate, and re-certify the CEMS.

E. **NSPS APPLICABILITY TO THE FCCU CATALYST REGENERATOR**

27. **NSPS Applicability and Compliance.** The El Paso Refinery FCCU catalyst regenerator has been and is an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and J. On and after the Entry Date, the El Paso Refinery FCCU catalyst regenerator shall continue to be subject to and shall comply with 40 C.F.R. Part 60, Subparts A and J, with respect to SO<sub>2</sub>, PM, and CO.

F. **NOx EMISSIONS REDUCTIONS FROM COMBUSTION UNITS**

28. **General.** Western shall implement a program to reduce NOx emissions from the Combustion Units listed in Appendix A of this Consent Decree through the installation of NOx controls or the permanent Shutdown of certain units and by the acceptance of permit limits on the units controlled to meet the requirements of Paragraphs 30 and 33. Western shall monitor compliance with the emission limits through the use of CEMS, PEMS, or stack tests as described in more detail below.

29. **Identification of Qualifying Controls.** Western shall select one or any combination of the following “Qualifying Controls” to satisfy the requirements of Paragraphs 30 and 33:

- i. Selective catalytic reduction or selective non-catalytic reduction;
- ii. Current-Generation or Next-Generation Ultra-Low NOx Burners;
- iii. Other technologies which Western demonstrates to EPA’s satisfaction will reduce NOx emissions to 0.040 pounds of NOx per mmBTU heat input or lower;

- iv. With respect to Boiler B-3, the low-NOx burner retrofit that Western installed and has achieved an emission rate of 0.062 pounds of NOx per mmBTU heat input, and with respect to Boiler B-1, the low-NOx burner retrofit that Western intends to install, which will be designed to reduce NOx emissions to 0.062 pounds of NOx per mmBTU heat input or lower; or
- v. Permanent Shutdown of a Combustion Unit with surrender of its operating permit; provided, however, that to the extent that the emissions reductions resulting from the permanent Shutdown are used to satisfy the requirements of Paragraphs 30 and 33, those reductions (with the exception of the reductions from the shutdown of Heater H-101 (EPN 1) and Heater H-102 (EPN 2) used to permit Heater H-103 (EPN H103)) may not be used as reductions for the construction of new units or the modification of existing units permitted collectively as a single project with the Shutdown, notwithstanding the provisions of Subparagraph 106. iii (“use emissions reductions from the installation of controls...”).

30. **Installation of Qualifying Controls – June 2013.** On or before June 30, 2013, Western shall use Qualifying Controls to reduce NOx emissions from the Combustion Units listed in Appendix A by at least 320 tons per year so as to satisfy the following inequality:

$$\sum_{i=1}^n [(E_{actual})_i - (E_{allowable})_i] \geq 320 \text{ tons of NOx per year}$$

Where:

- $(E_{allowable})_i$  = [(The permitted allowable pounds of NOx per million BTU for Combustion Unit i)/(2000 pounds per ton)] x [(the lower of permitted or maximum heat input rate capacity in million BTU per hour for Combustion Unit i) x (the lower of 8760 or permitted hours per year)];
- $(E_{Actual})_i$  = The tons of NOx per year prior actual emissions as listed in Appendix A for Combustion Unit i (unless prior actual emissions exceed allowable emissions, then use allowable); and
- n = The number of Combustion Units with Qualifying Controls from the units listed in Appendix A that are selected by Western to satisfy the requirements of the equation set forth in this Paragraph 30.

Permit limits established to implement this Paragraph may use a 365-day rolling average for Combustion Units that use a CEMS to monitor compliance, and for Combustion Units that do not use a CEMS, the permit limit averaging period must be no longer than the averaging period of the reference test method.

31. **Baseline Information.** Appendix A to this Consent Decree (El Paso Refinery Combustion Unit Information) provides the following information for each Combustion Unit:

- i. the maximum physical heat input capacity or, if less, the allowable heat input capacity in mmBtu/hr (HHV);
- ii. the annual average emission rate for 2006/2007 in pounds of NOx per mmBtu heat input (HHV) and tons per year of actual emissions;
- iii. the type of data used to derive the emission estimate (*i.e.*, emission factor, stack test, or CEMS data); and,
- iv. the utilization rate in annual average mmBtu/hr (HHV) for 2006/2007.

32. **NOx Control Plan.** Western shall submit a detailed NOx control plan (the “NOx Control Plan”) to EPA for review and comment by no later than 60 days after the Entry Date, with annual updates (covering the prior calendar year as determined at calendar year end) with the first report submitted pursuant to Section VII (Reporting) following the passage of each calendar year until termination of the Consent Decree or until the reductions required by Paragraph 33 are achieved, whichever occurs first. The NOx Control Plan and its annual updates shall describe the achieved (as determined at calendar year end) and anticipated progress of the NOx emissions reductions program for Combustion Units and shall contain the following information for each Combustion Unit Western plans to use to satisfy the requirements of Paragraphs 30 and 33:

- i. All of the information in Appendix A;
- ii. Identification of the type of Qualifying Controls installed or planned with date installed or planned (including identification of any Combustion Unit to be permanently shut down);
- iii. To the extent limits exist, the allowable NOx emission rates (in lbs/mmBtu (HHV)), with averaging period) and allowable heat input rate (in mmBtu/hr (HHV)) obtained or planned with dates obtained or planned;
- iv. The results of emissions tests conducted, and annual average CEMS or PEMS data collected, pursuant to Paragraph 35 (reported in ppmvd corrected to 3% oxygen, in lbs/mmBtu, and in tons per year); and
- v. The amount in tons per year applied or to be applied toward satisfying Paragraph 30 and/or 33.

Appendix A (El Paso Refinery Combustion Unit Information), the NOx Control Plan, and the annual updates required by this Paragraph shall be for informational purposes only and shall not be used to develop permit requirements or other operating restrictions. Western may change any projections, plans, or information (including, but not limited to, which units Western plans to control) that is included in the NOx Control Plan or updates by including such changes or updates in its annual reports.

33. **Installation of Qualifying Controls – June 2014.** By June 30, 2014, Western shall have installed sufficient Qualifying Controls and have applied for emission limits sufficient to reduce NOx emissions from the Combustion Units listed in Appendix A by at least 481 tons per year so as to satisfy the following inequality:

$$\sum_{i=1}^n [(E_{actual})_i - (E_{allowable})_i] \geq 481 \text{ tons of NOx per year}$$

Where:

$$(E_{allowable})_i = [(\text{The permitted allowable pounds of NOx per million BTU for Combustion Unit } i)/(2000 \text{ pounds per ton})] \times [(\text{the }]$$

lower of permitted or maximum heat input rate capacity in million BTU per hour for Combustion Unit i) x (the lower of 8760 or permitted hours per year)];

- |                  |   |   |
|------------------|---|---|
| $(E_{Actual})_i$ | = | The tons of NOx per year prior actual emissions as listed in Appendix A for Combustion Unit i (unless prior actual emissions exceed allowable emissions, then use allowable); and             |
| n                | = | The number of Combustion Units with Qualifying Controls from those listed in Appendix A that are selected by Western to satisfy the requirements of the equation set forth in this Paragraph. |

Permit limits established to implement this Paragraph may use a 365-day rolling average for Combustion Units that use a CEMS to monitor compliance, and for Combustion Units that do not use a CEMS, the permit limit averaging period must be no longer than the averaging period of the reference test method.

34. Pursuant to Subsection V.N of this Consent Decree, Western shall apply for federally enforceable permits that incorporate emission limits (in lbs/mmBTU) for Combustion Units required under Paragraphs 30 and 33, to ensure that the NOx emission reduction requirements imposed by this Subsection V.F shall survive the termination of this Consent Decree.

35. By no later than 180 days after installing Qualifying Controls on a Combustion Unit that will be used to satisfy the requirements of Paragraphs 30 and 33, Western shall monitor such Combustion Unit as follows:

- i. For each Combustion Unit with a maximum physical capacity greater than 150 mmBtu/hr (HHV), install or continue to operate a NOx and O<sub>2</sub> CEMS.
- ii. For heaters and boilers with a capacity greater than 100 mmBTU/hr (HHV) but less than or equal to 150 mmBTU/hr (HHV), install or continue to operate a NOx

CEMS or monitor NOx emissions with a PEMS developed and operated pursuant to the requirements of Appendix B (Predictive Emissions Monitoring Systems for Heaters and Boilers with capacities between 100 and 150 mmBTU/hr) of this Consent Decree.

- iii. For each Combustion Unit with a maximum physical capacity of less than or equal to 100 mmBtu/hr (HHV), (a) conduct an initial performance test and any periodic tests that may be required by EPA under other applicable regulatory authority; or (b) comply with the monitoring requirements described in Subparagraphs "i" or "ii" of this Paragraph, above. The results of the initial performance testing shall be reported to EPA within 90 days of completing the test. Western shall perform annual performance tests during each calendar year thereafter.

Western shall use Method 7E of 40 C.F.R. Part 60, Appendix A-4, (or a test method made applicable by a future, final EPA regulation) to conduct performance testing required by Subparagraph 35.iii. For units that utilize Qualifying Controls as of the Entry Date and which Western intends to use to achieve the NOx reductions required by Paragraphs 30 and/or 33, Western shall implement the specified monitoring (CEMS, PEMS, or stack test) by no later than four (4) months after the Entry Date, based on the capacity of the Combustion Unit as listed in Appendix A to this Decree. For any such unit with a maximum physical capacity of less than 100 mmBtu/hr (HHV), an additional performance test is not required under this Paragraph if a performance test using Method 7E was performed after January 1, 2007, and the Combustion Unit was equipped with Qualifying Controls before the performance test.

36. **Demonstrating Compliance through Use of a NOx CEMS.** Western shall install, certify, calibrate, maintain, and operate the CEMS required by Paragraph 35 in accordance with 40 C.F.R. Part 60, Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60, Appendix B. However, unless Appendix F is required by the NSPS, state law or regulation, or a permit or approval, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, Western may conduct either a Relative

Accuracy Audit (“RAA”) or a Relative Accuracy Test Audit (“RATA”) once every three (3) years and shall conduct Cylinder Gas Audits (“CGA”) each calendar quarter during which a RAA or a RATA is not performed. If the CEMS must be moved because of the installation of control equipment, Western shall promptly reinstall, re-calibrate, and re-certify the CEMS.

37. The requirements of this Subsection V.F do not exempt Western from complying with any and all federal, state, regional, and local requirements that may require technology, equipment, monitoring, or other upgrades based on actions or activities occurring after the Date of Lodging of the Consent Decree, or based upon new or modified regulatory, statutory, or permit requirements.

38. Western shall retain monitoring and test data required under this Subsection until termination of the Consent Decree. Western shall submit such records to EPA upon request.

G. **SO<sub>2</sub> EMISSIONS REDUCTIONS FROM, AND NSPS APPLICABILITY TO, HEATERS, BOILERS, AND OTHER FUEL GAS COMBUSTION DEVICES (OTHER THAN FLARING DEVICES)**

39. **NSPS Applicability to Heaters, Boilers and Other Fuel Gas Combustion Devices (Other than Flaring Devices)** Each heater and boiler that is used to combust refinery fuel gas at the El Paso Refinery has been and is an “affected facility” as that term is used in 40 C.F.R. Part 60, Subparts A and J. On and after the Entry Date, each such heater and boiler shall continue to be subject to and shall comply with the requirements of NSPS Subparts A and J for fuel gas combustion devices.

40. **Elimination/Reduction of Fuel Oil Burning.** Effective on the Entry Date, Western shall not burn Fuel Oil in any combustion unit at the El Paso Refinery except during periods of Natural Gas Curtailment or operator training. Nothing herein is intended to limit, or

shall be interpreted as limiting, the use of torch oil in an FCCU regenerator to assist in starting, restarting, maintaining hot standby, or maintaining regenerator heat balance.

41. **Construction of Fuel Gas Combustion Devices After Lodging.** After the Date of Lodging, Western shall not construct at the El Paso Refinery any new fuel gas combustion device that burns fuel oil unless the air pollution control equipment controlling the combustion device either (i) has an SO<sub>2</sub> control efficiency of 90% or greater; or (ii) achieves an SO<sub>2</sub> concentration of 20 ppm at 0% O<sub>2</sub> or less on a three-hour rolling average basis. Nothing in this Paragraph exempts Western from securing all necessary permits before constructing a new combustion device at the El Paso Refinery.

H. **SULFUR RECOVERY PLANT OPERATIONS**

42. **Sulfur Recovery Plant Compliance.** The North SRP (and the associated TGU) and South SRP have been shutdown permanently. Western shall not reactivate the North SRP (or the associated TGU) or the South SRP unless and until Western has obtained new-source permits for the units under the PSD/NSR Regulations, including the major new-source-review permitting requirements under the federally approved Texas SIP. Western shall not operate the North SRP (or the associated TGU) or the South SRP without complying with 40 C.F.R. Part 60, Subpart A, and Subparts J and/or Ja, as applicable.

I. **FLARING DEVICES**

43. **Good Air Pollution Control Practices.** On and after the Entry Date, Western shall at all times and to the extent practicable, including during periods of Startup, Shutdown, upset and/or Malfunction, implement good air pollution control practices to minimize emissions

from its Flaring Devices, in a manner consistent with the requirements imposed by 40 C.F.R. § 60.11(d).

44. **NSPS Applicability to Flaring Devices.** Western currently owns and/or operates the following three Flaring Devices at the El Paso Refinery: the Relief Gas Emergency Flare (EPN D-2914); the Plant Emergency/AAG/Main South Flare (EPN 112); and the Rheniformer Emergency Flare (EPN R-2911). Each of these Flaring Devices has been and is an “affected facility” as that term is used in NSPS, 40 C.F.R. Part 60, Subparts A and J. On and after the Entry Date, the Relief Gas Emergency Flare (EPN D-2914) and the Plant Emergency/AAG/Main South Flare (EPN 112) shall comply with the requirements of 40 C.F.R. Part 60, Subparts A and J, for fuel gas combustion devices. By no later than 120 days after the Entry Date, the Rheniformer Emergency Flare (EPN R-2911) shall comply with the requirements of 40 C.F.R. Part 60, Subparts A and J, for fuel gas combustion devices.

45. **Compliance Methods for Flaring Devices.**

Western shall comply with the NSPS Subparts A and J requirements for each Flaring Device by using one or any combination of the following methods:

- (1) Design, install, operate, and maintain a flare gas recovery system to prevent continuous or routine combustion in the Flaring Device;
- (2) Eliminate the routes of continuous or intermittent, routinely generated refinery fuel gases to a Flaring Device and operate the Flaring Device such that it receives only process upset gases (as defined in 40 C.F.R. § 60.101(e)), fuel gas released as a result of relief valve leakage, or process upset gases released due to other emergency malfunctions; and/or
- (3) Operate the Flaring Device as a fuel gas combustion device and comply with the applicable NSPS Subpart J requirements, including monitoring requirements by use of a CEMS pursuant to 40 C.F.R. § 60.105(a)(4) or with a parametric monitoring system approved by EPA as an alternative monitoring system under 40 C.F.R. § 60.13(i).

Western shall certify that each Flaring Device is in compliance with NSPS Subparts A and J, and indicate which of the three above methods were used, by no later than the following dates:

Relief Gas Emergency Flare (EPN-D-2914) :	Entry Date
Plant Emergency/AAG/Main South Flare (EPN 112):	Entry Date
Rheniformer Emergency Flare (EPN R-2911):	120 days after the Entry Date.

46. **Performance Test Requirements.** For any flare that receives a continuous flow of refinery fuel gas, by no later than 180 days after certifying that the Flaring Device is in compliance with NSPS Subparts A and J, Western shall conduct a flare performance test pursuant to 40 C.F.R. §§ 60.8 and 60.18, or an EPA-approved equivalent method. In lieu of conducting the velocity test required in 40 C.F.R. § 60.18, Western may (a) submit velocity calculations which demonstrate that the Flaring Device meets the performance specification required by 40 C.F.R. § 60.18, or (b) utilize a prior demonstration of Western's compliance with the requirements of Refinery MACT I, 40 C.F.R. Part 63, Subpart CC, provided that EPA determines that such prior demonstration provides a substantially equivalent assurance of compliance with 40 C.F.R. § 60.18.

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

a. **Continuous or Intermittent, Routinely Generated Refinery Fuel Gases.**

For continuous or intermittent, routinely generated refinery gases that are combusted in any Flaring Device, Western shall comply with the emission limit at 40 C.F.R. § 60.104(a)(1) by no later than the compliance date in Paragraph 44.

b. **Non-Routinely Generated Gases.** The combustion of gases generated by the Startup, Shutdown, or Malfunction of a refinery process unit or released to a Flaring Device

as a result of relief valve leakage or other emergency malfunction are exempt from the requirement to comply with 40 C.F.R. § 60.104(a)(1).

48. **Periodic Maintenance of Flare Gas Recovery Systems.** The Parties recognize that periodic maintenance may be required for properly designed and operated flare gas recovery systems. To the extent that Western operates flare gas recovery systems in the future, Western shall take all reasonable measures to minimize emissions while such periodic maintenance is being performed.

49. **Safe Operation of Refining Processes.** The Parties recognize that under certain conditions, a flare gas recovery system may need to be bypassed in the event of an emergency or in order to ensure safe operation of refinery processes. Nothing in this Consent Decree precludes Western from temporarily bypassing a flare gas recovery system under such circumstances.

J. **CONTROL OF ACID GAS FLARING INCIDENTS**

50. **Past Acid Gas Flaring and Tail Gas Incidents Analysis and Corrective Measures.** By no later than 6 months after Entry Date, Western shall submit to EPA a report identifying and describing each Acid Gas Flaring Incident and Tail Gas Incident that occurred at the El Paso Refinery between January 1, 2005, and the Entry Date. To the extent the information is available, the report shall state the date and time that each Acid Gas Flaring Incident and each Tail Gas Incident started and ended, each incident's Root Cause or Causes, its estimated SO<sub>2</sub> emissions and the calculations used to determine the quantity of emissions, and the corrective measures Western has implemented to address the Root Cause or Causes of the past incidents to minimize the number and duration of future Acid Gas Flaring Incidents.

a. The report shall also identify any releases that may have been reportable under Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), and/or Section 304 of EPCRA, 42 U.S.C. § 11004, and/or similar or corresponding state reporting regulations. For all releases for which Western seeks a resolution of liability under Paragraph 173 of this Consent Decree, Western shall correct any violations by submitting corrective reports to the appropriate agencies consistent with the requirements of Section 103(a) of CERCLA and Section 304 of EPCRA, Western shall attach copies of such corrective reports to the report required by this Paragraph, and Western shall describe the corrective measures Western has implemented to address the Root Cause or Causes of past failures to report under CERCLA Section 103(a) and/or EPCRA Section 304.

51. **Future Acid Gas Flaring Incidents.** As specified by this Subsection V.J and consistent with the requirements of 40 C.F.R. § 60.11(d), Western shall investigate the causes of future Acid Gas Flaring Incidents, take reasonable steps to correct the conditions that have caused or contributed to such Acid Gas Flaring Incidents, and minimize Acid Gas Flaring Incidents at the El Paso Refinery.

52. **Investigation and Reporting.** No later than sixty (60) days following the end of an Acid Gas Flaring Incident occurring after the Entry Date, Western shall conduct an investigation into the Root Cause or Causes of the incident and record the findings of the investigation in a report, which shall be submitted to EPA as part of a Semi-Annual Report as required by Paragraph 61 of this Decree. The report for each incident shall include, at a minimum, the following:

- i. The date and time that the Acid Gas Flaring Incident started and ended. To the extent that the Acid Gas Flaring Incident involved multiple releases either within a twenty-four (24) hour period or within subsequent, contiguous, non-overlapping

- twenty-four (24) hour periods, Western shall set forth the starting and ending dates and times of each release;
- ii. An estimate of the quantity of sulfur dioxide that was emitted and the calculations that were used to determine that quantity;
  - iii. The steps, if any, that Western took to limit the duration and/or quantity of sulfur dioxide emissions associated with the Acid Gas Flaring Incident;
  - iv. A detailed analysis that sets forth the Root Cause or Causes and all significant contributing causes of that Acid Gas Flaring Incident, to the extent determinable;
  - v. An analysis of the measures, if any, that are available to reduce the likelihood of a recurrence of an Acid Gas Flaring Incident resulting from the same Root Cause or Causes or significant contributing causes in the future. The analysis shall discuss the alternatives, if any, that are available, the probable effectiveness and cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation, and maintenance changes shall be evaluated. If Western concludes that corrective action(s) is (are) required under Paragraph 53, the report shall include a description of the action(s) and, if not already completed, a schedule for its (their) implementation, including proposed commencement and completion dates. If Western concludes that corrective action is not required under Paragraph 53, the report shall explain the basis for that conclusion;
  - vi. A statement that: (a) specifically identifies each of the grounds for stipulated penalties in Paragraphs 54 and 55 of this Decree and describes whether or not the Acid Gas Flaring Incident falls under any of those grounds (provided, however, that Western may choose to submit with the Root Cause analysis a payment of stipulated penalties in the nature of settlement without the need to specifically identify the grounds for the penalty; such payment of stipulated penalties shall not constitute an admission of liability, nor shall it raise any presumption whatsoever about the nature, existence or strength of Western's potential defenses); (b) if an Acid Gas Flaring Incident falls under Paragraph 56 of this Decree, describes which Subparagraph ("a" or "b") applies and why; and (c) if an Acid Gas Flaring Incident falls under either Paragraph 55 or Subparagraph 56.b, states whether or not Western asserts a defense to the Acid Gas Flaring Incident, and if so, a description of the defense;
  - vii. To the extent that investigations of the causes and/or possible corrective actions still are underway on the due date of the report, a statement of the anticipated date by which a follow-up report fully conforming to the requirements of Subparagraphs iv and v of this Paragraph 52 shall be submitted; provided, however, that if Western has not submitted a report or a series of reports containing the information required to be submitted under this Paragraph within the 60-day time period set forth in this Paragraph 52 after the due date for the initial report for the Acid Gas Flaring Incident (or such additional time as EPA

may allow), the stipulated penalty provisions of Section IX shall apply. Nothing in this Paragraph shall be deemed to excuse Western from its investigation, reporting, and corrective action obligations under this Section for any Acid Gas Flaring Incident that occurs after an Acid Gas Flaring Incident for which Western has requested an extension of time under this Subparagraph 52.vii; and

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

53. **Corrective Action.**

a. In response to any Acid Gas Flaring Incident occurring after the Entry Date, Western shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause or Causes and all contributing causes of that Acid Gas Flaring Incident.

b. EPA does not, by its agreement to the entry of this Decree, or by its failure to object to any corrective action that Western may take in the future, warrant or aver in any manner that any corrective actions in the future will result in compliance with the provisions of the Clean Air Act or any other applicable federal, state, or local law or regulation.

Notwithstanding EPA's review of any plans, reports, corrective actions or procedures under this Section V.J, Western shall remain solely responsible for non-compliance with the Clean Air Act and its implementing regulations. Nothing in this Subsection V.J shall be construed as a waiver of EPA's rights under the Clean Air Act and its regulations for future violations of the Act or its regulations.

c. After review of any report required by Paragraph 52 and submitted as required by Paragraph 61, EPA will notify Western in writing of (i) any deficiencies in the corrective actions

identified in the report and/or (ii) any objections to the schedules for corrective actions. EPA will also explain the basis for its objection(s) to the corrective actions and/or schedule(s). Western shall implement an alternative or revised corrective action or implementation schedule based on EPA's comments. If a corrective action that EPA has identified as deficient has already been completed by the time of EPA's notification, Western shall not be obligated to implement the corrective action as specified by EPA for that incident. Western shall be on notice, however, that EPA has determined that the corrective action is deficient and not acceptable for remedying the same or similar Root Cause or Causes of later incidents. If EPA and Western cannot agree on the appropriate corrective action(s) to be taken in response to a particular Acid Gas Flaring Incident, either Party may invoke the Dispute Resolution provisions of Section XIII of the Consent Decree.

d. Nothing in this Subsection V.J shall be construed to limit the right of Western to take such corrective actions as it deems necessary and appropriate immediately following an Acid Gas Flaring Incident or in the period during preparation and review of any reports required under Paragraph 52.

54. **Stipulated Penalties for Acid Gas Flaring Incidents.** The stipulated penalty provisions of Paragraphs 55 through 57 shall apply to any Acid Gas Flaring Incident for which the Root Cause was one or more of the following acts, omissions, or events:

- i. Error resulting from careless operation by the personnel charged with the responsibility for the operation of the Sulfuric Acid Plant or Upstream Process Units;
- ii. Failure to follow written procedures; or
- iii. A failure of equipment that is due to a failure by Western to operate and maintain that equipment in a manner consistent with good engineering practice.

55. If the Acid Gas Flaring Incident is not a result of one of the Root Causes identified in Paragraph 54, then the stipulated penalty provisions of Paragraph 132 shall apply if the Acid Gas Flaring Incident:

- i. Results in emissions of sulfur dioxide at a rate greater than twenty (20.0) pounds per hour continuously for three (3) consecutive hours or more and/or Western failed to take any action during the Acid Gas Flaring Incident to limit the duration and/or quantity of SO<sub>2</sub> emissions associated with such incident; or
- ii. Causes the total number of Acid Gas Flaring Incidents in a rolling twelve-month (12- month) period to exceed five (5).

56. With respect to any Acid Gas Flaring Incident not identified in Paragraphs 54 or 55, the following provisions shall apply:

a. First Time: If the Root Cause of the Acid Gas Flaring Incident was not a recurrence of the same Root Cause that resulted in a previous Acid Gas Flaring Incident that occurred after the Entry Date, then:

(1) If the Root Cause of the Acid Gas Flaring Incident was sudden, infrequent, and not reasonably preventable through the exercise of good engineering practice, then that cause shall be designated as an agreed-upon Malfunction for purposes of reviewing subsequent Acid Gas Flaring Incidents; or

(2) If the Root Cause of the Acid Gas Flaring Incident was sudden and infrequent, but reasonably preventable through the exercise of good engineering practice, then Western shall implement corrective action(s) pursuant to Paragraph 53, and the stipulated penalty provisions of Paragraph 132 shall not apply.

b. Recurrence: If the Root Cause is a recurrence of the same Root Cause that resulted in a previous Acid Gas Flaring Incident that occurred since the Entry Date, then Western shall be liable for stipulated penalties under Paragraph 132 unless:

- (1) the Acid Gas Flaring Incident resulted from a Malfunction; or
- (2) the Root Cause previously was designated as an agreed-upon Malfunction under Subparagraph 56.a.(1); or

(3) the Acid Gas Flaring Incident had as its Root Cause the recurrence of a Root Cause for which Western had previously developed, or was in the process of developing, a corrective action plan for which Western had not yet completed implementation.

57. **Defenses.** Western may raise the following affirmative defenses in response to a demand by the United States for stipulated penalties:

- i. Force Majeure
- ii. As to Paragraph 54, the Acid Gas Flaring Incident does not meet the identified criteria.
- iii. As to Paragraph 55, Malfunction.
- iv. As to Paragraph 56, the Acid Gas Flaring Incident does not meet the identified criteria and/or was due to a Malfunction.

58. In the event a dispute under Paragraphs 54 – 57 is brought to the Court pursuant to the Dispute Resolution provisions (Section XIII) of this Consent Decree, Western may also assert a Startup, Shutdown and/or Malfunction defense, but the United States shall be entitled to assert that such defenses are not available. If Western prevails in persuading the Court that the defenses of Startup, Shutdown and/or Malfunction are available for Acid Gas Flaring Incidents under 40 C.F.R. 60.104(a)(1), Western shall not be liable for stipulated penalties for emissions resulting from such Startup, Shutdown and/or Malfunction. If the United States prevails in persuading the Court that the defenses of Startup, Shutdown and/or Malfunction are not available, Western shall be liable for such stipulated penalties.

59. Other than for a Malfunction or force majeure, if no Acid Gas Flaring Incident occurs at the El Paso Refinery for a rolling 36-month period commencing after the Entry Date, then the stipulated penalty provisions of Subsection V.J shall no longer apply. EPA may elect to reinstate the stipulated penalty provision if the El Paso Refinery has an Acid Gas Flaring Incident that would otherwise be subject to stipulated penalties. EPA's decision shall not be

subject to dispute resolution. Once reinstated, the stipulated penalty provision shall continue for the remaining term of this Consent Decree.

60. **Emission Calculations.**

a. **Calculation of the Quantity of Sulfur Dioxide Emissions Resulting from Acid Gas Flaring.** For purposes of this Consent Decree, the quantity of SO<sub>2</sub> emissions resulting from an Acid Gas Flaring Incident shall be calculated by the following formula:

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

The quantity of SO<sub>2</sub> emitted shall be rounded to one decimal point. (Thus, for example, for a calculation that results in a number equal to 10.050 tons, the quantity of SO<sub>2</sub> emitted shall be rounded to 10.1 tons.) For purposes of determining the occurrence of, or the total quantity of SO<sub>2</sub> emissions resulting from, an Acid Gas Flaring Incident that is comprised of intermittent Acid Gas Flaring, the quantity of SO<sub>2</sub> emitted shall be equal to the sum of the quantities of SO<sub>2</sub> flared during each 24-hour period starting when the Acid Gas was first flared.

b. **Calculation of the Rate of SO<sub>2</sub> Emissions During Acid Gas Flaring.** For purposes of this Consent Decree, the rate of SO<sub>2</sub> emissions resulting from an Acid Gas Flaring Incident shall be expressed in terms of pounds per hour and shall be calculated by the following formula:

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

The emission rate shall be rounded to one decimal point. (Thus, for example, for a calculation that results in an emission rate of 19.95 pounds of SO<sub>2</sub> per hour, the emission rate shall be

rounded to 20.0 pounds of SO<sub>2</sub> per hour; for a calculation that results in an emission rate of 20.05 pounds of SO<sub>2</sub> per hour, the emission rate shall be rounded to 20.1.)

c. Meaning of Variables and Derivation of Multipliers Used in the Equations in this Paragraph 60:

ER =	Emission Rate in pounds of SO <sub>2</sub> per hour
FR =	Average Flow Rate to Flaring Device(s) during Flaring Incident in standard cubic feet per hour
TD =	Total Duration of Flaring Incident in hours
ConcH <sub>2</sub> S =	Average Concentration of Hydrogen Sulfide in gas during Flaring Incident (or immediately prior to Flaring Incident if all gas is being flared) expressed as a volume fraction (scf H <sub>2</sub> S/scf gas)
8.44 x 10 <sup>-5</sup> =	[lb mole H <sub>2</sub> S/379 scf H <sub>2</sub> S][64 lbs SO <sub>2</sub> /lb mole H <sub>2</sub> S][Ton/2000 lbs]
0.169 =	[lb mole H <sub>2</sub> S/379 scf H <sub>2</sub> S][1.0 lb mole SO <sub>2</sub> /1.0 lb mole H <sub>2</sub> S][64 lb SO <sub>2</sub> /1.0 lb mole SO <sub>2</sub> ]

The flow of gas to the Acid Gas Flaring Device(s) (“FR”) shall be as measured by the relevant flow meter or reliable flow estimation parameters. Hydrogen sulfide concentration (“ConcH<sub>2</sub>S”) shall be determined from knowledge of the sulfur content of the process gas being flared, by direct measurement by Tutwiler or Draeger (or other colorimetric) tube analysis, or by any other method approved by EPA. In the event that any of these data points is unavailable or inaccurate, the missing data point(s) shall be estimated according to best engineering judgment. The report required under Paragraph 52 shall include the data used in the calculation and an explanation of the basis for any estimates of missing data points.

61. **Semi-Annual Reporting.** As part of the Semi-Annual Reports required by Section VII (Reporting) of this Decree, Western shall include all reports on Acid Gas Flaring

Incidents that Western was required to prepare pursuant to this Subsection V.J during the six-month period covered by the Semi-Annual Report that is due. In addition, each Semi-Annual Report shall include a summary of any such incidents during the six-month period, including, at a minimum, the following information regarding each incident:

- a. Date;
- b. Summary of the Root Cause or Causes;
- c. Duration;
- d. Amount of sulfur dioxide releases;
- e. Any stipulated penalties due or demanded as a result of the incident;
- f. Any corrective actions completed;
- g. A list of all incidents for which corrective actions are outstanding.

Semi-Annual Reports shall also include a summary analysis of any trends identified by Western in the number, Root Causes, types of corrective actions, and other relevant information regarding Acid Gas Flaring Incidents during the six-month period covered by the report.

#### **K. HYDROCARBON FLARING INCIDENTS**

62. **Future HC Flaring Incidents.** For HC Flaring Incidents occurring after the Entry Date, Western shall follow the same investigative, reporting, and corrective action procedures as set forth in Subsection V.J for Acid Gas Flaring Incidents. However:

- i. Western shall submit the HC Flaring Incident(s) reports as part of the Semi-Annual Reports required pursuant to Section VII, rather than on an incident-by-incident basis.
- ii. For each Flaring Device, Western may prepare and submit a single Root Cause Analysis for one or more Root Causes found by that analysis to routinely recur. Western shall inform EPA that it is electing to report only once on that Root Cause(s). Unless EPA objects within thirty (30) days of receipt of the Root Cause Analysis, such election shall be effective.
- iii. If Western chooses to install the flare gas recovery system referenced in Paragraph 45(1) on the Rheniformer Emergency Flare (EPN R-2911), then during the six-month period after installation (that is, during the time in which the flare gas recovery system is being commissioned), Western shall not be required to undertake HC Flaring Incident investigations regarding the Rheniformer

Emergency Flare if the Root Cause of the HC Flaring Incident is directly related to the commissioning of the flare gas recovery system.

- iv. In lieu of analyzing possible corrective actions under Subparagraph 52.v and taking interim and/or long-term corrective action under Paragraph 53 for a HC Flaring Incident attributable to the Startup or Shutdown of a process unit that Western has previously analyzed under this Paragraph, Western may identify such prior analysis when submitting the report required under this Paragraph.
- v. To the extent that a HC Flaring Incident at the El Paso Refinery has as its Root Cause the bypass of the flare gas recovery system for safety or maintenance reasons as set forth in Paragraphs 48 and 49, Western shall be required to describe only the HC Flaring Incident and to list the date, time, and duration of such Incident in the Semi-Annual Reports due under Section VII.
- vi. Stipulated penalties under Paragraphs 54–56 and Paragraph 132 shall not apply to HC Flaring Incident(s).

Western shall continue to follow the HC Flaring Incident investigation and corrective action procedures after termination of the Consent Decree, but the reporting provisions of this Subsection shall not apply after termination. The formulas at Paragraph 60, used for calculating the quantity and rate of SO<sub>2</sub> emissions during Acid Gas Flaring Incidents, shall be used to calculate the quantity and rate of SO<sub>2</sub> emissions during HC Flaring Incidents.

#### **L. BENZENE WASTE NESHAP PROGRAM ENHANCEMENTS**

63. In addition to complying with all applicable requirements of 40 C.F.R. Part 61, Subpart FF (“Benzene Waste NESHAP,” “BWON,” or “Subpart FF”), Western shall undertake the measures set forth in this Subsection V.L to ensure continuing compliance with Subpart FF and to minimize or eliminate fugitive benzene waste emissions at the El Paso Refinery.

64. **Subpart FF Compliance.** By no later than the Entry Date, Western shall comply with the compliance option set forth at 40 C.F.R. § 61.342(e) (herein referred to as the “6 BQ Compliance Option”).

65. **Refinery Compliance Status Changes.** During the term of this Consent Decree, Western shall not change the compliance option of the El Paso Refinery from the 6 BQ Compliance Option to the compliance options set forth at 40 C.F.R. § 61.342(c)(2) or (c)(3)(ii).

66. **One-Time Review and Verification of the El Paso Refinery's TAB and Compliance with the Benzene Waste NESHAP, including the 6 BQ Compliance Option.**

a. **Phase One of the Review and Verification Process** By no later than 120 days after the Entry Date, Western shall complete a review and verification of the El Paso Refinery's Total Annual Benzene quantity ("TAB") and its compliance with the Benzene Waste NESHAP, including the 6 BQ Compliance Option. Western's review and verification process shall include, but not be limited to:

- i. an identification of each waste stream that is required to be included in the El Paso Refinery's TAB (e.g., slop oil, tank water draws, spent caustic, desalter "rag" layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround wastes);
- ii. a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;
- iii. an identification of the benzene concentration in each waste stream, including sampling for benzene concentration at no less than 10 waste streams, consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3); provided, however, that previous analytical data or documented knowledge of waste streams may be used, in accordance with 40 C.F.R. § 61.355(c)(2), for streams not sampled. Streams sampled on or after the date that fell one year before the Entry Date may be applied toward the waste streams requiring sampling; and
- iv. an identification of whether or not the stream is controlled consistent with the requirements of Subpart FF.

By no later than 30 days following the completion of Phase One of the review and verification process, Western shall submit a BWON Compliance Review and Verification Report to EPA that sets forth the results of Phase One, including but not limited to the items identified in Subparagraphs a.i through a.iv of this Paragraph.

b. Phase Two of the Review and Verification Process. Based on EPA's review of the BWON Compliance Review and Verification Report, EPA may select up to 20 waste streams at the El Paso Refinery for additional sampling or re-sampling for benzene concentration. Western shall conduct the required sampling under representative conditions and submit the results to EPA within 60 days of receipt of EPA's request. Western shall use the results of this additional sampling to reevaluate the TAB and the uncontrolled benzene quantity and to amend the BWON Compliance Review and Verification Report, as needed. To the extent that EPA requires Western to re-sample a waste stream as part of the Phase Two review that Western chose to sample as part of the Phase One review, Western may average the results of the two sampling events. Western shall submit an amended BWON Compliance Review and Verification Report within 90 days following the date of the completion of the required Phase Two sampling, if Phase Two sampling is required by EPA.

67. Implementation of Actions Necessary to Correct Non-Compliance or to Come Into Compliance.

a. Amended TAB Reports. If the results of the BWON Compliance Review and Verification Report indicate that the most recently filed TAB report required by 40 C.F.R. § 61.357(c) or 61.357(d) for the El Paso Refinery is inaccurate and/or does not satisfy the requirements of Subpart FF (or that the most recently due report was not filed), Western shall submit, by no later than 120 days after completion of the BWON Compliance Review and Verification Report, an amended TAB report (or new report) to EPA.

b. BWON Corrective Measures Plan. If the results of the BWON Compliance Review and Verification Report indicate that Western is not in compliance with the 6 BQ Compliance Option at the El Paso Refinery, Western shall submit to EPA, by no later than

ninety (90) days after completion of the BWON Compliance Review and Verification Report, a BWON Corrective Measures Plan that identifies with specificity the compliance strategy and schedule that Western shall implement to ensure that the El Paso Refinery complies with the 6 BQ Compliance Option as soon as practicable.

c. Review and Approval of Plan Submitted Pursuant to Subparagraph 67.b.

Any plan submitted pursuant to Subparagraph 67.b shall be subject to approval or disapproval by EPA. Within sixty (60) days after receiving any notification of disapproval from EPA, Western shall submit to EPA a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, Western shall implement the plan according to the schedule provided in the approved plan.

d. Certification of Compliance with the 6 BQ Compliance Option. By no

later than 30 days after completion of the implementation of all actions, if any, required pursuant to Subparagraphs 67.b or 67.c to come into compliance with the 6 BQ Compliance Option, Western shall submit a report to EPA certifying that the El Paso Refinery complies with the Benzene Waste NESHAP.

68. **Carbon Canisters.** Western shall comply with the requirements of this Paragraph 68 at all locations at the El Paso Refinery where a carbon canister(s) is utilized as a control device under the Benzene Waste NESHAP.

a. Installation and Certification. By no later than 180 days after the Entry Date, Western shall complete installation of primary and secondary carbon canisters at locations currently utilizing single canisters and shall operate them in series. By no later than 210 days after the Entry Date, Western shall submit a report certifying the completion of the installation of dual canisters. The report shall include: (i) a list of all locations at the El Paso Refinery where

carbon canister systems are used as a control device under Subpart FF; (ii) an indication, for each location, whether there was a pre-existing secondary carbon canister or whether a secondary carbon canister was installed under this Paragraph; (iii) the installation date of each such secondary canister installed under this Paragraph and the date that each secondary canister was put into operation; and (iv) an indication, for each location, whether volatile organic compounds (“VOC”) or benzene will be used to monitor for breakthrough under and as required by Subparagraph 68.c.

b. Except as expressly permitted under Subparagraphs 68.e and 68.f, Western shall not use single carbon canisters for any new units or installations at the El Paso Refinery that require controls pursuant to the Benzene Waste NESHAP.

c. Definition of “Breakthrough.” For dual carbon canister systems, “breakthrough” between the primary and secondary canister is defined as any reading equal to or greater than 50 ppm VOC or 5 ppm benzene (depending upon the constituent that Western decides to monitor).

d. Monitoring. Western shall monitor for breakthrough between the primary and secondary carbon canisters at times when there is actual flow into the carbon canister in accordance with the frequency specified in 40 C.F.R. § 61.354(d), and shall monitor the outlet of the secondary canister on a monthly basis or at its design replacement interval (whichever is less) to verify the proper functioning of the system. This requirement shall commence: (i) upon the Date of Lodging where dual carbon canisters currently are in service; and (ii) within seven days after installation of a new dual carbon canister system.

e. Replacing Canisters. Western shall replace the original primary carbon canister (or route the flow to an appropriate alternative control device) immediately when

breakthrough is detected between the primary and secondary canister. The original secondary carbon canister (or a fresh canister) shall become the new primary carbon canister and a fresh carbon canister shall become the secondary canister. For purposes of this Subparagraph, “immediately” shall mean within eight (8) hours of the detection of a breakthrough for canisters of 55 gallons or less, and within twenty-four (24) hours of the detection of a breakthrough for canisters greater than 55 gallons. In lieu of replacing the primary canister immediately, Western may elect to monitor the outlet of the secondary canister beginning on the day the breakthrough between the primary and secondary canister is identified and each calendar day thereafter. This daily monitoring shall continue until the primary canister is replaced. If the constituent being monitored (either benzene or VOC) is detected above background levels at the outlet of the secondary canister during this period of daily monitoring, both canisters shall be replaced within eight (8) hours of the detection of a breakthrough.

f. Limited, Temporary Use of Single Canisters. Western may utilize properly sized single canisters for short-term operations such as with temporary storage tanks or as temporary control devices. For canisters operated as part of a single canister system, “breakthrough” is defined for purposes of this Consent Decree as any reading of VOC or benzene above background. Beginning no later than the Entry Date, Western shall monitor for breakthrough from a single carbon canister system once every calendar day that there is actual flow to the carbon canister. Western shall replace the single carbon canister with a fresh carbon canister, discontinue flow, or route the stream to an alternate, appropriate device immediately when breakthrough is detected. For purpose of this Subparagraph, “immediately” shall mean within eight (8) hours for canisters of 55 gallons or less and twenty-four (24) hours for canisters greater than 55 gallons. If a single canister has been found to exceed the applicable

breakthrough concentration, flow must be discontinued to that canister immediately. Such a spent canister may not be placed back into Benzene Waste NESHAP vapor control service until it has been appropriately regenerated.

g. Canister Supplies. Western shall maintain a readily available supply of fresh carbon canisters at the El Paso Refinery at all times.

h. Records Regarding Canisters. Western shall maintain records associated with the requirements of this Paragraph in accordance with 40 C.F.R. § 61.356(j)(10), including carbon canister monitoring readings and the constituents being monitored, for at least five (5) years after such readings occur. Additionally, all VOC and/or benzene measurements used to calculate removal efficiencies through control carbon canisters shall be maintained in a logbook or electronic database. The date, time, monitoring instrument type, instrument reading, and canister location shall be maintained in the logbook or database.

69. Annual Review. By no later than 60 days after the Entry Date, Western shall modify, as necessary, its existing written management of change procedures to provide for an annual review of process information for the El Paso Refinery, including but not limited to construction projects, to ensure that all new benzene waste streams are included in the Refinery's waste stream inventory. Western shall conduct such reviews on an annual basis.

70. Laboratory Audits. Western shall conduct audits of all laboratories that perform analyses of Western's Benzene Waste NESHAP samples to ensure that proper analytical and quality assurance/quality control procedures are followed for such samples.

a. By no later than 120 days after the Entry Date, Western shall complete initial audits of each laboratory used by the El Paso Refinery. In addition, Western shall audit

any new laboratory to be used for analyses of benzene samples from the El Paso Refinery prior to use of the new laboratory. If Western completed an audit of any laboratory during the 18 months preceding the Entry Date, initial audits of those laboratories pursuant to this Subparagraph shall not be required.

b. During the term of this Consent Decree, Western shall conduct subsequent laboratory audits, such that each laboratory is audited once every two (2) calendar years.

c. Western may conduct audits itself, retain third parties to conduct these audits, or use audits conducted by others as its own, but the responsibility and obligation to ensure compliance with this Consent Decree and Subpart FF are solely Western's.

71. **Benzene Spills.** For each spill at the El Paso Refinery after the Entry Date, Western shall review the spill to determine if any benzene waste, as defined by Subpart FF, was generated. For each spill involving the release of more than 10 pounds of benzene in a 24-hour period, Western shall: (i) include the benzene waste generated by the spill in the El Paso Refinery's TAB, as required by 40 C.F.R. § 61.342; and (ii) as appropriate, account for such benzene waste in accordance with the applicable compliance option.

72. **Training.**

a. By no later than 60 days after the Entry Date, Western shall develop and complete implementation of a program for annual (*i.e.*, once each calendar year) training for all employees who draw benzene waste samples for Benzene Waste NESHAP purposes.

b. By no later than 120 days after the Entry Date, Western shall complete the development of standard operating procedures (where they do not already exist) for all control devices and treatment processes used to comply with the Benzene Waste NESHAP at the El Paso Refinery. By no later than 6 months after the Entry Date, Western shall complete an initial

training program regarding these procedures for all operators assigned to the relevant equipment. Comparable training shall also be provided to any persons who subsequently become operators, prior to their assumption of this duty. “Refresher” training in these procedures shall be performed on a three-year cycle (i.e., once every three calendar years).

c. Western shall ensure that the employees of any contractors hired to perform any of the requirements of this Subsection V.L are properly trained to implement such requirements that they are hired to perform, as under Subparagraphs 72.a and b.

73. **Waste/Slop/Off-Spec Oil Management.**

a. Schematics. No Later than 60 Days after the Entry Date, Western shall submit to EPA schematics for the El Paso Refinery that: (i) depict the waste management units (including sewers) that handle, store, and transfer waste/slop/off-spec oil streams; (ii) identify the control status of each waste management unit; and (iii) show how such oil is transferred within the Refinery. If requested by EPA, Western shall within 90 days submit revised schematics regarding the characterization of these oil streams and the appropriate control standards.

Western shall use these schematics in preparing the BWON Sampling Plan required under Paragraph 74.

b. Non-Aqueous Benzene Waste Streams. All waste management units handling non-exempt, non-aqueous benzene wastes, as defined in Subpart FF, shall meet the applicable control standards of Subpart FF.

c. Aqueous Benzene Waste Streams. For purposes of calculating the El Paso Refinery’s TAB pursuant to the requirements of 40 C.F.R. § 61.342(a), Western shall include all waste/slop/off-spec oil streams that become “aqueous” until such streams are recycled to a process or put into a process feed tank (unless the tank is used primarily for the storage of

wastes). Appropriate adjustments shall be made to such calculations to avoid the double-counting of benzene. For purposes of complying with the 6 BQ Compliance Option, all waste management units handling benzene waste streams shall either meet the applicable control standards of Subpart FF or shall have their uncontrolled benzene quantity count toward the applicable limit under the 6 BQ Compliance Option.

74. **Quarterly Sampling at End of Line and Point of Waste Generation.** Western shall conduct quarterly sampling at the El Paso Refinery for the purpose of calculating quarterly, uncontrolled benzene quantities.

a. By no later than 120 days after the Entry Date, Western shall submit to EPA for approval a sampling plan for the El Paso Refinery designed to identify the quarterly benzene quantity in uncontrolled benzene waste streams, including waste/slop/off-spec oil. That sampling plan (the “BWON Sampling Plan”) shall include, but need not be limited to:

- (i) proposed sampling locations and methods for flow calculations at the “end of line” of uncontrolled benzene waste streams; (ii) a simplified flow diagram that identifies significant, uncontrolled benzene waste streams that feed into each proposed sampling location;
- (iii) proposed quarterly sampling, at the “point of waste generation,” of each waste stream that contributes 0.05 Megagrams per year or more to the Refinery’s benzene quantity; and
- (iv) quarterly sampling at all “end of line” and point of waste generation locations identified in Subparagraphs 74.a.(i) and 74.a.(iii). The BWON Sampling Plan may identify commingled, exempt waste streams for sampling, provided Western demonstrates that the benzene quantity of those commingled streams will not be underestimated. Additionally, waste streams that are non-aqueous at their point of generation and do not become aqueous thereafter shall not be included in the BWON Sampling Plan.

b. If changes in processes, operations, or other factors lead Western to conclude that its approved BWON Sampling Plan no longer provides an accurate measure of the El Paso Refinery's quarterly benzene quantity in uncontrolled benzene waste streams, Western shall submit a revised BWON Sampling Plan to EPA for approval.

c. Western shall commence sampling under its BWON Sampling Plan during the first full calendar quarter following the due date for the submittal of the Plan, regardless of whether or not the Plan is approved at that time. Western shall take, and have analyzed, at least three representative samples from each identified sampling location. Western shall use the average of all samples taken and the identified flow calculations to determine its quarterly benzene quantity in uncontrolled waste streams and to estimate a calendar year value for the El Paso Refinery.

d. After at least 16 quarters of sampling under an approved BWON Sampling Plan under this Paragraph, Western may submit a report to EPA that requests a change in monitoring frequency specified by Subparagraph 74.a. If EPA determines, after an opportunity for consultation with Western, that the information presented in the report supports a change in the monitoring frequency for the El Paso Refinery, then the monitoring frequency requirement under Subparagraph 74.a. will be modified in accordance with Paragraph 194 (Consent Decree Modifications). EPA's determination under this subparagraph shall be wholly discretionary and shall not be subject to the dispute resolution provisions of this Consent Decree or judicial review in any other setting.

75. **Quarterly and Annual Estimations of Uncontrolled Benzene Quantity.** At the end of each calendar quarter following commencement of quarterly sampling, Western shall calculate a quarterly uncontrolled benzene quantity and shall estimate a projected calendar year

uncontrolled benzene quantity based on the quarterly end-of-line sampling results, non-end-of-line sampling results, and the approved flow calculations. Western shall submit the uncontrolled benzene quantity in the Semi-Annual Reports due under Section VII of this Decree.

**76. Corrective Measures.**

a. Applicability. If the calculations in Paragraph 75 indicate that the quarterly uncontrolled benzene quantity exceeds 1.5 Megagrams or the projected calendar year uncontrolled benzene quantity exceeds 6.0 Megagrams, Western shall submit a written report to EPA that evaluates all relevant information and identifies whether any action should be taken to reduce benzene quantities in its waste streams for the remainder of the calendar year. If additional actions are determined to be necessary to ensure compliance with the 6 BQ Compliance Option, Western shall include in its written report a BWON Corrective Measures Plan as specified in Subparagraph 76.c.

b. If Western can identify the reason(s) in any particular calendar quarter that the quarterly and projected annual calculations result in benzene quantities in excess of those identified in Paragraph 76.a and states that it does not expect such reason or reasons to recur, then Western may exclude the benzene quantity attributable to the identified reason(s) from the projected calendar year quantity. If that exclusion results in no potential violation of the BWON, Western shall not be required to implement corrective measures under Paragraph 76.a, and may exclude the uncontrolled benzene attributable to the identified reason(s) in determining the applicability of Subparagraph 76.c. At any time Western proceeds under this Subparagraph, Western shall describe how it has satisfied the conditions in this Paragraph in the reports due under Section VII (Reporting) of this Consent Decree.

c. BWON Corrective Measures Plan. Western shall, in any BWON Corrective Measures Plan required by this Paragraph, identify: (i) the cause of the potentially elevated benzene quantities; (ii) all corrective actions that Western has taken or plans to take to ensure that the cause will not recur; and (iii) an appropriate strategy and schedule that Western shall implement to ensure that Western complies with the 6 BQ Compliance Option.

d. Third-Party TAB Study and Compliance Review. After a second consecutive quarter in which at least one of the conditions in Subparagraph 76.a continues to exist and Western is not then able to identify the cause(s) and/or appropriate corrective measures to ensure compliance with the 6 BQ Compliance Option, Western shall retain a third-party contractor to undertake a comprehensive TAB study and compliance review (“Third-Party TAB Study and Compliance Review”) at the El Paso Refinery. By no later than the last day of the next following quarter, Western shall submit a proposal to EPA that identifies the contractor, the contractor’s scope of work, and the contractor’s schedule for the Third-Party TAB Study and Compliance Review. Unless EPA disapproves or seeks modifications of the proposal within 30 days after its receipt, Western shall authorize the contractor to commence work. Western shall ensure that the work is completed in accordance with the schedule provided therein. No later than thirty (30) days after Western receives the results of the Third-Party TAB Study and Compliance Review, Western shall submit the results to EPA. No later than ninety (90) days after Western receives the results of the Third-Party TAB Study and Compliance Review or at such other time as Western and EPA may agree, Western shall submit to EPA a plan and schedule for remedying any deficiencies identified in the Third-Party TAB Study and Compliance Review and any deficiencies that EPA identified following the Third-Party TAB Study and Compliance Review. Unless EPA disapproves or seeks modifications of the proposal

within thirty (30) days after its receipt, Western shall implement the remedial plan in accordance with the schedule included in its plan.

77. **Miscellaneous Measures.** By no later than 90 days after the Entry Date, Western shall:

- i. Conduct monthly visual inspections of and, if appropriate, refill all Subpart FF water traps within the El Paso Refinery's individual drain systems;
- ii. If Western utilizes conservation vents, visually inspect all Subpart FF conservation vents or indicators on process sewers for detectable leaks on a weekly basis, reset any vents where leaks are detected, and record the results of the inspections. After two (2) years of weekly inspections, and based upon an evaluation of the recorded results, Western may submit a request to EPA Region 6 to modify the frequency of the inspections. EPA shall not unreasonably withhold its consent to such modification. Alternatively, for conservation vents with indicators that identify whether flow has occurred, Western may elect to visually inspect such indicators on a monthly basis and, if flow is detected, Western shall visually inspect that indicator on a weekly basis for four weeks. If flow is detected during any two of those four weeks, Western shall install a carbon canister on that vent until appropriate corrective action(s) can be implemented to prevent such flow. Nothing in this Subparagraph shall require Western to monitor conservation vents on fixed roof tanks;
- iii. Conduct quarterly monitoring and repair of the oil-water separators consistent with the "no detectable emissions" provision in 40 C.F.R. § 61.347; and
- iv. Identify and mark at the drain all area drains that are segregated stormwater drains.

78. **Reporting Requirements for this Subsection V.L Outside of the Reports Required Under 40 C.F.R. § 61.357 and the Semi-Annual Reports Required by Section VII (Reporting).**

At the times specified in the applicable provisions of this Section V.L, Western shall submit, as and to the extent required, the following reports to EPA:

- i. BWON Compliance Review and Verification Reports (under Subparagraph 66.a), as amended, if necessary (under Subparagraph 66.b);
- ii. Amended TAB Reports, if necessary (under Subparagraphs 67.a);
- iii. BWON Corrective Measures Plans, if necessary (under Subparagraph 67.b, 67 c, and/or Paragraph 76);

- iv. Certifications of Compliance, if necessary (under Subparagraph 67.d);
- v. Reports certifying the completion of installation of dual carbon canisters (under Subparagraph 68.a);
- vi. Schematics of waste/slop/off-spec oil movements, as revised, if necessary (under Subparagraph 73.a); and
- vii. BWON Sampling Plans (under Subparagraph 74.a), and revised BWON Sampling Plans, if necessary (under Subparagraph 74.b).

**79. Recordkeeping and Periodic Reporting Requirements for this Subsection As Part of the Semi-Annual Reports Required by Section VII (Reporting).**

Western shall submit the following information in the Semi-Annual Reports submitted pursuant to Section VII (Reporting) for the six month period covered by the Report:

- i. An identification of all laboratory audits, if any, completed during the six month period, including a description of the methods used in the audit and the results of the audit;
- ii. A description of the measures taken, if any, during the six month period to comply with the training provisions of Paragraph 72; and
- iii. A summary of the sampling results required under Paragraph 74, including the quarterly and projected annual uncontrolled benzene quantities or TAB, as applicable.

**M. LEAK DETECTION AND REPAIR PROGRAM**

80. In order to minimize or eliminate fugitive emissions of volatile organic compounds (“VOCs”), benzene, volatile hazardous air pollutants (“VHAPs”), and organic hazardous air pollutants (“HAPs”) from equipment in light liquid and/or in gas/vapor service, Western shall comply with the leak detection and repair (“LDAR”) requirements of this Subsection V.M at the El Paso Refinery. The terms “equipment,” “in light liquid service” and “in gas/vapor service” shall have the definitions set forth in the applicable provisions of 40

C.F.R. Part 60, Subpart GGG; Part 61, Subparts J and V; Part 63, Subparts F, H and CC; and applicable state and local LDAR regulations.<sup>1</sup>

81. No later than 30 days after the Entry Date, the group of all equipment within each process unit (as “equipment” and “process unit” are defined at 40 C.F.R. § 60.591) and each compressor shall become affected facilities under 40 C.F.R. Part 60, Subpart GGG, and shall become subject to and comply with the requirements of 40 C.F.R. Part 60, Subpart GGG, and the requirements of this Subsection V.M, provided that any such equipment or compressors that are subject to 40 C.F.R. Part 63, Subparts CC, F, or H; or 40 C.F.R. Part 60, Subpart GGGa; shall comply with those Subparts, as applicable, not Subpart GGG.

82. **Written El Paso Refinery-Wide LDAR Program Description.** By no later than 120 days after the Entry Date, Western shall develop and maintain a written LDAR Program Description for a program for compliance with all applicable federal, state, and local LDAR regulations applicable to equipment in light liquid or gas/vapor service. Western shall update the LDAR Program Description as may be necessary to ensure continuing compliance. The LDAR Program Description shall include, at a minimum:

- i. A set of leak rate goals for the El Paso Refinery that shall be a target for achievement on a process-unit-by-process-unit basis (for the purposes of this provision, the leak rate goals shall be a tool for implementation of the refinery-wide program, but shall not be enforceable or subject to stipulated penalties);
- ii. An identification of all equipment in light liquid and/or in gas/vapor service that has the potential to leak VOCs, HAPs, VHAPs, or benzene;
- iii. Procedures for identifying leaking equipment within the El Paso Refinery’s process units;
- iv. Procedures for repairing and keeping track of leaking equipment;

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<sup>1</sup> It is the parties’ understanding that the definitions of “in light liquid service” in Subpart GGG (40 CFR §60.591) and Subpart GGGa (40 CFR §60.591a) contain an incorrect cross reference. As published in the 2009 edition of the C.F.R., those sections reference, respectively, Section 60.593(c) and Section 60.593a(c). It is the parties’ understanding that the references should have been to Section 60.593(d) and Section 60.593a(d), respectively.

- v. Procedures for identifying and including new equipment to be added to the LDAR program;
  - vi. A process for evaluating new and replacement equipment to promote consideration and installation of equipment that will minimize leaks and/or eliminate chronic leakers;
  - vii. A description of the El Paso Refinery's LDAR monitoring organization, a listing of personnel assigned LDAR responsibilities, and a designation of the person or position responsible for LDAR management who (or that) has the authority to implement LDAR improvements at the Refinery, as required by Paragraph 84; and
  - viii. A procedure for regularly communicating LDAR information to appropriate Western personnel.
83. **Training.** By no later than 120 days after the Entry Date, Western shall begin to implement a training program at the El Paso Refinery that includes the following features:
- i. For personnel newly assigned LDAR responsibilities, Western shall require that any such person satisfactorily complete LDAR training prior to each employee beginning such work;
  - ii. For all personnel assigned LDAR responsibilities, such as monitoring technicians, database users with permissions or rights to modify LDAR data, QA/QC personnel, and the LDAR Coordinator, Western shall provide, and/or require its LDAR contractor to provide, and require satisfactory completion of, annual LDAR training (the initial annual LDAR training for all such personnel shall be completed not later than one year after the Entry Date);
  - iii. For all other El Paso Refinery operations and maintenance personnel (including contract personnel) who have duties relevant to LDAR, such as operators and mechanics performing valve packing and designated unit supervisors reviewing for delay of repair work, Western shall provide and require satisfactory completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties (the initial LDAR training for all such personnel shall be completed no later than one year after the Entry Date) and "refresher" training in LDAR shall be performed on a cycle of no longer than three years; and
  - iv. If contract employees have LDAR responsibilities or have duties relevant to LDAR, Western shall ensure that the contractor complies with the training requirements of this Paragraph and shall require the contractor to provide its training information and records to Western and, if requested, EPA.

84. **LDAR Personnel.** By no later than 120 days after the Entry Date, Western shall establish a program that holds each person assigned LDAR responsibilities accountable for LDAR performance and shall establish and maintain a person or position at the El Paso Refinery with responsibility for LDAR management and authority to implement LDAR improvements.

85. **LDAR Audits.** Western shall implement Refinery-wide LDAR Audits – including an Initial Third-Party LDAR Audit and Periodic LDAR Audits – as set forth in this Paragraph to ensure the El Paso Refinery complies with all applicable LDAR requirements. Each LDAR Audit shall include, but shall not be limited to: (i) performing comparative monitoring; (ii) reviewing records to ensure monitoring and repairs were completed in the required periods; (iii) performing field reviews to ensure all affected equipment has been included in the LDAR program; and (iv) observing LDAR technicians' calibration and monitoring techniques. During each LDAR Audit, leak rates shall be calculated for each process unit where comparative monitoring was performed.

a. **Initial Third-Party LDAR Audit.** Western shall retain a third-party contractor with expertise in the LDAR Program's requirements to complete an Initial Third-Party LDAR Audit for the El Paso Refinery no later than 6 months after the Entry Date. No later than 90 days after the completion of the Initial Third-Party LDAR Audit, Western shall submit the contractor's Report on the Initial Third-Party Audit to EPA. The Report shall describe the results of the Initial Third-Party LDAR Audit and disclose all areas of identified non-compliance. The Report shall be accompanied by a Certification in which Western certifies compliance, except for any identified areas of non-compliance, and a Schedule for correcting any identified deficiencies as soon as practicable. If the proposed compliance schedule extends greater than 90 days beyond the audit completion date, Western must seek approval of the

compliance schedule from EPA. Western shall implement the compliance schedule as proposed until the schedule is approved or disapproved by EPA.

b. Periodic LDAR Audits.

i. Periodic Third-Party Audits. Western shall retain a contractor with expertise in the LDAR Program's requirements to perform a Periodic Third-Party LDAR Audit of the El Paso Refinery's LDAR program at least once every four (4) calendar years after the Initial LDAR Audit is completed under Subparagraph 85.a (with approximately 48 months between the Audits).

ii. Periodic Internal Audits. Periodic Internal LDAR Audits of the El Paso Refinery's LDAR program shall be completed by having an audit performed by Western personnel from a refinery other than the El Paso Refinery who are familiar with the LDAR Program's requirements, or by contractors with expertise in the LDAR Program's requirements. Western shall complete a Periodic Internal LDAR Audit by no later than two (2) years from the date of the completion of the Third-Party LDAR Audits required by Subparagraphs 85.a and 85.b.(i). Western shall perform an internal audit of the El Paso Refinery's LDAR program at least once every four (4) calendar years (with approximately 48 months between the Audits).

iii. Timing. To ensure that an LDAR Audit occurs every two (2) years at the El Paso Refinery, once the Initial Third-Party Audit is completed, the remaining Periodic Third-Party Audits and Periodic Internal Audits shall be separated by not more than two (2) calendar years (with approximately 24 months between the Audits).

86. Implementation of Actions Necessary to Correct Non-Compliance. If the results of any of the LDAR Audits conducted pursuant to Paragraph 85 identify any areas of non-compliance, Western shall implement, as soon as practicable, all steps necessary to correct or

otherwise address such area(s) of non-compliance and to prevent, to the extent practicable, a recurrence of the cause of such non-compliance. For purposes of this Paragraph, if a ratio of the process-unit-valve leak percentage established through a comparative monitoring audit conducted pursuant to Paragraph 85, and the average valve leak percentage reported for the process unit for the last four monitoring periods preceding the audit, is equal to or greater than 3.0, and provided the auditor identified at least three (3) leaking valves in the process unit, it shall be deemed an area of non-compliance and a cause for corrective action. If the calculated ratio yields an infinite result, Western shall assume one leaking valve was found in the process unit through its routine monitoring during the 4-quarter period. After the completion of any LDAR Audit other than the Initial Audit, Western shall include the following information in the next Semi-Annual Report due under Section VII of this Consent Decree: (i) a summary, including findings, of each such LDAR Audit; (ii) a list of corrective actions taken during the reporting period, and any schedule for implementing future corrective actions; and (iii) a certification that the audit has been completed and that the El Paso Refinery is in compliance or on a compliance schedule. Until termination of this Consent Decree, Western shall retain the Initial Audit Report and all other LDAR Audit reports generated pursuant to Paragraph 85, and shall maintain a written record of all corrective actions that Western takes in response to deficiencies identified in any LDAR Audits.

87. **Internal Leak Definition for Valves and Pumps.** Western shall utilize the following internal leak definitions for valves and pumps in light liquid and/or gas/vapor service, unless permits, regulations, or laws require the use of lower leak definitions.

a. Leak Definition for Valves. By no later than the Entry Date, Western shall use an internal leak definition of 500 ppm VOCs for valves in light liquid and/or gas/vapor service at the El Paso Refinery, excluding pressure relief devices.

b. Leak Definition for Pumps. By no later than the Entry Date, Western shall use an internal leak definition of 2,000 ppm for pumps in light liquid and/or gas/vapor service at the El Paso Refinery. Reciprocating pumps shall retain their applicable regulatory leak definition.

88. **LDAR Monitoring Frequency.**

a. Pumps. Unless more frequent monitoring is required by applicable federal, state and/or local requirements, Western shall monitor pumps in light liquid and/or gas/vapor service, other than pumps vented to a control device, at the internal leak definition on a monthly basis.

b. Valves. Unless more frequent monitoring is required by applicable federal, state and/or local requirements, Western shall monitor valves (other than difficult-to-monitor or unsafe-to-monitor valves) at the internal leak definition on a quarterly basis, with no ability to skip periods on a process-unit-by-process-unit basis.

89. **Reporting, Recording, Tracking, Repairing and Re-monitoring Leaks of Valves and Pumps Based on the Internal Leak Definitions.**

a. Reporting. For regulatory reporting purposes, Western may continue to report leak rates in valves and pumps against the applicable regulatory leak definition, or may use the lower, internal leak definitions specified in Paragraph 87.

b. Recording, Tracking, Repairing and Re-monitoring Leaks. Western shall record, track, repair, and re-monitor all leaks in excess of the internal leak definitions of Paragraph 87. Except as provided otherwise in this Subsection V.M, Western shall make a first

attempt at repair and re-monitor the component within five (5) calendar days after a leak is detected and either complete repairs and re-monitor leaks or place such component on the El Paso Refinery's delay of repair list according to Paragraph 94 within thirty (30) days after a leak is detected.

90. **Initial Attempt at Repair on Certain Valves.** Beginning no later than the Entry Date, Western shall promptly make an "initial attempt" at repair after detecting a leak at a reading greater than 200 ppm of VOCs at any valve, excluding control valves and valves that LDAR personnel are not authorized to repair. Western or its designated contractor shall re-monitor the valve in question within five (5) calendar days after identification. If the re-monitored leak reading is below the applicable leak definition, no further action will be necessary. If the re-monitored leak reading is greater than the applicable leak definition, Western shall repair the valve according to the requirements of Subparagraph 89.b, except that no first repair attempt requirement shall apply.

91. **Electronic Monitoring, Storing, and Reporting of LDAR Data.**

a. **Electronic Storing and Reporting of LDAR Data.** Western shall maintain an electronic database for storing and reporting all LDAR data at the El Paso Refinery.

b. **Electronic Data Collection During LDAR Monitoring and Transfer Thereafter.** By no later than the Entry Date, Western shall use data loggers and/or electronic data collection devices during all LDAR monitoring at the El Paso Refinery. Western, or its designated contractor, shall use its best efforts to transfer, by the end of the next business day, the electronic data from electronic data logging devices to the electronic database maintained pursuant to Subparagraph 91.a. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp, and

identification of the instrument and operator. Western may only use paper logs where necessary or more feasible (e.g., small rounds, re-monitoring, or when data loggers are unavailable or broken), and shall record, at a minimum, the identity of the technician, the date, the monitoring starting and ending times, all monitoring readings, and an identification of the monitoring equipment. Western shall use its best efforts to transfer any manually recorded monitoring data to the electronic database maintained pursuant to Subparagraph 91.a within seven (7) days of the monitoring event.

92. **QA/QC of LDAR Data.** By no later than 60 days after the Entry Date, Western (or a third-party contractor retained by Western) shall develop and implement procedures for quality assurance/quality control (“QA/QC”) reviews of all data generated by LDAR monitoring technicians. Western shall ensure that monitoring data provided by monitoring technicians is reviewed daily for QA/QC. At least once per calendar quarter, Western shall perform a QA/QC review of the monitoring data collected during the quarter. The review shall include, but not be limited to, a review of: (i) the number of components monitored per technician; (ii) the time between monitoring events; and (iii) abnormal data patterns.

93. **Calibration/Calibration Drift Assessment.**

a. **Calibration.** Western shall conduct all calibrations of LDAR monitoring equipment at the El Paso Refinery using methane as the calibration gas, and in accordance with 40 C.F.R. Part 60, Appendix A-7, Method 21.

b. **Calibration Drift Assessment.** By no later than the Entry Date, Western shall conduct calibration drift assessment re-checks of the LDAR monitoring equipment at least twice during each monitoring shift, with one such re-check being at the end of the monitoring shift. Western shall conduct the calibration drift assessment re-check using a calibration gas

with a concentration approximately equal to the applicable internal leak definition. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, Western shall re-monitor all valves that were monitored since the last calibration or calibration drift assessment that had a reading greater than 100 ppm and shall re-monitor all pumps that were monitored since the last calibration or calibration drift assessment that had a reading greater than 500 ppm.

**94. Delay of Repair.**

- a. By no later than 90 days after the Entry Date, Western shall take the following actions for any equipment at the El Paso Refinery, that Western is allowed to place on the “delay of repair” list for repair under 40 C.F.R. § 60.482-9(a):
  - i. Western shall require sign-off by the unit supervisor, within thirty (30) days of identifying a piece of equipment leaking at a rate greater than the applicable leak definition, that such equipment qualifies for delayed repair under applicable regulations;
  - ii. Western shall include equipment that is placed on the “delay of repair” list in Western’s regular LDAR monitoring;
  - iii. Western shall use its best efforts to isolate and repair centrifugal pumps identified as leaking at a rate of 2000 ppm or greater; and
  - iv. For valves (other than control valves, and pressure relief devices) leaking at 10,000 ppm or greater and which cannot be repaired using traditional techniques, Western shall use the “drill and tap” repair method (or an equivalent repair method) for the leaking valve (unless the valve is isolated from the process and does not remain in VOC service), prior to placing the valve on the delay of repair list, unless Western can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in that manner. If not repaired within 15 days by other means, Western shall perform the first “drill and tap” (or equivalent repair method) within 15 days, and a second attempt (if necessary) within 30 days after the leak is detected. After two unsuccessful attempts to repair a leaking valve through the “drill and tap” (or equivalent) method, Western may place the leaking valve on its “delay of repair” list. The requirement to make two attempts to repair a leaking component by the drill and tap method may be satisfied by making two sealant injection attempts rather than by making multiple taps into the valve body.

b. If a new valve repair method not currently in use by the refining industry is planned to be used by Western in lieu of the “drill and tap” method referenced in the preceding Subparagraph, Western shall advise EPA prior to implementing such a method or, if prior notice is not practicable, as soon as practicable after implementation.

95. **Chronic Leakers.** Western shall replace, repack, or perform similarly effective repairs on all “chronic leaker” non-control valves during the next process unit turnaround. A non-control valve shall be classified as a “chronic leaker” under this Paragraph if it leaks above 10,000 ppm twice in any two quarters between refinery turnarounds.

96. **Alternate Leak Detection Method.** With EPA’s prior written approval, Western may begin using an alternate leak detection method – such as a method employing “Smart LDAR” technology – based on a showing that the alternate leak detection method is equivalent to traditional monitoring methods and is allowable under the applicable LDAR regulations. If necessary to implement this Paragraph, the Parties shall make appropriate modifications to this Consent Decree in accordance with Paragraph 194.

97. **Recordkeeping and Reporting Requirements for this Section.**

- a. In the Semi-Annual Reports submitted by Western pursuant to Section VII (Reporting), Western shall include the following information in the Report for the period in which the identified activity occurred or was required:
  - i. A copy of the El Paso Refinery’s LDAR Program Description under Paragraph 82;
  - ii. A certification that the El Paso Refinery’s training program has been implemented as required by Paragraph 83;
  - iii. An identification of the person or position at the El Paso Refinery responsible for LDAR performance as required by Paragraph 84;

- iv. A certification that the lower leak definitions and increased monitoring frequencies have been implemented according to Paragraphs 87 and 88;
- v. A certification of the implementation of the “initial attempt” to repair program under Paragraph 90;
- vi. A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 92;
- vii. A certification of the implementation of the calibration drift assessment procedures of Paragraph 93; and
- viii. A certification of the implementation of the “delay of repair” procedures of Paragraph 94.

b. Special Requirement for Initial Semi-Annual Report Each Year. As part of the first Semi-Annual Report submitted each year pursuant to Section VII (Reporting), Western shall identify each LDAR Audit that was conducted under Paragraph 85 in the previous calendar year, including an identification of the auditors, a summary of the audit results, and the actions that Western took or intends to take to correct identified deficiencies.

c. Reports Due Under 40 C.F.R. § 63.655. In each report due under 40 C.F.R. § 63.655, Western shall include the following information on LDAR monitoring:

- i. a list of the process units monitored during the reporting period;
- ii. the number of valves and pumps present in each process unit;
- iii. the number of valves and pumps monitored in each process unit;
- iv. the number of valves and pumps found leaking for each process unit;
- v. the number of “difficult to monitor” pieces of equipment monitored;
- vi. the projected month and year of the next monitoring event for that unit;
- vii. a list of all equipment currently on the “delay of repair” list and the date each component was placed on the list;
- viii. the number of repairs not attempted within five (5) days and thirty (30) days pursuant to Subparagraph 89.b;
- ix. the number of initial attempts at repair not made promptly and re-monitored within five (5) days pursuant to Paragraph 90;

- x. the number of repairs not completed at the next process unit turnaround pursuant to Paragraph 95; and
- xi. the number of repairs not completed within fifteen (15) days and thirty (30) days under Subparagraph 94.a.iv.

N. **INCORPORATION OF CONSENT DECREE REQUIREMENTS INTO FEDERALLY ENFORCEABLE PERMITS**

98. **Emission Limits and Standards Effective on the Entry Date.** By no later than 180 days after the Entry Date, Western shall submit appropriate applications, amendments, and/or supplements, as appropriate, to TCEQ's SIP-approved permitting program to incorporate the emission limits and standards required by the Consent Decree that are effective as of the Entry Date into federally enforceable minor or major new source review permits or other permits (other than Title V permits) that are federally enforceable. Following submission of the appropriate applications, amendments, and/or supplements, Western shall cooperate with TCEQ by promptly submitting to TCEQ all available information that TCEQ seeks following its receipt of the permit materials. Promptly upon issuance of such permits or in conjunction with such permitting, Western shall file any applications necessary to incorporate the requirements of those permits into the Title V permit for the El Paso Refinery.

99. **Future Emission Limits and Standards.** As soon as practicable, but in no event later than ninety (90) days after the effective date of or establishment of any emission limit or standard under Section V that becomes effective after the Entry Date, Western shall submit applications, amendments, and/or supplements, as appropriate, to TCEQ's SIP-approved permitting program to incorporate those emission limits and standards into federally enforceable minor or major new source review permits or other permits (other than Title V permits) that are federally enforceable. Following submission of the appropriate applications, amendments,

and/or supplements, Western shall cooperate with TCEQ by promptly submitting to TCEQ all available information that TCEQ seeks following its receipt of the permit materials. Promptly upon issuance of such permits or in conjunction with such permitting, Western shall file any applications necessary to incorporate the requirements of those permits into the Title V permit for the El Paso Refinery.

100. **Mechanism for Title V Incorporation.** The Parties agree that the incorporation of the requirements of this Consent Decree into Title V permits shall be in accordance with state Title V rules.

101. **Obtaining Construction Permits.** Western agrees to use its best efforts to obtain all required, federally enforceable permits for the construction of the pollution control technology and/or the installation of equipment necessary to implement the affirmative relief set forth in Section V. To the extent that Western must submit permit applications for construction or installation to TCEQ, Western shall cooperate with TCEQ by promptly submitting to TCEQ all available information that TCEQ seeks following its receipt of the permit application.

O. **COMPLIANCE WITH SUBPART Ja IN LIEU OF SUBPART J**

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

103. If prior to the termination of this Consent Decree, an FCCU, Fuel Gas Combustion Device, or Flaring Device becomes subject to NSPS Subpart Ja due to a “reconstruction” (as that term is defined in the final Subpart Ja rule), the reconstructed facility shall be subject to and comply with NSPS Subpart Ja for all pollutants in lieu of Subpart J.

## **VI. EMISSION CREDIT GENERATION**

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

105. **General Prohibition.** Western shall neither generate nor use any NO<sub>x</sub>, SO<sub>2</sub>, PM, VOC, or CO emissions reductions, or apply for and obtain any emission reduction credits, that result from any projects conducted or controls utilized to comply with this Consent Decree as netting reductions or emissions offsets in any PSD, major non-attainment, and/or synthetic minor new source review permit or permit proceeding.

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

- i. use or generate netting reductions or emission offset credits from refinery units that are covered by this Consent Decree to the extent that the proposed netting reductions or emission offset credits represent the difference between the emissions limitations set forth in or established pursuant to this Consent Decree for these refinery units and the more stringent emissions limitations that Western may elect to accept for these refinery units in a permitting process;
- ii. use or generate netting reductions or emission offset credits for refinery units that are not subject to an emission limitation pursuant to this Consent Decree;
- iii. use emissions reductions from the installation of controls required by this Consent Decree in determining whether a project – that (a) includes both the installation of controls under this Consent Decree and other construction that occurs at the same time, and (b) is permitted as a single project – triggers major New Source Review requirements;

- iv. use CD Emission Reductions for the El Paso Refinery's compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and Non-Attainment New Source Review rules) that apply to the El Paso Refinery; provided, however, that Western shall not be allowed to trade or sell any CD Emissions Reductions;
- v. use or generate emissions credits or reductions from heaters and boilers on which Qualifying Controls have been installed, provided that such reductions are not included in Western's demonstration of compliance with the requirements of Paragraphs 30 and 33 of this Consent Decree; or
- vi. use any emission reduction recognized under TCEQ Permit Number 93546, for which Western applied prior to the Date of Lodging of this Consent Decree.

## **VII. REPORTING**

107. Western shall submit to EPA Semi-Annual Reports no later than August 31 of each year (covering the period from January 1 to June 30) and February 28 of each year (covering the period from July 1 to December 31). The first Semi-Annual Report shall be due on the first reporting date (August 31 or February 28) after the Entry Date, *unless* the Entry Date falls 45 or fewer days before June 30 or December 31, in which case the first Semi-Annual Report shall be due on the next reporting due date.

108. All of Western's Semi-Annual Reports shall contain, at a minimum, the following information:

- i. a progress report on the implementation of the requirements of Section V (Affirmative Relief) at the El Paso Refinery;
- ii. a summary of the emissions data that is specifically required by the reporting requirements of Section V of this Consent Decree for the six (6) month period covered by the report;
- iii. a description of any problems anticipated with respect to meeting the requirements of Section V of this Consent Decree at the El Paso Refinery;
- iv. any additional items required by any other Paragraph of this Consent Decree to be submitted with a Semi-Annual Report; and
- v. any such additional matters that Western believes should be brought to the attention of EPA.

109. Emissions Data. In the Semi-Annual Report required to be submitted on August 31 of each year, a summary of annual emissions data for the prior calendar year shall be provided, including:

- i. NOx, SO<sub>2</sub>, CO, and PM emissions in tons per year for each Combustion Unit;
- ii. NOx, SO<sub>2</sub>, CO, and PM emissions in tons per year as a sum for all heaters and boilers;
- iii. NOx, SO<sub>2</sub>, CO, and PM emissions in tons per year for the FCCU;
- iv. SO<sub>2</sub> emissions from all Acid Gas Flaring Incidents by each flare in tons per year;
- v. NOx, SO<sub>2</sub>, PM, and CO emissions in tons per year as a sum for the El Paso Refinery for all emissions units not identified in (i) through (iv), above, that are required to be included in the El Paso Refinery's annual emissions summary required pursuant to 30 TAC § 101.10; and
- vi. for each of the estimates in (i-v) above, the basis for the emissions estimate or calculation (i.e. stack tests, CEMS, emission factor, etc.).

To the extent that the required emissions summary data is available in other reports generated by the Company, such other reports can be attached, or the appropriate information can be extracted from such other reports and attached to this Semi-Annual Report to satisfy this requirement.

110. Exceedances of Emissions Limits. In all Semi-Annual Reports, Western shall identify each exceedance of an emission limit required or established by this Consent Decree that occurred during the previous semi-annual period. The report shall, at a minimum, include the following information:

- (a) for emissions units monitored with CEMS:
  - (1) total period where the emissions limit was exceeded, if applicable, expressed as a percentage of operating time for each calendar quarter;
  - (2) where the operating unit has exceeded the emissions limit more than 1% of the total time of the calendar quarter, an identification of each averaging period that exceeded the limit by time and date, the actual emissions of that averaging period (in the units of the limit), and any

identified cause for the exceedance (including startup, shutdown, maintenance or malfunction), and, if it was a malfunction, an explanation and any corrective actions taken;

- (3) total downtime of the CEMS, if applicable, expressed as a percentage of operating time for the calendar quarter;
  - (4) where the CEMS downtime is greater than 5% of the total time in a calendar quarter for a unit, an identification of the periods of downtime by time and date, and any cause or causes of the downtime (including maintenance or malfunction), and if downtime was caused by a malfunction, an explanation of any corrective actions taken;
  - (5) if a report filed pursuant to another applicable legal requirement contains all of the information required by this Subparagraph (a) in the same or a similar format, the requirements of this Subparagraph (a) may be satisfied by attaching a copy of such report;
- (b) for emissions limits monitored by stack testing:
- (1) A summary of the results of the stack test in which the exceedance occurred;
  - (2) A copy of the full stack test report in which the exceedance occurred;
  - (3) If the stack test results already have been submitted, Western need not resubmit them, but may instead reference the prior submission in the Semi-Annual Report (e.g., date, sender, addressee, reason for submission).

111. The Semi-Annual Report shall be certified by: (i) the person responsible for environmental management and compliance for the El Paso Refinery; or (ii) a person responsible for overseeing implementation of this Decree for Western, as follows:

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 directions and 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.

### **VIII. CIVIL PENALTY**

112. **Civil Penalty.** Within thirty (30) days of the Entry Date, Western shall pay a civil penalty of \$1,450,000 to the United States.

113. Western shall pay the civil penalty due by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice in accordance with written instructions to be provided to Western, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the Western District of Texas, 601 N.W. Loop 410, Suite 600, San Antonio, Texas 78216, Tel. (210) 384-7262, Fax (210) 384-7247. The costs of such EFT shall be Western’s responsibility. At the time of payment, Western 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 v. Western Refining Company, L.P., and shall reference the civil action number and DOJ case number 90-5-2-1-07629/1, to the United States in accordance with Paragraph 190 (Notice); by email to [acctsreceivable.CINWD@epa.gov](mailto:acctsreceivable.CINWD@epa.gov); and by mail to:

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

114. The civil penalty set forth in Paragraph 112 constitutes the sole penalty imposed for the violations alleged hereunder within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f). Western shall not treat this penalty payment as tax deductible for purposes of net income taxes imposed under federal, state, or local law.

115. Upon the Entry Date, the Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Federal Rule of Civil

Procedure 69, the Federal Debt Collection Procedure Act, 28 U.S.C. §§ 3001-3308, and other applicable federal authority.

## **IX. STIPULATED PENALTIES**

### **116. Generally**

a. Western shall pay stipulated penalties to the United States for each failure by Western to comply with the terms of this Consent Decree as provided herein. Stipulated penalties shall be calculated in the amounts specified in this Section IX.

b. For those provisions where a stipulated penalty of either a fixed amount or 1.2 times the economic benefit of non-compliance is available, the decision as to which alternative will be sought rests exclusively within the discretion of the United States.

c. Where a single event triggers more than one stipulated penalties provision in this Consent Decree, only the provision providing for the higher stipulated penalty shall apply.

### **A. Requirements for NOx Emission Reductions from the FCCU**

117. For failure to meet an FCCU NOx limit set forth in Paragraph 14 or 15: \$750 for each calendar day in which the short-term rolling average exceeds the applicable limit; and \$2,500 for each calendar day on which the specified 365-day rolling average exceeds the applicable limit.

### **B. Requirements for SO<sub>2</sub> Emission Reductions from the FCCU**

118. For failure to meet any FCCU SO<sub>2</sub> Limit set forth in Paragraph 18: \$750 for each calendar day on which the specified 7-day rolling average exceeds the applicable limit; \$2,500 for each calendar day on which the specified 365-day rolling average exceeds the applicable limit.

**C. Requirements for PM Emissions Reductions from the FCCU**

119. For each failure to meet the FCCU PM limit set forth in Paragraph 21: \$1,000 for each calendar day during which the El Paso Refinery exceeds the emission limit.

**D. Requirements for CO Emissions Reductions from the FCCU**

120. For each failure to meet the first FCCU CO limit set forth in Paragraph 24: \$750 for each calendar day on which the 1-hour average exceeds the applicable limit; and for each failure to meet the second FCCU CO limit set forth in Paragraph 24, \$2,500 for each calendar day on which the 365-day rolling average exceeds the applicable limit.

**E. Requirements Related to NSPS Applicability to FCCU Regenerator**

121. For failure to comply with NSPS Subparts A and J limits applicable to the El Paso Refinery FCCU's catalyst regenerator, as specified by Paragraph 27, per pollutant, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day	\$2,000
Over 60 days	\$3,000 or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.

**F. Requirements for NOx Emission Reductions from Combustion Units**

122. For failure to install selected Qualifying Controls on Combustion Units and/or submit the required permit applications, as required by Paragraphs 30, 33, or 34, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$2,500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$6,000
Beyond 60 <sup>th</sup> day after deadline	\$10,000, or an amount equal to 1.2 times economic benefit of non-compliance, whichever is greater.

123. For each failure to meet the NOx emission limits proposed by Western pursuant to Paragraphs 30 or 33, per day, per unit: \$500 for each calendar day during which emissions exceed the applicable limit.

**G. Requirements for SO<sub>2</sub> Emission Reductions from Heaters, Boilers, and Other Fuel Gas Combustion Devices**

124. For burning after the Entry Date in any heater or boiler or in any Other Fuel Gas Combustion Device any refinery fuel gas that contains H<sub>2</sub>S in excess of the applicable requirements of NSPS Subparts A and J, as set forth in Paragraph 39, per day:

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

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

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

126. For operating a fuel-oil combusting fuel gas combustion device constructed in violation of Paragraph 41, per day:

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

**H. Requirements for Sulfur Recovery Plants**

127. For a failure to comply with the permitting requirements of Paragraph 42, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$2,500

Beyond 31 <sup>st</sup> day	\$5,000 or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.
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128. For failure to comply with NSPS Subparts A, J, and/or Ja, as specified in

Paragraph 42, per SRP:

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

### I. Requirements for Flaring Devices

129. For failure to comply with applicable NSPS Subparts A and J requirements, including emission limits, as specified in Paragraphs 44 or 47, per Flaring Device:

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

130. For failure to comply with the compliance method selected by Western pursuant to Paragraph 45 and/or for failure to submit the certificate of compliance as required by Paragraph 45, per Flaring Device:

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

131. For failure to comply with the performance-test requirements of Paragraph 46:

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

**J. Requirements for Control of Acid Gas Flaring Incidents**

132. For Acid Gas Flaring Incidents and/or Tail Gas Incidents for which Western is liable under Subsection V.J:

Tons Emitted in Flaring Incident or Tail Gas Incident↓	Length of Time from Commencement of Flaring within the Flaring Incident to Termination of Flaring within the Flaring Incident is 3 hours or less; Length of Time of the Tail Gas Incident is 3 hours or less	Length of Time from Commencement of Flaring within the Flaring Incident to Termination of Flaring within the Flaring Incident is greater than 3 hours but less than or equal to 24 hours; Length of Time of the Tail Gas Incident is greater than 3 hours but less than or equal to 24 hours	Length of Time of Flaring within the Flaring Incident is greater than 24 hours; Length of Time of the Tail Gas Incident is greater than 24 hours
<b>5 Tons or less</b>	\$500 per Ton	\$750 per Ton	\$1,000 per Ton
<b>Greater than 5 Tons, but less than or equal to 15 Tons</b>	\$1,200 per Ton	\$1,800 per Ton	\$2,300 per Ton, up to, but not exceeding, \$27,500 in any one calendar day
<b>Greater than 15 tons</b>	\$1,800 per Ton, up to, but not exceeding, \$27,500 in any one calendar day	\$2,300 per Ton, up to, but not exceeding, \$27,500 in any one calendar day	\$27,500 per calendar day for each calendar day over which the Flaring Incident lasts

For purposes of calculating stipulated penalties pursuant to this Paragraph, only one cell within the matrix shall apply. Thus, for example, for an Acid Gas Flaring Incident in which the flaring starts at 1:00 p.m. and ends at 3:00 p.m., and for which 14.5 tons of sulfur dioxide are emitted, the penalty would be \$17,400 (14.5 x \$1,200); the penalty would not be \$13,900 [(5 x \$500) + (9.5 x \$1200)]. For purposes of determining which column in the table set forth in this Paragraph applies under circumstances in which flaring occurs intermittently during an Acid Gas Flaring Incident, the flaring shall be deemed to commence at the time that the flaring that

triggers the initiation of an Acid Gas Flaring Incident commences, and shall be deemed to terminate at the time of the termination of the last episode of flaring within the Acid Gas Flaring Incident. Thus, for example, for flaring within an Acid Gas Flaring Incident that (i) starts at 1:00 p.m. on Day 1 and ends at 1:30 p.m. on Day 1; (ii) recommences at 4:00 p.m. on Day 1 and ends at 4:30 p.m. on Day 1; (iii) recommences at 1:00 a.m. on Day 2 and ends at 1:30 a.m. on Day 2; and (iv) for which no further Flaring occurs within the Flaring Incident, the flaring within the Acid Gas Flaring Incident shall be deemed to last 12.5 hours – not 1.5 hours – and the column for flaring of “greater than 3 hours but less than or equal to 24 hours” shall apply.

133. For failure to timely submit any report required by Subsection V.J, or for submitting any report that does not substantially conform to its requirements:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
Days 1-30	\$750
Days 31-60	\$1,500
Over 60 days	\$3,000

134. For those corrective action(s) which Western: (i) agrees to undertake following receipt of an objection by EPA pursuant to Paragraph 53; or (ii) is required to undertake following dispute resolution, then, from the date of EPA’s receipt of Western’s report under Paragraph 52 of this Consent Decree until the date that either: (i) a final agreement is reached between EPA and Western regarding the corrective action; or (ii) a court order regarding the corrective action is entered, Western shall be liable for stipulated penalties as follows:

i.	<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
	Days 1-120	\$50
	Days 121-180	\$100
	Days 181-365	\$300
	Over 365 Days	\$3,000

or

ii. 1.2 times the economic benefit resulting from Western's failure to implement the corrective action(s).

135. For failure to complete any corrective action under Paragraph 53 of this Decree in accordance with the schedule for such corrective action agreed to by Western or imposed on Western pursuant to the dispute resolution provisions of this Decree (with any such extensions thereto as to which EPA and Western may agree in writing):

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
Days 1-30	\$1,000
Days 31-60	\$2,000
Over 60	\$5,000

#### **K. Requirements for Control of Hydrocarbon Flaring Incidents**

136. For each failure to perform a Root Cause analysis or submit a written report, for submitting a report that does not substantially conform to the requirements for an HC Flaring Incident Report or to perform corrective action(s) for an HC Flaring Incident, as required by Paragraph 62:

<u>Period of Non-Compliance</u>	<u>Penalty per day per Incident</u>
1st through 30th day	\$500
31st through 60th day	\$1,500
Beyond 60th day	\$3,000

#### **L. Requirements for Benzene Waste NESHAP Program Enhancements**

137. For each violation in which a frequency is specified in Subsection V.L, the amounts identified below shall apply on the first day of violation, and shall be calculated for each incremental period of violation (or portion thereof).

a. For failure to complete a BWON Compliance Review and Verification Report as required by Paragraph 66: \$7,500 per month.

b. For failure to submit a BWON Corrective Measures Plan as required by Subparagraph 67.b, or for failure to implement the Plan and to certify compliance as required by Subparagraphs 67.c and 67.d:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000, or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.

c. For failure to comply with the requirements set forth in Paragraph 68 related to the use, monitoring, and replacement of carbon canisters: \$1,000 per incident of non-compliance, per day.

d. For failure to establish an annual review program to identify new benzene waste streams as required by Paragraph 69: \$2,500 per month.

e. For failure to perform laboratory audits as required by Paragraph 70: \$5,000 per month, per audit.

f. For failure to implement the training requirements of Paragraph 72: \$10,000 per quarter.

g. For failure to submit or maintain any plans or other deliverables required by Paragraph 73: \$2,000 per deliverable.

h. For failure to conduct sampling in accordance with the sampling plans required by Paragraph 74: \$2,500 per week or \$30,000 per quarter, per stream, whichever is greater, but not to exceed \$150,000 per quarter.

i. For failure to submit a BWON Corrective Measures Plan or retain the third-party contractor required by Paragraph 76: \$10,000 per month.

- j. For failure to conduct monthly visual inspections of all Subpart FF water traps as required by Subparagraph 77.i: \$500 per drain not inspected;
- k. For failure to monitor Subpart FF conservation vents as required by Subparagraph 77.ii: \$500 per vent not monitored;
- l. For failure to conduct monitoring of oil-water separators as required by Subparagraph 77.iii: \$1,000 per month, per unit not monitored;
- m. For failure to identify/mark segregated stormwater drains as required in Subparagraph 77.iv: \$1,000 per week per drain not identified/marked as required;
- n. For failure to submit any of the written deliverables required by Subsection V.L (except for those deliverables for which stipulated penalties are specified in Subparagraphs 137.a, 137.b, 137.g, or 137.i): \$1,000 per week, per deliverable not submitted.

**M. Requirements for Leak Detection and Repair Program Enhancements**

138. For each violation in which a frequency is specified in Subsection V.M the amounts identified below shall apply on the first day of violation, and shall be calculated for each incremental period of violation (or portion thereof).

- a. For failure to develop an LDAR Program Description as required by Paragraph 82: \$3,500 per week.
- b. For failure to implement the training program specified in Paragraph 83: \$10,000 per month.
- c. For failure to conduct any of the LDAR Audits described in Paragraph 85: \$5,000 per month, per audit.
- d. For failure to implement any actions necessary to correct non-compliance as required in Paragraph 86:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000, or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.

e. For failure to perform monitoring utilizing the lower internal leak rate definitions as specified in Paragraph 87: \$100 per component, but not greater than \$10,000 per month, per process unit.

f. For failure to perform LDAR monitoring at the frequency required by Paragraph 88: \$100 per component, but not greater than \$10,000 per month per unit.

g. For failure to make first repair attempts within 5 days and/or take other actions required by Paragraph 89: \$100 per component but not greater than \$10,000 per month (except that Subparagraph 138.h shall apply in lieu of this Subparagraph 138.g where both Subparagraphs are potentially applicable).

h. For failure to implement the “initial attempt” repair program set forth in Paragraph 90: \$100 per component, but not to exceed \$10,000 per month for the Refinery.

i. For failure to implement the QA/QC procedures described in Paragraph 92: \$1,000 per incident, but not greater than \$10,000 per month for the Refinery.

j. For failure to designate a person or position responsible for LDAR management as required by Paragraph 84, or for failure to implement the maintenance tracking program required by Subparagraph 82.iv: \$3,500 per week.

k. For failure to use dataloggers or maintain electronic data as required by Paragraph 91: \$5,000 per month.

l. For failure to conduct and record the calibrations and the calibration drift assessments or re-monitor valves and pumps based on calibration drift assessments in Paragraph 93: \$100 per missed event.

m. For failure to comply with the requirements for delay of repair set forth at Paragraph 94: \$5,000 per valve or pump, per incident of non-compliance.

n. For failure to submit a written submission to EPA as required by Subsection V.M: \$500 per week per submission.

o. If it is determined through a federal, state, or local investigation that Western has failed to include any valves or pumps in its LDAR program, Western shall pay \$175 per component that it failed to include.

p. For failure to comply with the requirements for chronic leakers set forth at Paragraph 95: \$5,000 per valve.

**N. Requirements to Incorporate Consent Decree Requirements into Federally-Enforceable Permits**

139. For each failure to submit an application as required by Paragraphs 98 and 99:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
Days 1-30	\$800
Days 31-60	\$1,500
Over 60 Days	\$3,000

**O. Requirements for Monitoring, Recordkeeping, and Reporting**

140. For failure to install, certify, calibrate, maintain and/or operate a CEMS, as required by Paragraph 17, 20, 26, 28, 35, 36, or 45, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.

141. For failure to conduct PM testing or comply with performance testing required by

Paragraph 23:

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

142. Unless covered by a more specific stipulated penalty, for failure to submit reports as required by Sections V (Affirmative Relief) or VII (Reporting) of this Consent Decree, per report, per day:

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

143. For failure to submit any other written deliverable (unless a more specific stipulated penalty applies), per day per deliverable:

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

#### **P. Requirement to Pay Stipulated Penalties**

144. Western shall be liable for \$2,500 per day, and interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a), for failure to do either of the following within sixty (60) days after receipt of a written demand pursuant to Paragraph 145: (i) pay stipulated penalties as required by Paragraph 116 of this Consent Decree; or (ii) place the amount of stipulated penalties demanded in escrow pursuant to Paragraph 146.

**Q. General Provisions Regarding Stipulated Penalties**

145. Payment of Stipulated Penalties. 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. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree. Western shall pay stipulated penalties (as required under Paragraph 116) upon written demand by the United States no later than sixty (60) days after Western receives such demand. Stipulated penalties shall be paid to the United States in the manner set forth in Section VIII (Civil Penalty) of this Consent Decree. A demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount the United States is demanding for each violation (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based. The United States may, in its unreviewable discretion, waive payment of any portion of stipulated penalties that may accrue under this Consent Decree.

146. Stipulated Penalties Dispute. Should Western dispute the United States' demand for all or part of a stipulated penalty, Western may avoid the imposition of a stipulated penalty for failure to pay a stipulated penalty under Paragraph 144 by placing the disputed amount demanded in a commercial escrow account pending resolution of the matter and by invoking the dispute resolution provisions of Section XIII within the time provided in Paragraph 145 for payment of stipulated penalties. If the dispute is thereafter resolved in Western's favor, the escrowed amount plus accrued interest shall be returned to Western; otherwise, the United States shall be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount. The United States reserves the right to

pursue any other non-monetary remedies to which it is legally entitled, including but not limited to, injunctive relief for Western's violations of this Consent Decree.

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

#### X. INTEREST

148. After the date on which a payment is due under this Consent Decree, Western shall be liable for interest on the unpaid balance of the civil penalty specified in Section VIII, and for interest on any unpaid balance of stipulated penalties to be paid in accordance with Section IX. All such interest shall accrue at the rate established pursuant to 28 U.S.C. § 1961(a) – *i.e.*, a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of the Consent Decree. Interest shall be computed daily and compounded annually. Interest shall be calculated from the date payment is due under the Consent Decree through the date of actual payment. For purposes of this Section X, interest pursuant to this Paragraph will cease to accrue on the amount of any stipulated penalty payment made into an interest bearing escrow account as contemplated by Paragraph 146 of the Consent

Decree. Monies timely paid into escrow shall not be considered to be an unpaid balance under this Section.

**XI. RECORDKEEPING; RIGHT OF ENTRY**

149. Any authorized representative of EPA, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of the facilities of the El Paso Refinery, at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment, and inspecting and copying all records maintained by Western pursuant to the requirements of this Consent Decree or in the ordinary course of Western's business that are deemed necessary by EPA to verify compliance with this Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests, inspections, or other activities under any statutory or regulatory provision.

150. Unless otherwise specified in this Consent Decree, Western shall retain all records required to be maintained in accordance with this Consent Decree until Termination, unless applicable regulations require the records to be maintained longer.

151. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal 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 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.

## **XII. FORCE MAJEURE**

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

153. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Western shall provide notice orally or by electronic or facsimile transmission to EPA within seven days of when Western first knew that the event might cause a delay. Within fourteen days thereafter, Western shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Western’s rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Western, such event may cause or contribute to an endangerment to public health, welfare or the environment. Western shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Western from asserting any claim of force majeure for that

event for the period of time of such failure to comply, and for any additional delay caused by such failure. Western shall be deemed to know of any circumstance of which Western, any entity controlled by Western, or Western's contractors knew or should have known.

154. With respect to any compliance obligation under this Consent Decree that requires Western to obtain a federal, state, or local permit or approval, a delay in the performance of such obligation by Western resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, may form the basis for a claim of force majeure, provided that Western has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.

155. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. Within 45 days of receipt of the written force majeure notice, EPA will notify Western in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

156. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Western in writing of its decision within 45 days of receipt of the written force majeure notice.

157. If Western elects to invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution), it shall do so no later than 20 days after receipt of EPA's notice. In any such proceeding, Western shall have the burden of demonstrating by a preponderance of the

evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Western complied with the requirements of Paragraphs 152 and 153, above. If Western carries this burden, the delay at issue shall be deemed not to be a violation by Western of the affected obligation of this Consent Decree identified to EPA and the Court.

### **XIII. RETENTION OF JURISDICTION / DISPUTE RESOLUTION**

158. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the Consent Decree and for the purpose of adjudicating all disputes – including, but not limited to, determinations under Section V (Affirmative Relief) of the Consent Decree – among the Parties that may arise under the provisions of the Consent Decree, until the Consent Decree terminates in accordance with Section XVI (Termination).

159. The dispute resolution procedure set forth in this Section XIII shall be available to resolve all disputes arising under this Consent Decree, except only as otherwise provided in Section XII regarding force majeure, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Party.

160. Dispute resolution shall be commenced by one of the Parties under the Consent Decree by giving written notice to another Party advising of a dispute pursuant to this Section XIII. The notice shall describe the nature of the dispute, and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice.

161. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond thirty-five (35) calendar days from the date of the written notice invoking dispute resolution.

162. In the event that the Parties are unable to reach agreement during such informal negotiation period, the United States shall provide Western with a written summary of its position regarding the dispute. The position advanced by the United States shall be considered binding unless, within forty-five (45) calendar days of Western's receipt of the written summary of the United States' position, Western files with the Court a petition which describes the nature of the dispute. The United States shall respond to the petition within forty-five (45) calendar days of filing.

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

164. The Parties do not intend that the invocation of this Section XIII by a Party cause the Court to draw any inferences or establish any presumptions adverse to either Party as a result of the invocation of this Section or the Parties' inability to reach agreement. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. Western shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

#### **XIV. EFFECT OF SETTLEMENT**

165. **Definitions.** For purposes of this Section XIV, the following definitions apply:

a. “Applicable NSR/PSD Requirements” shall mean:

- i. PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. §§ 52.21 and 51.166, as amended from time to time;
- ii. “Plan Requirements for Non-Attainment Areas” at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7502-7503, and the regulations promulgated thereunder at 40 C.F.R. §§ 51.165 (a) and (b); 40 C.F.R. Part 51, Appendix S; and 40 C.F.R. § 52.24, as amended from time to time;
- iii. Any Title V regulations that implement, adopt, or incorporate the specific regulatory requirements identified above, as amended from time to time; and
- iv. Any applicable state or local laws or regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above regardless of whether such state or local laws or regulations have been formally approved by EPA as being a part of the applicable state implementation plan.

b. “Applicable NSPS Subparts A and J Requirements” shall mean the standards, monitoring, testing, recordkeeping and reporting requirements, found at 40 C.F.R. §§ 60.100 through 60.109 (Subpart J), relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart J.

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

d. “LDAR Requirements” shall mean the requirements relating to equipment in light liquid service and gas and/or vapor service set forth at 40 C.F.R. Part 60, Subpart GGG; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC; and any

applicable state, regional, or local regulations or State Implementation Plan requirements that implement, adopt or incorporate those federal regulations or set similar standards.

e. “Post-Lodging Compliance Dates” shall mean any dates in this Section XIV after the Date of Lodging (and/or after the Entry Date). Post-Lodging Compliance Dates include dates certain (e.g., “December 31, 2011”), dates after Lodging represented in terms of time after the Date of Lodging or the Entry Date (e.g., “180 days after the Date of Lodging” or “180 days after the Entry Date”), and dates after Lodging represented by actions taken (e.g., “Date of Certification”). The Post-Lodging Compliance Dates represent the dates by which work is required to be completed or an emission limit is required to be met under the applicable provisions of this Consent Decree.

**166. Liability Resolution Regarding the Applicable NSR/PSD Requirements.**

With respect to emissions of the following pollutants from the following units, entry of this Consent Decree shall resolve all civil liability of Western to the United States for violations of the Applicable NSR/PSD Requirements resulting from construction or modification from the date of the pre-Lodging construction or modification up through the following dates:

<u>Unit</u>	<u>Pollutants</u>	<u>Date</u>
El Paso Refinery FCCU	NOx, SO <sub>2</sub> , CO, & PM	Entry Date
All Combustion Units listed in Appendix A on which Qualifying Controls are installed and that are used to satisfy the requirements of ¶ 33	NOx & SO <sub>2</sub>	The later of the Entry Date or the date of the installation of Qualifying Controls
All other heaters and boilers	NOx & SO <sub>2</sub>	Entry Date
Relief Gas Emergency Flare (EPN D-2914)	SO <sub>2</sub>	Entry Date

Plant Emergency/AAG/ Main South Flare (EPN 112)	SO <sub>2</sub>	Entry Date
Rheniformer Emergency Flare (EPN R-2911)	SO <sub>2</sub>	Date that Western's certification of compliance is due under Paragraph 45.
Sour Water Stripper Emergency Flare (EPN 128)	SO <sub>2</sub>	January 9, 2009

**167. Reservation of Rights Regarding Applicable NSR/PSD Requirements:**

**Release for Violations Continuing After the Date of Lodging Can be Rendered Void.**

Notwithstanding the resolution of liability in Paragraph 166, the release of liability by the United States to Western for alleged violations of the Applicable NSR/PSD Requirements during the period between the Date of Lodging of the Consent Decree and the Post-Lodging Compliance Dates shall be rendered void for a particular emissions unit if Western materially fails to comply with the obligations and requirements of Subsections V.A – V.D and V.F for that unit; provided, however, that the release in Paragraph 166 shall not be rendered void if Western remedies such material failure and pays any stipulated penalties due as a result of such material failure.

**168. Exclusions from Release Coverage Regarding Applicable NSR/PSD**

**Requirements: Construction and/or Modification Not Covered by Paragraph 166.**

Notwithstanding the resolution of liability in Paragraph 166, nothing in this Consent Decree precludes the United States from seeking from Western injunctive relief, penalties, or other appropriate relief for violations by Western of the Applicable NSR/PSD Requirements resulting from construction or modification that: (i) commenced prior to or commences after the Date of Lodging of the Consent Decree for pollutants or units not covered by the Consent Decree; or (ii) commences after the Date of Lodging of the Consent Decree for pollutants and units covered by this Consent Decree.

169. **Evaluation of Applicable PSD/NSR Requirements Must Occur.** Increases in emissions from units covered by this Consent Decree, where the increases result from the Post-Lodging construction or modification of any units within the El Paso Refinery, are beyond the scope of the release in Paragraph 166, and Western must evaluate any such increases in accordance with the Applicable PSD/NSR Requirements.

170. **Resolution of Liability Regarding Applicable NSPS Subparts A and J Requirements.**

**Requirements.** With respect to emissions of the following pollutants from the following units, entry of this Consent Decree shall resolve all civil liability of Western to the United States for alleged violations of the Applicable NSPS Subparts A and J Requirements from the date that claims of the United States resulting from pre-Lodging construction or modification (including reconstruction) accrued up to the following dates:

<u>Unit</u>	<u>Pollutant</u>	<u>Date</u>
El Paso Refinery FCCU	SO <sub>2</sub>	Entry Date
	PM and opacity	Entry Date
	CO	Entry Date
All Heaters and Boilers	SO <sub>2</sub>	Entry Date
North SRP (including its TGU)	SO <sub>2</sub>	October 29, 2008
South SRP	SO <sub>2</sub>	January 9, 2009
Relief Gas Emergency Flare (EPN D-2914)	SO <sub>2</sub>	Entry Date
Plant Emergency/AAG/ Main South Flare (EPN 112)	SO <sub>2</sub>	Entry Date
Rheniformer Emergency Flare (EPN R-2911)	SO <sub>2</sub>	Date that Western's certification of compliance is due under Paragraph 45.
Sour Water Stripper Emergency Flare (EPN 128)	SO <sub>2</sub>	January 9, 2009

171. **Reservation of Rights Regarding Applicable NSPS Subparts A and J**

**Requirements: Release for NSPS Violations Occurring After the Date of Lodging Can be**

**Rendered Void.** Notwithstanding the resolution of liability in Paragraph 170, the release of liability by the United States to Western for alleged violations of any Applicable NSPS Subparts A and J Requirements that occurred between the Date of Lodging and the Post-Lodging Compliance Dates shall be rendered void for a particular emissions unit if Western materially fails to comply with the obligations and requirements of Subsections V.E, V.G, V.H, V.I, V.J, and V.K for that unit; provided, however, that the release in Paragraph 170 shall not be rendered void if Western remedies such material failure and pays any stipulated penalties due as a result of such material failure.

172. **Prior NSPS Applicability Determinations.** Nothing in this Consent Decree shall affect the status of any FCCU, fuel gas combustion device, or sulfur recovery plant currently subject to NSPS as previously determined by any federal, state, or local authority or any applicable permit.

173. **Liability under EPCRA/CERCLA for Certain Pre-Lodging Acid Gas Flaring and Tail Gas Incidents.** After receipt by EPA of the report required by Paragraph 50 identifying, inter alia, violations of CERCLA or EPCRA, this Consent Decree resolves the civil liability of Western to the United States for violations of CERCLA/EPCRA requirements associated with SO<sub>2</sub> and H<sub>2</sub>S releases resulting from pre-Lodging Acid Gas Flaring Incidents and Tail Gas Incidents at the El Paso Refinery to the extent that Western has identified such violations in the Paragraph 50 report and corrected the violations as required by Paragraph 50.a.

**174. Resolution of Liability Regarding Benzene Waste NESHAP Requirements.**

Entry of this Consent Decree shall resolve all civil liability of Western to the United States for alleged violations of Benzene Waste NESHAP Requirements at the El Paso Refinery that either: (i) commenced and ceased prior to the Entry Date; or (ii) are based on events identified in the BWON Compliance Review and Verification Report required under Paragraph 66 and are corrected pursuant to the requirements of Paragraph 67.

**175. Resolution of Liability Regarding LDAR Requirements.** Entry of this Consent Decree shall resolve the civil liability of Western to the United States for alleged violations of LDAR Requirements at the El Paso Refinery that either: (i) commenced and ceased prior to the Entry Date; or (ii) are based on events that are identified in the LDAR Initial Audit Report required under Subparagraph 85.a and are corrected pursuant to the requirements of Paragraph 86.

**176. Reservation of Rights Regarding Benzene Waste NESHAP and LDAR Requirements.** Notwithstanding the resolution of liability in Paragraphs 174 and 175, nothing in this Consent Decree precludes the United States from seeking from Western civil penalties and/or injunctive relief and/or other equitable relief for violations by Western for a violation of Benzene Waste NESHAP Requirements or of LDAR Requirements that either continued or commenced after the Entry Date:

- i. if Western fails to identify any such violation of Benzene Waste NESHAP Requirements in its BWON Compliance Review and Verification Report under Paragraph 66 and correct such violation as required by Paragraph 67;
- ii. if Western fails to identify any such violation of LDAR Requirements in its LDAR Initial Audit Report required under Subparagraph 85.a and correct such violation as required by Paragraph 86.

177. **Audit Policy.** Nothing in this Consent Decree is intended to limit or disqualify Western, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply EPA's Audit Policy or any state audit policy to any violations or non-compliance that Western discovers during the course of any investigation, audit, or enhanced monitoring that Western is required to undertake pursuant to this Consent Decree.

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

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

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

179. **Imminent and Substantial Endangerment.** Nothing in this Consent Decree shall be construed to limit the authority of the United States to undertake any action against any

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

## XV. GENERAL PROVISIONS

180. **Other Laws.** Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Western of its obligations to comply with all applicable federal, state and local laws and regulations. Subject to Section XIV (Effect of Settlement), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to seek or obtain other remedies or sanctions available under other federal, state or local statutes or regulations, by virtue of Western's violation of the Consent Decree or of the statutes and regulations upon which the Consent Decree is based, or for Western's violations of any applicable provision of law, other than the specific matters resolved herein. This shall include the right of the United States to invoke the authority of the Court to order Western's compliance with this Consent Decree in a subsequent contempt action.

181. **Post-Permit Violations.** Nothing in this Consent Decree shall be construed to prevent or limit the right of the United States to seek injunctive or monetary relief for violations of limits that have been incorporated into permits pursuant to this Consent Decree; provided, however, that with respect to monetary relief, the United States must elect between filing a new action for such monetary relief or seeking stipulated penalties under this Consent Decree, if stipulated penalties also are available for the alleged violation(s).

182. **Alternative Monitoring Plans.** Where this Consent Decree permits or requires Western to submit an alternative monitoring plan to EPA for approval, Western shall submit a complete application and shall comply with the proposed AMP pending EPA's approval or disapproval of the application. If EPA disapproves a proposed alternative monitoring plan,

Western shall, according to EPA's direction, either monitor with CEMS, or submit a revised AMP to EPA for approval within ninety (90) days of receiving notice of EPA's disapproval. Such revised plan may include a revised alternative monitoring plan application, physical or operational changes to the equipment, or additional or different monitoring. If the revised monitoring plan is not approved by EPA, the monitoring in question shall be conducted by a CEMS.

183. **Startup, Shutdown, Malfunction.** Notwithstanding the provisions of this Consent Decree regarding Startup, Shutdown, and Malfunction, this Consent Decree does not exempt Western from the requirements of federal or state laws and regulations or from the requirements of any permits or plan approvals issued to Western, as these laws, regulations, permits, and/or plan approvals may apply to Startups, Shutdowns, and Malfunctions at the El Paso Refinery.

184. **Failure of Compliance.** The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Western's complete compliance with the Consent Decree will result in future compliance with the provisions of the Clean Air Act or any other applicable federal, state, or local law or regulation. Notwithstanding the review or approval by the United States and/or state agencies of any plans, reports, policies or procedures formulated pursuant to the Consent Decree, Western shall remain responsible for compliance with the terms of the Consent Decree, all applicable permits, and all applicable federal, state and local laws and regulations, except as provided in Section XII (Force Majeure).

185. **Service of Process.** Western hereby agrees to accept service of process by mail with respect to all matters arising under or relating to the Consent Decree and to waive the formal service requirements set forth in Rules 4 or 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. The General Counsel identified by Western at Paragraph 190 (Notice) is authorized to accept service of process with respect to all matters arising under or relating to the Consent Decree.

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

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

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

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

190. **Notice.** Unless otherwise provided herein, notifications to or communications between the Parties shall be deemed submitted on the date they are postmarked. Notifications and communications shall be sent by U.S. Mail, postage pre-paid, or private courier service, except for notices under Section XII (Force Majeure) and Section XIII (Retention of Jurisdiction/Dispute Resolution) which shall be sent by overnight mail or by certified or registered mail, return receipt requested. Each report, study, notification, or other communication of Western shall be submitted as specified in this Consent Decree, with copies to EPA Headquarters and EPA Region 6. If the date on which a report, study, notification, or other communication is due falls on a Saturday, Sunday or legal holiday, the deadline for such submission shall be enlarged to the next business day. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required under this Consent Decree to be submitted or sent to the United States, EPA, and/or Western shall be addressed as follows:

**As to the United States:**

Chief  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611, Ben Franklin Station  
Washington, DC 20044-7611  
Reference Case No. 90-5-2-1-07629/1

**As to EPA:**

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

*with a hard copy to:*

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

*and an electronic copy to [csullivan@matrixworld.com](mailto:csullivan@matrixworld.com)*

*and*

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

**As to Western:**

Senior Vice President - Southwest Region Refining  
212 N. Clark Street  
El Paso, TX 79905

*With copies to:*

Environmental Manager  
212 N. Clark Street  
El Paso, TX 79905

Director of Support Services  
212 N. Clark Street  
El Paso, TX 79905

Senior Vice President - Health, Safety, Environment, and Regulatory Affairs  
123 W. Mills Avenue, Suite 200  
El Paso, TX 79901

General Counsel  
123 W. Mills Avenue, Suite 200  
El Paso, TX 79901

President - Refining and Marketing  
123 W. Mills Avenue, Suite 200  
El Paso, TX 79901

Any Party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

191. **Approvals.** All EPA approvals or comments required under this Consent Decree shall be made in writing.

192. **Paperwork Reduction Act.** The information required to be maintained or submitted pursuant to this Consent Decree is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501 et seq.

193. **Integration.** 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. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, no other document, and no other 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.

194. **Consent Decree Modifications.** Non-material modifications to this Consent Decree shall be in writing and shall be effective when signed by the United States and Western. The United States will file non-material modifications with the Court on a periodic basis. For the purpose of this Paragraph, non-material modifications include, but are not be limited to, any modifications to the frequency of reporting obligations, and (ii) any modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment. Material modifications to this Consent Decree shall be in writing, signed by the United States and Western, and shall be effective upon approval by the Court.

195. **Effect of Shutdown.** Except as provided in Section V.F (NOx Emissions Reductions from Combustion Units), the permanent shutdown of a unit and the surrender of all permits for that unit will be deemed to satisfy all requirements of this Consent Decree applicable to that unit on and after the later of: (i) the date of the shutdown of the unit; or (ii) the date of the surrender of all permits. The permanent shutdown of the El Paso Refinery and the surrender of all air permits for the Refinery will be deemed to satisfy all requirements of this Consent Decree on and after the later of: (i) the date of the shutdown of the Refinery; or (ii) the date of the surrender of all permits.

## **XVI. TERMINATION**

196. **Prerequisites to Termination.** This Consent Decree shall be subject to termination upon motion by the United States or Western (under the procedure identified in Paragraph 198). Prior to either party seeking termination, Western shall have completed and satisfied all of the following requirements with respect to this Consent Decree:

- i. installation of control technology systems as specified in this Consent Decree;
- ii. compliance with all provisions contained in this Consent Decree, which compliance may be established for specific parts of the Consent Decree in accordance with Paragraph 197, below;
- iii. payment of all penalties and other monetary obligations due under the terms of the Consent Decree; no penalties or other monetary obligations due hereunder can be outstanding or owed to the United States;
- iv. application for and receipt of permits incorporating the surviving emission limits and standards established under Subsection V.N; and
- v. operation for at least one year of each unit in compliance with the emission limits established herein, and certification of such compliance for each unit within the first six (6) month period progress report following the conclusion of the compliance period.

197. **Certification of Completion.**

a. Prior to moving for termination, Western may certify completion of one or more of the following Subsections of the Consent Decree, provided that all of the related requirements have been satisfied:

- i. Subsections V.A through V.E, relating to FCCUs;
- ii. Subsection V.F, relating to NOx emissions from Combustion Units;
- iii. Subsection V.G, relating to SO<sub>2</sub> emissions from Heaters, Boilers, and Other Fuel Gas Combustion Devices;
- iv. Subsections V.H, relating to SRPs;
- v. Subsections V.I through V.K, relating to Flaring;
- vi. Subsections V. L, relating to the Benzene Waste NESHAP, and
- vii. Subsection V.M, relating to LDAR.

b. Within 90 days after Western concludes that any of the parts of the Consent Decree identified in this Paragraph 197 have been completed, Western may submit a written report to the Parties listed in Paragraph 190 (Notice) describing the activities undertaken and certifying that the applicable Paragraphs have been completed in full satisfaction of the requirements of this Consent Decree, and that Western is in substantial and material compliance with all of the other requirements of the Consent Decree. The report shall be certified, using the language at Paragraph 111, above, by a responsible corporate official of Western.

c. Upon receipt of Western's certification, EPA shall notify Western whether the requirements set forth in the applicable Paragraphs have been completed in accordance with this Consent Decree. The parties recognize that ongoing obligations under such Paragraphs remain and necessarily continue (e.g., reporting, record keeping, training, auditing requirements),

and that Western's certification is that it is in current compliance with all such obligations. If EPA concludes that the requirements of the applicable Paragraphs have been completed in accordance with this Consent Decree, EPA will so certify in writing to Western and that certification by EPA shall constitute the certification of completion of the applicable Paragraphs for purposes of this Consent Decree. If EPA concludes that such requirements have not been fully complied with, EPA shall notify Western as to the activities that must be undertaken to complete the applicable Paragraph(s) of the Consent Decree, and Western shall perform all activities described in the notice, subject to its right to invoke the dispute resolution procedures set forth in Section XIII (Retention of Jurisdiction/Dispute Resolution).

d. Nothing in this Paragraph 197 shall preclude the United States from seeking stipulated penalties for a violation of the Consent Decree regardless of whether a Certification of Completion has been issued under Paragraph 197.c. In addition, nothing in Paragraph 197.c shall permit Western to fail to implement any ongoing obligations under the Consent Decree regardless of whether a Certification of Completion has been issued.

198. **Termination Procedure.** At such time as Western believes that it has satisfied the requirements for termination set forth in Paragraph 196, Western shall certify such compliance and completion to the United States in writing as provided in Paragraph 190 (Notice). Unless, within 120 days of receipt of Western's certification under this Paragraph, the United States objects in writing with specific reasons, Western may move this Court for an order that this Consent Decree be terminated. If the United States objects to the certification by Western under this Paragraph, then the matter shall be submitted to the Court for resolution under Section XIII (Retention of Jurisdiction/Dispute Resolution) of this Consent Decree. In

such case, Western shall bear the burden of proving that this Consent Decree should be terminated.

**XVII. SIGNATORIES**

199. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

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

201. Defendant agrees not to oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

Dated and entered this \_\_\_\_\_ day of \_\_\_\_\_, 2011

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UNITED STATES DISTRICT JUDGE

United States v. Western Refining Company, L.P. (W.D. Tex.)

WE HEREBY CONSENT to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

**FOR PLAINTIFF UNITED STATES OF AMERICA:**

[REDACTED]

IGNACIA S. MORENO  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice

[REDACTED]

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United States v. Western Refining Company, L.P. (W.D. Tex.)

WE HEREBY CONSENT to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

**FOR PLAINTIFF UNITED STATES OF AMERICA (cont'd):**

[REDACTED]

---

CYNTHIA GILES  
Assistant Administrator for  
Enforcement and Compliance Assurance  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

[REDACTED]

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ROBERT D. FENTRESS  
Attorney-Advisor  
Air Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

United States v. Western Refining Company, L.P. (W.D. Tex.)

WE HEREBY CONSENT to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

**FOR PLAINTIFF UNITED STATES OF AMERICA (cont'd):**

[Redacted]  
AL ARMENDARIZ  
Regional Administrator  
U.S. Environmental Protection Agency  
Region 6

United States v. Western Refining Company, L.P. (W.D. Tex.)

WE HEREBY CONSENT to the entry of this Consent Decree:

**FOR DEFENDANT WESTERN REFINING COMPANY, L.P.:**

Western Refining Company, L.P.  
By Western Refining GP, LLC  
Its General Partner

[Redacted]  
\_\_\_\_\_  
By: MARK J. SMITH  
Title: President – Refining & Marketing

**Appendix A**  
**Western Refining**  
**El Paso Refinery Combustion Unit Information**

Unit EPN	Facility Identification Number	Maximum Heater Capacity MMBTU/hr (HHV)	NO <sub>x</sub> Emission Rate lb-NO <sub>x</sub> /MMBTu (HHV)	2006/2007		Average Annual Utilization Rate MMBTU/hr (HHV)	2006/2007 Emission Rate Basis
				(E <sub>Actual</sub> ) <sub>i</sub> 2006/2007	Average NO <sub>x</sub> (ton/year)		
6	B-1	183	0.339	122	82	Stack Test	Stack Test
8	B-3	174	0.371	132	81	Stack Test	Stack Test
109	109 (H1601)	180	0.057	32	126	Stack Test	Stack Test
XF1001	F-1001	80	0.143	37	59	Stack Test	Stack Test
XF1010	F-1010	97	0.440	116	60	Stack Test	Stack Test
XF1011	F-1011	97	0.122	36	68	Stack Test	Stack Test
XF1601	F-1601	138	0.147	95	148	Stack Test	Stack Test
XF1602	F-1602	131	0.106	39	84	Stack Test	Stack Test
XF4150-60	F-4150	163	0.228	107	107	Stack Test	Stack Test
XF4150-60	F-4160	163	0.228	105	106	Stack Test	Stack Test
XF4170-80	F-4170	163	0.147	50	77	Stack Test	Stack Test
XF4170-80	F-4180	61	0.147	15	23	Stack Test	Stack Test
XF3901	F-3901	62	0.067	11	36	Stack Test	Stack Test
XF8801	H-8801	67	0.035	1	9	Design guarantee by manufacturer	Design guarantee by manufacturer
XF8802	H-8802	67	0.035	1	9	Design guarantee by manufacturer	Design guarantee by manufacturer
1,2 <sup>2</sup>	101,102 (H101 E/W and H201)	127	0.178	53	69	Stack Test	Stack Test
H103 <sup>1</sup>	H-103	186	0.035	0	0	Design guarantee by manufacturer	Design guarantee by manufacturer
XF4132	F-4132	42	0.098	11	25	AP-42 Emission Factor	AP-42 Emission Factor
<b>TOTALS</b>		<b>2,181</b>		<b>963</b>	<b>1,169</b>		

<sup>1</sup> H103 was not in operation during 2006 and 2007. The emission rate is the design permitted emission factor.

<sup>2</sup> H101 and H201 were shut down in early 2008 when H103 was brought on line. H201 (EPN 2) is commonly known as, and in the text of this Decree is called, "H-102."

## APPENDIX B

### **PREDICTIVE EMISSIONS MONITORING SYSTEMS FOR HEATERS AND BOILERS WITH CAPACITIES BETWEEN 100 AND 150 MMBTU/HR**

A Predictive Emissions Monitoring Systems (“PEMS”) is a mathematical model that predicts the gas concentration of NO<sub>x</sub> in the stack based on a set of operating data. Consistent with the CEMS data frequency requirements of 40 C.F.R. Part 60, the PEMS shall calculate a pound per million BTU value at least once every 15 minutes, and all of the data produced in a calendar hour shall be averaged to produce a calendar hourly average value in pounds per BTU.

The types of information needed for a PEMS are described below. The list of instruments and data sources shown below represents an ideal case. However, at a minimum, each PEMS shall include continuous monitoring for at least “Instrumentation” items 3-5, below. Western will identify and use existing instruments and refinery data sources to provide sufficient data for the development and implementation of the PEMS.

Instrumentation:

1. Absolute Humidity reading (one instrument per refinery, if available);
2. Fuel Density, Composition and/or specific gravity – Online readings (it may be possible if the fuel gas does not vary widely, that a grab sample and analysis may be substituted);
3. Fuel Flow rate;
4. Firebox temperature;
5. Percent excess oxygen;
6. Airflow to the firebox (if known or possibly estimated);
7. Process variable data – steam flow rate, temperature, and pressure – process stream flow rate, temperature and pressure, etc.

Computers & Software:

Relevant data will be collected and stored electronically, using computers and software.

The hardware and software specifications will be specified in the source-specific PEMS.

Calibration and Setup:

1. For a period of 7 to 10 days, the data that will be used to construct the mathematical model will be collected. The data will be collected over an operating range that represents 80% to 100% of the normal operating range of the heater/boiler;
2. A "Validation" analysis shall be conducted to make sure the system is collecting data properly;
3. Stack Testing will be conducted to develop the actual emissions data for comparison to the collected parameter data; and
4. The mathematical models will be developed and installed on the computer.

**The elements of a monitoring protocol for a PEMS will include:**

1. Applicability
  - a. Identify source name, location, and emission unit number(s);
  - b. Provide expected dates of monitor compliance demonstration testing.
2. Source Description
  - a. Provide a simplified block flow diagram with parameter monitoring points and emission sampling points identified (e.g., sampling ports in the stack);
  - b. Provide a discussion of process or equipment operations that are known to significantly affect emissions or monitoring procedures (e.g., batch operations, plant schedules, product changes).
3. Control Equipment Description

- a. Provide a simplified block flow diagram with parameter monitoring points and emission sampling points identified (e.g., sampling ports in the stack);
  - b. List monitored operating parameters and normal operating ranges;
  - c. Provide a discussion of operating procedures that are known to significantly affect emissions (e.g., catalytic bed replacement schedules).
4. Monitoring System Design
- a. Install, calibrate, operate, and maintain a continuous PEMS;
  - b. Provide a general description of the software and hardware components of the PEMS, including manufacturer, type of computer, name(s) of software product(s), monitoring technique (e.g., method of emission correlation). Manufacturer literature and other similar information shall also be submitted, as appropriate;
  - c. List all elements used in the PEMS to be measured (e.g., pollutant(s), other exhaust constituent(s) such as O<sub>2</sub> for correction purposes, process parameter(s), and/or emission control device parameter(s));
  - d. List all measurement or sampling locations (e.g., vent or stack location, process parameter measurement location, fuel sampling location, work stations);
  - e. Provide a simplified block flow diagram of the monitoring system overlaying process or control device diagram (could be included in Source Description and Control Equipment Description, 2 and 3 above);
  - f. Provide a description of sensors and analytical devices (e.g., thermocouple for temperature, pressure diaphragm for flow rate);

- g. Provide a description of the data acquisition and handling system operation including sample calculations (e.g., parameters to be recorded, frequency of measurement, data averaging time, reporting units, recording process);
- h. Provide checklists, data sheets, and report format as necessary for compliance determination (e.g., forms for record keeping).

5. Support Testing and Data for Protocol Design

- a. Provide a description of field and/or laboratory testing conducted in developing the correlation (e.g., measurement interference check, parameter/emission correlation test plan, instrument range calibrations);
- b. Provide graphs showing the correlation, and supporting data (e.g., correlation test results, predicted versus measured plots, sensitivity plots, computer modeling development data).

6. Initial Verification Test Procedures

- a. Perform an initial relative accuracy test (RA test) to verify the performance of the PEMS for the equipment's operating range. The PEMS must meet the relative accuracy requirement of the applicable Performance Specification in 40 C.F.R. Part 60, Appendix B. The test shall utilize the test methods of 40 C.F.R. Part 60, Appendix A;
- b. Identify the most significant independently modifiable parameter affecting the emissions. Within the limits of safe unit operation, and typical of the anticipated range of operation, test the selected parameter for three RA test data sets at the low range, three at the normal operating range, and three at the high

operating range of that parameter, for a total of nine RA test data sets. Each RA test data set should be between 21 and 60 minutes in duration;

c. Maintain a log or sampling report for each required stack test listing the emission rate;

d. Demonstrate the ability of the PEMS to detect excessive sensor failure modes that would adversely affect PEMS emission determination. These failure modes include gross sensor failure or sensor drift;

e. Demonstrate the ability to detect sensor failures that would cause the PEMS emissions determination to drift significantly from the original PEMS value;

f. The PEMS may use calculated sensor values based upon the mathematical relationships established with the other sensors used in the PEMS. Establish and demonstrate the number and combination of calculated sensor values which would cause PEMS emission determination to drift significantly from the original PEMS value.

7. Quality Assurance Plan

a. Provide a list of the input parameters to the PEMS (e.g., transducers, sensors, gas chromatograph, periodic laboratory analysis), and a description of the sensor validation procedure (e.g., manual or automatic check);

b. Provide a description of routine control checks to be performed during operating periods (e.g., preventive maintenance schedule, daily manual or automatic sensor drift determinations, periodic instrument calibrations);

- c. Provide minimum data availability requirements and procedures for supplying missing data (including specifications for equipment outages for QA/QC checks);
- d. List corrective action triggers (e.g., response time deterioration limit on pressure sensor, use of statistical process control (SPC) determinations of problems, sensor validation alarms);
- e. List trouble-shooting procedures and potential corrective actions;
- f. Provide an inventory of replacement and repair supplies for the sensors;
- g. Specify, for each input parameter to the PEMS, the drift criteria for excessive error (e.g., the drift limit of each input sensor that would cause the PEMS to exceed relative accuracy requirements);
- h. Conduct a quarterly electronic data accuracy assessment test of the PEMS;
- i. Conduct semi-annual RA tests of the PEMS. Annual RA tests may be conducted if the most recent RA test result is less than or equal to 7.5%. Identify the most significant independently modifiable parameter affecting the emissions. Within the limits of safe unit operation and typical of the anticipated range of operation, test the selected parameter for three RA test data pairs at the low range, three at the normal operating range, and three at the high operating range of that parameter for a total of nine RA test data sets. Each RA test data set should be between 21 and 60 minutes in duration.

8. PEMS Tuning

- a. Perform tuning of the PEMS provided that the fundamental mathematical relationships in the PEMS model are not changed.

- b. Perform tuning of the PEMS in case of sensor recalibration or sensor replacement provided that the fundamental mathematical relationships in the PEMS model are not changed.