IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

UNITED STATES OF AMERICA, STATE OF ILLINOIS, STATE OF LOUISIANA, and the STATE OF MONTANA	)	
Plaintiffs,	)	Case No. 05 C 5809
v.	)	The Honorable Rebecca R. Pallmeyer
EXXON MOBIL CORPORATION and EXXONMOBIL OIL CORPORATION	)	
Defendants.	)	

FOURTH CONSENT DECREE AMENDMENT
CONCERNING EXXONMOBIL'S JOLIET REFINERY

I. BACKGROUND

A. Defendant ExxonMobil Oil Corporation currently owns and operates petroleum refineries located near Joliet, Illinois and in Beaumont, Texas. ExxonMobil Oil Corporation also owned a petroleum refinery in Torrance, California, until it completed the sale of the Torrance Refinery to PBF Energy in 2016. Defendant Exxon Mobil Corporation currently owns and operates petroleum refineries located in Baton Rouge, Louisiana; Baytown, Texas; and Billings, Montana. The six petroleum refineries identified above are referred to herein as the "Six Refineries" (as further defined at Section IV (Definitions) below).

B. On October 11, 2005, Plaintiff the United States of America ("United States"), by the authority of the Attorney General of the United States, acting at the request and on behalf of the United States Environmental Protection Agency ("EPA"), filed the Complaint in this case alleging, *inter alia*, that the Defendants had violated and/or continued to violate certain requirements of the Clean Air Act at the Six Refineries, as well as regulations and permits issued under the Clean Air Act including: (i) New Source Performance Standard ("NSPS") regulations promulgated by EPA; (ii) National Emissions Standards for Hazardous Air Pollutants ("NESHAP") regulations promulgated by EPA; and (iii) State Implementation Plans ("SIPs") and other state rules adopted by the states and/or local air quality districts in which the Six Refineries are located. Electronic Case File ("ECF") No. 1.

C. Shortly after the United States filed the Complaint in this case, the United States also lodged a proposed Consent Decree with the Court that would resolve the claims alleged in the Complaint on specified terms and conditions. After an opportunity for public comment afforded in accordance with U.S. Department of Justice policy, the Court approved and entered that Consent Decree regarding the Six Refineries on December 13, 2005. ECF Nos. 7-2, 10. The parties thereafter agreed to three Consent Decree amendments that were filed with this Court

in 2006, 2007, and 2008. ECF Nos. 11, 13, 19. The 2005 Consent Decree and those three Consent Decree amendments are referred to collectively herein as the "Original Consent Decree."

D. Among other things, the Original Consent Decree required ExxonMobil to: (i) pay a $7,700,000 civil penalty for alleged past violations at the Six Refineries; (ii) pay stipulated penalties for any future Consent Decree violations; (iii) make wide-ranging upgrades and improvements to pollution control equipment and systems at the Six Refineries as agreed injunctive relief; and (iv) achieve and maintain compliance with specified pollution control requirements, standards, and limits.

E. The State of Illinois (on behalf of the Illinois Environmental Protection Agency), the State of Louisiana (on behalf of the Louisiana Department of Environmental Quality), and the State of Montana (on behalf of the Montana Department of Environmental Quality) joined in this matter to allege and resolve violations of their respective applicable SIP provisions and other state and local rules, regulations, and permits incorporating and/or implementing federal Clean Air Act requirements. The Original Consent Decree identified each of those states as an "Applicable Co-Plaintiff" with respect to the following refineries: (i) the State of Illinois, for the Joliet Refinery; (ii) the State of Louisiana, for the Baton Rouge Refinery; and (iii) the State of Montana, for the Billings Refinery.

F. The United States contends that ExxonMobil Oil Corporation ("ExxonMobil") has violated certain requirements of the Original Consent Decree that apply to the Joliet Refinery. The United States also contends that ExxonMobil has violated other Clean Air Act requirements applicable to the Joliet Refinery, including NSPS and NESHAP requirements, as detailed in an EPA Notice and Finding of Violation issued in 2013. Furthermore, the United States contends that those violations of the Original Consent Decree and the Clean Air Act

support claims for stipulated penalties, statutory civil penalties, and additional injunctive relief. ExxonMobil does not concede those contentions, and specifically denies that it has violated the foregoing statutory, regulatory, SIP provisions and other state and local rules, regulations and permits incorporating and implementing the foregoing federal requirements, and maintains that it has been and remains in compliance with all applicable statutes, regulations and permits and is not liable for civil penalties and injunctive relief, but nonetheless agrees to resolve those allegations on the terms and conditions set forth in this Fourth Consent Decree Amendment (the "Fourth Decree Amendment").

G. This Fourth Decree Amendment requires ExxonMobil to: (i) pay civil penalties and stipulated penalties for the alleged violations of the Clean Air Act and the Original Consent Decree at the Joliet Refinery; and (ii) implement additional and streamlined compliance requirements at the Joliet Refinery, as specified herein. As provided by the Emission Credit Generation provisions of the Original Consent Decree and this Fourth Decree Amendment, any emission reductions that result from any projects, controls, or any other actions used to comply with the Original Consent Decree or this Fourth Decree Amendment shall not be contemporaneous or creditable for the purpose of calculating a net emissions increase as set forth in 40 C.F.R § 52.21(b)(3).

H. For the reasons outlined above, and as specified below in Paragraph 83, the Court's entry of this Fourth Decree Amendment shall replace, supersede, and terminate all requirements of the Original Consent Decree concerning the Joliet Refinery.

I. Because the new and modified requirements of this agreement only concern ExxonMobil's Joliet Refinery, the only parties to this Fourth Decree Amendment are ExxonMobil, the United States, and the State of Illinois, as the Applicable Co-Plaintiff for the Joliet Refinery (collectively referred to herein as the "Parties").

J. The Parties recognize, and the Court by entering this Fourth Decree Amendment finds, that this Fourth Decree Amendment has been negotiated at arms-length and in good faith and that the Fourth Decree Amendment 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 this Fourth Decree Amendment, it is hereby ORDERED, ADJUDGED and DECREED as follows:

II. JURISDICTION AND VENUE

1. This Court has continuing 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 continuing jurisdiction over the subject matter of this action pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. §§ 7413(b).

2. Venue is proper in the Northern District of Illinois pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c), and 1395(a). ExxonMobil consents to the personal jurisdiction of this Court, waives any objections to venue in this District, and does not object to the participation of Illinois as a Co-Plaintiff and a party to this case.

III. APPLICABILITY AND BINDING EFFECT

3. The provisions of this Fourth Decree Amendment shall be binding upon the United States, Illinois, and ExxonMobil (acting through their officers, agents, servants, employees, and members acting in their capacities as such), and upon their successors and assigns.

4. ExxonMobil, the United States, and Illinois agree not to contest the validity of this Fourth Decree Amendment in any subsequent proceeding to implement or enforce its terms.

5. ExxonMobil shall give written notice of this Fourth Decree Amendment to any successors in interest prior to the transfer of ownership or operation of any portion of the Joliet Refinery (to the extent such portion is subject to one or more requirements of this Fourth Decree Amendment) and shall provide a copy of this Fourth Decree Amendment to any successor in interest. ExxonMobil shall notify the United States and Illinois, in accordance with the notice provisions set forth in Section XV (Notices), of any successor in interest at least thirty (30) Days prior to any such transfer.

6. ExxonMobil 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 Joliet Refinery upon the execution by the transferee of a modification to this Fourth Decree Amendment, which modification shall make the terms and conditions of the Fourth Decree Amendment that apply to the Joliet Refinery or portion of the Joliet Refinery applicable to the transferee. In the event of such transfer, ExxonMobil shall notify the United States and Illinois. By no earlier than thirty (30) Days after such notice, ExxonMobil may file a motion to modify the Fourth Decree Amendment to make the terms and conditions of the Fourth Decree Amendment applicable to the transferee. ExxonMobil shall be released from the obligations and liabilities of this Fourth Decree Amendment unless the United States opposes the motion and the Court finds that the transferee does not have the financial and technical ability to assume the obligations and liabilities under the Fourth Decree Amendment.

7. Subject only to Paragraph 6, above, and Section X (Force Majeure), below, ExxonMobil shall be solely responsible for ensuring that performance of the work contemplated under this Fourth Decree Amendment is undertaken in accordance with the deadlines and requirements contained in this Fourth Decree Amendment. ExxonMobil shall provide a copy of this Fourth Decree Amendment (or an extract of applicable provisions of this Fourth Decree

Amendment) to each consulting or contracting firm that is retained to perform work required under Section V (Affirmative Relief) of this Fourth Decree Amendment, upon execution of any contract relating to such work. Copies of the Fourth Decree Amendment (or an extract of applicable provisions of this Fourth Decree Amendment) may be provided by electronic means but do not need to be supplied to firms who are retained to supply materials or equipment to satisfy requirements under this Fourth Decree Amendment.

IV. DEFINITIONS

8. Unless otherwise defined herein, terms used in this Fourth Decree Amendment 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 Fourth Decree Amendment shall be defined, for purposes of the Fourth Decree Amendment and the reports and documents submitted pursuant hereto, as follows:

a. "7-day rolling average" means the average daily emission rate or concentration during the preceding 7 Days. For purposes of clarity, the effective date of the emission limit is the first day on which a full 7-day average compliance period has occurred (*e.g.,* for a limit effective on January 1, the first day in the period is December 26 of the previous year and the first complete 7-day period covers the period from December 26 through January 1).

b. "365-day rolling average" means the average daily emission rate or concentration during the preceding 365 Days. For purposes of clarity, the effective date of the emission limit is the first day on which a full 365-day average compliance period has occurred (*e.g.,* for a limit effective on January 1, the first day in the period is January 2 of the previous year and the first complete 365-day period covers January 2 through January 1).

c. "CEMS" or "Continuous Emissions Monitoring System" means the total equipment, required under this Consent Decree or an applicable regulation or permit, used to

sample and condition (if applicable), to analyze, and to record emissions or process parameters (*e.g.*, stack O_2). CEMS at the Joliet Refinery that are subject to the NO_x Budget Trading Program per 35 Ill. Adm. Code Part 217, Subpart U and, therefore, to 40 C.F.R. Part 75, are excluded from this definition.

d. "CO" means carbon monoxide.

e. "Date of Lodging" means the day on which this Fourth Decree Amendment is lodged with the Clerk of the Court for the United States District Court for the Northern District of Illinois, before the U.S. Department of Justice solicits public comments on the proposed settlement in accordance with 28 C.F.R. § 50.7.

f. "Day" or "Days" means a calendar day or days.

g. "Effective Date" has the meaning provided in Section XVI.

h. "EPA Violation Notice" means the September 27, 2013 Notice of Violation and Finding of Violation issued to ExxonMobil by EPA (attached as Appendix A to this Fourth Decree Amendment).

i. "Existing CEMS" means the following CEMS which exist at the Joliet Refinery as of the Date of Lodging:

Source	Constituents
FCCU	CO O_2 NO_x SO_2
North Sulfur Recovery Unit of SRP	SO_2 O_2
South Sulfur Recovery Unit of SRP	SO_2 O_2
Alky Heater 7-B-1	NO_x O_2
CHD Charge Heater 3-B-1	NO_x O_2
CHD Reboiler Heater 3-B-2	NO_x O_2

Coker Heater 16-B-1	NO_x O_2
Coker Heater 16-B-2	NO_x O_2
Crude Preheater 13-B-3/13-B-4	NO_x O_2
Crude Vacuum Heater 13-B-2	NO_x O_2
Crude Atmospheric Heater 1-B-1A	NO_x O_2
Crude Atmospheric Heater 1-B-1B	NO_x O_2
PreTreater Charge Heater 17-B-1	NO_x O_2
Pretreater Reboiler Heater 17-B-2	NO_x O_2
Reformer Heater 2-B-3/4	NOx O2
Reformer Heater 2-B-5/6/	NO_x O_2
South Flare 49-B-305b and East Flare 49-B-305a	Total Sulfur H_2S
Fuel Gas System (multiple)	H_2S

To the extent that, after the Date of Lodging, it is determined that additional CEMS existed as of the Date of Lodging but were not set forth on this list, then those additional CEMS shall be included in the definition of "Existing CEMS" for purposes of this Fourth Decree Amendment.

j. "ExxonMobil" means ExxonMobil Oil Corporation and its successors and assigns.

k. "FCCU" means a fluid catalytic cracking unit, its regenerator and associated CO boiler(s) and CO furnace(s) where present. The Joliet Refinery has one FCCU (the "Joliet FCCU").

l. "Fourth Decree Amendment" means this Fourth Consent Decree Amendment.

m. "Illinois" means the State of Illinois, acting on behalf of the Illinois Environmental Protection Agency and any successor departments or agencies of the State of Illinois.

n. "Illinois EPA" means the Illinois Environmental Protection Agency and any successor departments or agencies of the State of Illinois.

o. "Joliet Refinery" means the petroleum refinery owned and operated by ExxonMobil Oil Corporation and located at I-55 and Arsenal Road in Channahon, Illinois.

p. "Malfunction," as specified by 40 C.F.R. § 60.2, means: "[A]ny sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions."

q. "NO_X" means nitrogen oxides.

r. "O_2" means oxygen.

s. "Original Consent Decree" means, collectively: (i) the consent decree regarding the Six Refineries that this Court entered in this case on December 13, 2005 (ECF Nos. 7-2, 10); and (ii) the three prior consent decree amendments that were filed with this Court in 2006, 2007, and 2008 (ECF Nos. 11, 13, 19).

t. "Paragraph" means a portion of this Fourth Decree Amendment identified by an arabic numeral.

u. "Parties" means the United States, Illinois, and ExxonMobil.

v. "ppmvd" means parts per million by volume on a dry basis.

w. "SO_2" means sulfur dioxide.

x. "Six Refineries" means the following petroleum refineries: (i) the Baton Rouge Refinery, owned and operated by Exxon Mobil Corporation and located at 4045 Scenic

Highway in Baton Rouge, Louisiana; (ii) the Baytown Refinery, owned and operated by Exxon Mobil Corporation and located at 2800 Decker Drive in Baytown, Texas; (iii) the Beaumont Refinery, owned and operated by ExxonMobil Oil Corporation and located at End of Burt Street in Beaumont, Texas; (iv) the Billings Refinery, owned and operated by Exxon Mobil Corporation and located at 700 Exxon Refinery Road in Billings, Montana; (v) the Joliet Refinery, owned and operated by ExxonMobil Oil Corporation and located at I-55 and Arsenal Road in Channahon, Illinois; and (vi) the Torrance Refinery, formerly owned and operated by ExxonMobil Oil Corporation and located at 3700 West 190th Street in Torrance, California.

y. "Sulfur Recovery Plant" or "SRP" means a process unit that recovers sulfur from hydrogen sulfide by a vapor phase catalytic reaction of sulfur dioxide and hydrogen sulfide. The SRP at the Joliet Refinery (the "Joliet SRP") consists of three Claus trains: the North Train, the East Train, and the West Train. The North Train is sometimes referred to as the "North Sulfur Recovery Unit" and the East Train and the West Train are sometimes referred to collectively as the "South Sulfur Recovery Unit."

z. "United States" means the United States of America, acting on behalf of EPA.

V. AFFIRMATIVE RELIEF

A. NO_X Emissions Reductions from the Joliet FCCU.

9. ExxonMobil shall implement a program to reduce NO_X emissions from the Joliet FCCU, as specified below. Pursuant to Subsection V.F of this Fourth Decree Amendment, ExxonMobil shall apply for federally-enforceable permits that incorporate the NO_X emission limits established by this Subsection V.A. ExxonMobil will monitor compliance with the emission limits through the use of CEMS, as specified by this Subsection V.A.

10. NO_X Emissions Control for the Joliet FCCU.

a. NO_X Control System and General Overview. ExxonMobil controls emissions from the Joliet FCCU by operating a Selective Catalytic Reduction system for the FCCU. Rather than continuing to comply with the FCCU NO_X emission limits in the Original Consent Decree, ExxonMobil shall comply with the NO_X emissions limits listed in Subparagraphs 10.b and 10.c for the Joliet FCCU after the Effective Date.

b. Interim NO_X Limits. From the Effective Date until 364 days after startup following completion of the next Joliet FCCU turnaround, but no later than December 31, 2025, ExxonMobil shall comply with interim NO_X emission limits of 18 ppmvd at 0% O_2 on a 365-day rolling average basis and 40 ppmvd at 0% O_2 on a 7-day rolling average basis at the Joliet FCCU.

c. Final NO_X Limits. Commencing 365 days after startup following completion of the next Joliet FCCU turnaround, but no later than December 31, 2025, ExxonMobil shall comply with final NO_X emission limits of 15 ppmvd at 0% O_2 on a 365-day rolling average basis and 40 ppmvd at 0% O_2 on a 7-day rolling average basis at the Joliet FCCU.

11. Startup, Shutdown, and Malfunction. NO_X emissions (i) caused by or attributable to the startup, shutdown, or Malfunction of the Joliet FCCU and/or (ii) during periods of Malfunction of the Joliet FCCU's NO_X control system will not be used in determining compliance with the short-term (7-day) interim NO_X limit or short-term (7-day) final NO_X limits specified in Subparagraphs 10.b and 10.c, provided that during such periods ExxonMobil implements good air pollution control practices to minimize NO_X emissions. Nothing in this Paragraph shall be construed to relieve ExxonMobil of any obligation under any federal, state, or local law, regulation, or permit to report emissions 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 either be: (i) monitored with CEMS as provided by Paragraph 12; or (ii) monitored in accordance with an alternative monitoring plan approved by EPA if it is necessary to bypass the FCCU's main stack during the particular period of startup, shutdown, or Malfunction.

12. Demonstrating Compliance with FCCU NOx Emission Limits. After the Effective Date, ExxonMobil shall continue to use NO_X and O_2 CEMS to monitor performance and to report compliance with the terms and conditions of this Subsection V.A relating to NO_X emissions from the Joliet FCCU. As permitted by Paragraph 11, emissions during certain periods may be monitored in accordance with an alternative monitoring plan approved by EPA. 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.

B. SO_2 Emissions Reductions from the Joliet FCCU.

13. ExxonMobil shall implement a program to reduce SO_2 emissions from the Joliet FCCU, as specified below. Pursuant to Subsection V.F of this Fourth Decree Amendment, ExxonMobil shall apply for federally-enforceable permits that incorporate the SO_2 emission limits established by this Subsection V.B. ExxonMobil will monitor compliance with the emission limits through the use of CEMS, as specified by this Subsection V.B.

14. SO_2 Emissions Control for the Joliet FCCU.

a. SO_2 Control System and General Overview. ExxonMobil controls emissions from the Joliet FCCU by operating a Wet Gas Scrubber system for the FCCU. Rather than continuing to comply with the FCCU SO_2 emission limits in the Original Consent Decree,

ExxonMobil shall comply with the SO_2 emissions limits listed in Subparagraph 14.b for the Joliet FCCU after the Effective Date.

b. Final SO_2 Limits. ExxonMobil shall comply with SO_2 emission limits of 10 ppmvd at 0% O_2 on a 365-day rolling average basis and 50 ppmvd at 0% O_2 on a 7-day rolling average basis at the Joliet FCCU.

15. Startup, Shutdown, and Malfunction. SO_2 emissions (i) caused by or attributable to the startup, shutdown, or Malfunction of the Joliet FCCU and/or (ii) during periods of Malfunction of the Joliet FCCU's SO_2 control system will not be used in determining compliance with the short-term (7-day) final SO_2 limits specified in Subparagraph 14.b, provided that during such periods ExxonMobil implements good air pollution control practices to minimize SO_2 emissions. Nothing in this Paragraph shall be construed to relieve ExxonMobil of any obligation under any federal, state, or local law, regulation, or permit to report emissions 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 either be: (i) monitored with CEMS as provided by Paragraph 16; or (ii) monitored in accordance with an alternative monitoring plan approved by EPA if it is necessary to bypass the FCCU's main stack during the particular period of startup, shutdown, or Malfunction.

16. Demonstrating Compliance with FCCU SO_2 Emission Limits. After the Effective Date, ExxonMobil shall continue to use SO_2 and O_2 CEMS to monitor performance and to report compliance with the terms and conditions of this Subsection V.B relating to SO_2 emissions from the Joliet FCCU. As permitted by Paragraph 15, emissions during certain periods may be monitored in accordance with an alternative monitoring plan approved by EPA. 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.

C. Joliet Refinery Sulfur Recovery Plant Operations

17. Sulfur Recovery Plant NSPS Applicability. On the Effective Date, the Joliet SRP shall be an "affected facility," as that term is used in 40 C.F.R. Part 60, Subparts A and Ja.

18. Sulfur Recovery Plant NSPS Compliance. By no later than the Effective Date, ExxonMobil shall ensure that the Joliet SRP complies with all applicable provisions of the NSPS regulations set forth at 40 C.F.R. Part 60, Subparts A and Ja, including, but not limited to: (i) the emission limitations in 40 C.F.R. § 60.102a(f)(1); and (ii) the monitoring and reporting requirements in 40 C.F.R. §§ 60.7(c), 60.13, 60.106a, and 60.108a.

19. Additional Emissions Limitation. Commencing 365 days after the changes made in accordance with Subparagraph 20.c, but no later than December 31, 2025, ExxonMobil shall comply with an SO_2 emission limit of 80 ppmvd at 0% O_2 on a 365-day rolling average basis at the North Sulfur Recovery Unit. SO_2 emissions caused by or attributable to the startup, shutdown, or Malfunction of the North Sulfur Recovery Unit will be used in determining compliance with this limit.

20. Sulfur Pit Emissions

a. ExxonMobil shall continue to route all sulfur pit emissions from the Joliet SRP so that they are eliminated, controlled, or included and monitored as part of the emissions subject to NSPS Subpart Ja, including, but not limited to, the limit for SO_2 at 40 C.F.R. § 60.102a(f)(1)(i) (subject to the exception set forth in 40 C.F.R. § 60.102a(f)(3) pertaining to periods of sulfur pit maintenance). Commencing 365 days after the changes made in accordance with Subparagraph 20.c, but no later than December 31, 2025, re-routed emissions from the

North Sulfur Pit also shall be subject to the additional emissions limitation for the North Sulfur Recovery Unit set forth in Paragraph 19.

b. ExxonMobil shall operate and maintain the following control and monitoring equipment at the Joliet SRP in a manner consistent with good air pollution control practices for minimizing emissions: (i) the sulfur pit air sweep systems; and (ii) within 18 months of the Effective Date, the sulfur pit air sweep flow indicators located at each air intake.

c. As an added measure to further reduce controlled SO_2 emissions from sulfur pit emissions, by no later than December 31, 2024, ExxonMobil shall re-route all North Sulfur Recovery Unit sulfur pit emissions so that instead of being routed to the Thermal Oxidizer, they are routed to the beginning of the North Sulfur Recovery Unit (*i.e.* the inlet of the North Claus unit).

21. Sulfur Pit Operation and Maintenance Plan

a. Requirements of Sulfur Pit Operation and Maintenance Plan. By no later than 90 Days after the installation of the flow indicators required by Subparagraph 20.b, ExxonMobil shall develop and submit to EPA for review a comprehensive Sulfur Pit Operation and Maintenance Plan ("Sulfur Pit O&M Plan") that is designed to ensure operation and maintenance of all sulfur pits at the Joliet Refinery in accordance with good air pollution control practices for minimizing emissions. ExxonMobil shall include the following minimum elements in the Sulfur Pit O&M Plan:

i. a description of sulfur pit air sweep operations, including how ExxonMobil determines whether the sulfur pit is venting to the control device or to the atmosphere;

ii. flow indicator and eductor maintenance procedures;

iii. flow indicator inlet minimum air flow associated with no sulfur pit venting and the method used to determine such set point;

iv. flow indicator inlet alarm air flow set point(s) for operators to trouble shoot and take action to improve the eductor performance; and

v. response procedures when sulfur pit air sweep flow is low.

b. EPA Review and Comment on Sulfur Pit O&M Plan. EPA may provide written comments on ExxonMobil's Sulfur Pit O&M Plan or EPA may decline to comment. The procedures of this Subparagraph shall apply as follows:

i. If EPA provides written comments within 90 Days of receipt of ExxonMobil's Sulfur Pit O&M Plan, then within 45 Days of receipt of such comments, ExxonMobil shall either: *(1)* modify the Sulfur Pit O&M Plan consistent with EPA's written comments; or *(2)* submit the matter for dispute resolution under Section XI of this Fourth Decree Amendment.

ii. If EPA does not provide written comments within 90 Days of receipt of ExxonMobil's Sulfur Pit O&M Plan, EPA nonetheless may still provide written comments within 180 Days after receipt of the Sulfur Pit O&M Plan requiring changes to the Plan. Within 60 Days of receipt of such comments, ExxonMobil shall either: *(1)* implement all of the actions required by the comments; or *(2)* notify EPA that ExxonMobil has determined that implementation of one or more those actions (which ExxonMobil shall specifically identify) would be either unduly burdensome to implement given the degree to which ExxonMobil has proceeded with implementing the Sulfur Pit O&M Plan or would be otherwise unreasonable. If ExxonMobil notifies EPA that it will not implement all of the actions required by the comments, then within 60 Days of receipt of ExxonMobil's notification, EPA may either accept ExxonMobil's position or invoke dispute resolution pursuant to Section XI of this Fourth Decree Amendment.

iii. During the pendency of any dispute resolution proceeding pursuant to this Paragraph 21, ExxonMobil shall implement all parts of the Sulfur Pit O&M Plan that are not the subject of the dispute and shall also implement the disputed parts consistent with ExxonMobil's proposal. After completion of the dispute resolution proceeding, ExxonMobil shall implement the disputed parts of the Sulfur Pit O&M Plan if required by and in a manner consistent with the results of the dispute resolution proceeding.

c. Requirement to Update the Sulfur Pit O&M Plan. By no later than 90 Days after ExxonMobil re-routes all North Sulfur Recovery Unit sulfur pit emissions to the beginning of the North Sulfur Recovery Unit, or March 31, 2025, whichever occurs first, ExxonMobil shall update its Sulfur Pit O&M Plan to ensure that the re-routing is designed to ensure that the operation and maintenance of the North Sulfur Recovery Unit sulfur pits is in accordance with good air pollution control practices for minimizing emissions. If EPA comments on the updated O&M Plan, the procedure set forth in Subparagraph 21.b applies.

D. Joliet Refinery CEMS Improvement Program

22. CEMS Operation and Maintenance Plan. By no later than 180 Days after the Effective Date, ExxonMobil shall develop and submit to EPA for review a comprehensive CEMS Operation and Maintenance Plan ("CEMS O&M Plan") that is designed to enhance the performance of the CEMS, improve CEMS accuracy and stability, and minimize periods of CEMS downtime. The CEMS O&M Plan shall include, at a minimum, each element identified in Paragraphs 23–27. EPA's review of ExxonMobil's CEMS O&M Plan shall be undertaken pursuant to Paragraph 28.

23. CEMS Operations and Maintenance Training. At least once every 12-month period that commences 90 Days after ExxonMobil's submission of the CEMS O&M Plan, ExxonMobil shall provide training to all individuals (ExxonMobil employees and contractors)

involved in CEMS operations and maintenance in order to ensure and maintain necessary levels of competence in maintaining and operating CEMS. All newly-hired individuals (ExxonMobil employees and contractors) involved in CEMS operations and maintenance shall receive CEMS training which shall include a review of the CEMS O&M Plan, prior to undertaking any CEMS-related responsibilities. All individuals involved in CEMS operations and maintenance shall have access to and be familiar with the CEMS O&M Plan.

24. CEMS Testing and Calibration. Commencing on the Date of Lodging, ExxonMobil shall certify, calibrate, maintain, and operate all Existing CEMS in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to Continuous Opacity Monitoring Systems) and 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 a federal or state regulation or a permit condition otherwise requires compliance with 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3, and 5.1.4, ExxonMobil may conduct: (i) either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every three years; and (ii) a Cylinder Gas Audit ("CGA") each calendar quarter in which a RAA or RATA is not performed. Provided, however, that for CEMS that monitor flares that do not receive routine flow, ExxonMobil may use the alternative relative accuracy procedures described in Section 16.0 of Performance Specification 2 of Appendix B to 40 C.F.R. Part 60 (cylinder gas audits) for conducting relative accuracy evaluations, except that it is not necessary to include as much of the sampling probe or sampling line as practical.

25. CEMS Operation. Commencing on the Date of Lodging, for Existing CEMS, ExxonMobil shall operate each CEMS at all times, including during periods of process unit startup, shutdown, and/or Malfunction.

26. Notice of Removal of CEMS from list of Existing CEMS. If ExxonMobil determines that it no longer needs to operate an Existing CEMS because an underlying legal requirement (*e.g.*, this Fourth Decree Amendment, a federal or state statute or regulation, or a permit) no longer requires the operation of the CEMS, then ExxonMobil shall notify EPA, pursuant to Section XV (Notices), that ExxonMobil has modified the list of Existing CEMS set forth in Subparagraph 8.i (Definition of "Existing CEMS") to delete the CEMS that is the subject of the submission from the list. ExxonMobil shall submit this notice within 60 Days of the date that the operation of the CEMS no longer was required. In the notice, ExxonMobil shall identify the legal requirement that formerly required the CEMS' operation and the date that the legal requirement no longer was applicable or the date that a physical or operational change (such as process equipment removal or shutdown) rendered CEMS operation moot.

27. Preventive Maintenance, Quality Assurance/Quality Control ("QA/QC"), and Repair. By no later than the date of submission of the CEMS O&M Plan, ExxonMobil shall develop the programs set forth in Subparagraphs 27.a–27.c for CEMS. Commencing 90 Days after submission of the CEMS O&M Plan, and continuing until termination of this Fourth Decree Amendment, ExxonMobil shall implement these programs, as updated by the requirements of Subparagraph 27.d and/or the results of EPA's review and comment pursuant to Paragraph 28 and/or the results of dispute resolution pursuant to Paragraph 28 and Section XI of this Fourth Decree Amendment.

a. CEMS Routine Preventive Maintenance Program. The CEMS Routine Preventive Maintenance Program shall identify and require implementation of a regularly-scheduled set of activities designed to minimize problems that cause CEMS downtime. Such activities and procedures may be based initially on the CEMS vendor's recommendations. Routine preventive maintenance procedures shall include regular (*e.g.,* daily, weekly, monthly)

internal (and, as needed, external) operation and maintenance ("O&M") checks designed to minimize CEMS downtime. Internal O&M checks include, but are not limited to, CEMS inspections, routine cleaning of components, and any other routine maintenance. External O&M checks include, but are not limited to, independent third party CEMS audits or other assessments to ensure continuous CEMS operation. For the CEMS, both internal and external O&M checks are in accordance with the actions already required by 40 C.F.R. Part 60, Appendix F.

b. CEMS QA/QC Program. The CEMS QA/QC Program shall identify and require implementation of activities to assess and maintain the quality of continuous emissions monitoring data, including regular (*e.g.*, daily, weekly monthly) internal (and, as needed, external) QA/QC and operation checks designed to maintain or improve data quality. Internal QA/QC and operation checks include, but are not limited to, periodic calibrations, drift tests, relative accuracy tests, and any other sampling and analyses to assess the quality of CEMS data (*i.e.,* accuracy and precision). External QA/QC and operation checks include, but are not limited to, independent third party CEMS audits, third party sampling and analysis for accuracy and precision, or other assessments to ensure accurate CEMS operations. Both internal and external QA/QC and operation checks for CEMS are in accordance with the actions already required by 40 C.F.R. Part 60, Appendix F.

c. CEMS Repair Program. The CEMS Repair Program shall identify and require the implementation of procedures designed to ensure the prompt repair of CEMS to address both routine and non-routine maintenance and repair. As part of its CEMS Repair Program, ExxonMobil shall: (i) maintain a spare parts inventory adequate to support normal operating and preventive maintenance requirements; and (ii) establish written procedures for the acquisition of parts on an emergency basis (*e.g.,* vendor availability on a next-day basis). At all times during the pendency of this Fourth Decree Amendment, ExxonMobil shall ensure that a

current employee at the Joliet Refinery has been designated with the responsibility for maintaining the adequacy of the spare parts inventory. The on-site spare parts inventory may be based initially on CEMS vendor recommendations.

d. Review and Update of Programs. No less than one time per 12-month period commencing in the 12-month period that is one year after the date that ExxonMobil submits its CEMS O&M Plan, ExxonMobil shall review and update, as needed, its CEMS Routine Preventive Maintenance Programs, its CEMS QA/QC Program, and/or its CEMS Repair Program to incorporate necessary or appropriate modifications based on operating experience with each CEMS. ExxonMobil also shall review and update, as needed, its CEMS Routine Preventive Maintenance Program, its CEMS QA/QC Program, and/or its CEMS Repair Program based on the results of each CEMS Downtime Root Cause Analysis and Corrective Action Report written pursuant to Paragraph 29 by no later than 135 Days after the CEMS Downtime Root Cause Analysis and Corrective Action Report is due.

28. EPA Review and Comment on CEMS Operation and Maintenance Plan. EPA may provide written comments on ExxonMobil's CEMS O&M Plan, or EPA may decline to comment. The procedures of this Paragraph shall apply.

a. If EPA provides written comments within 60 Days of receipt of ExxonMobil's CEMS O&M Plan, then within 45 Days of receipt of such comments, ExxonMobil shall either: (i) modify the Plan consistent with EPA's written comments; or (ii) submit the matter for dispute resolution under Section XI of this Fourth Decree Amendment.

b. If EPA does not provide written comments within 60 Days of receipt of ExxonMobil's CEMS O&M Plan, EPA nonetheless may still provide written comments within 180 days after receipt of the CEMS O&M Plan requiring changes to the Plan. Within 60 Days of receipt of such comments, ExxonMobil shall either: (i) implement all of the actions required by

the comments; or (ii) notify EPA that ExxonMobil has determined that implementation of one or more of those actions (which ExxonMobil shall specifically identify) would be unduly burdensome to implement given the degree to which ExxonMobil has proceeded with implementing the CEMS O&M Plan or would be otherwise unreasonable. If ExxonMobil notifies EPA that it will not implement all of the actions required by the comments, then within 60 Days of receipt of ExxonMobil's notification, EPA may either accept ExxonMobil's position or invoke dispute resolution pursuant to Section XI of this Fourth Decree Amendment.

c. During the pendency of any dispute resolution proceeding pursuant to this Paragraph 28, ExxonMobil shall implement all parts of the CEMS O&M Plan that are not the subject of the dispute and shall also implement the disputed parts consistent with ExxonMobil's proposal. After completion of the dispute resolution proceeding, ExxonMobil shall implement the disputed parts of the CEMS O&M Plan if required by and in a manner consistent with the results of the dispute resolution proceeding.

29. CEMS Downtime Root Cause Analysis and Corrective Action.

a. CEMS Downtime Triggering Event. At any time that, in a six-month semi-annual period spanning January to June or July to December, a CEMS has calculated downtime greater than 5% of the time in the six-month semi-annual period, ExxonMobil shall conduct an analysis of the root cause and any contributing cause(s) of CEMS downtime (hereinafter, "CEMS Downtime Root Cause Analysis"). For purposes of the 5% downtime calculation, "calculated downtime" shall mean the period of time during the operation of the emission unit being monitored in which any of the required CEMS data either are not recorded or are invalid for any reason (*e.g.*, monitor malfunctions, data system failures, preventive maintenance, unknown causes, *etc.*), but shall not include downtime associated with routine CEMS zero and span checks and QA/QC activities required by this Fourth Decree Amendment

and/or an applicable regulation, or during periods of emission unit startup, shutdown or process upset when the CEMS functions yet actual and measured values are outside the range or span of the instrument specified by an applicable regulation ("excluded downtime"). Excluded downtime shall not be included in the numerator or the denominator for the percentage downtime calculation. CEMS data that meet the requirements of 40 C.F.R. § 60.13 shall be considered "valid" for purposes of determining downtime.

b. CEMS Downtime Root Cause Analysis and Corrective Action Report. By no later than 45 Days after the end of the applicable semi-annual reporting period in which the threshold for a CEMS Downtime Root Cause Analysis is met, ExxonMobil shall prepare a CEMS Downtime Root Cause Analysis and Corrective Action Report that shall, at a minimum, include the following elements:

i. An identification and detailed analysis setting forth the root cause and any contributing cause(s) of the CEMS downtime;

ii. The steps, if any, taken to limit the duration of the CEMS downtime;

iii. An analysis of the measures reasonably available to prevent the root cause and any contributing cause(s) of the CEMS downtime from recurring. This analysis shall include an evaluation of possible design, operational, and maintenance measures; and

iv. The corrective actions taken or to be taken consistent with the requirements of Subparagraph 29.c.

c. CEMS Downtime Corrective Action. ExxonMobil shall undertake as expeditiously as reasonably possible all reasonably available corrective actions that are necessary to correct the cause of the CEMS downtime and to prevent a recurrence of the root and any contributing cause(s) identified in the CEMS Downtime Root Cause Analysis and Corrective Action Report. In this Report, ExxonMobil shall include a description of any corrective actions

already completed or, for corrective actions that are not yet completed, a schedule for their implementation.

d. CEMS Downtime Third Party Evaluation. For any specific CEMS for which a CEMS Downtime Root Cause Analysis and Corrective Action Report is required twice within six consecutive six-month semi-annual periods, ExxonMobil shall retain an independent third party technical advisor to evaluate ExxonMobil's assessment of the CEMS downtime cause(s). By no later than 120 Days after ExxonMobil's required preparation of the second CEMS Downtime Root Cause Analysis and Corrective Action Report, the independent third party shall prepare a written report ("CEMS Downtime Third Party Report") which may include recommendations for additional corrective actions and/or modifications to ExxonMobil's CEMS O&M Plan. ExxonMobil shall implement all recommended corrective action(s) or implement other actions that address the root cause and any contributing cause(s) identified by the third party. ExxonMobil shall document its basis for not implementing any elements of the third party's recommended corrective action(s). Dispute resolution under Section XI may be invoked for disputes arising under this Subparagraph.

e. EPA Review and Comment on CEMS Downtime Corrective Actions; ExxonMobil Response; Dispute Resolution.

i. EPA Review. After a review of a CEMS Downtime Root Cause Analysis and Corrective Action Report, EPA may notify ExxonMobil in writing of: *(1)* any deficiencies in the corrective actions identified; and/or *(2)* any objections to the schedules of implementation of the corrective actions. In the notification, EPA will provide an explanation of the basis for its objections.

ii. ExxonMobil Response.

(1) If ExxonMobil has not yet commenced implementation of the corrective action, ExxonMobil will implement an alternative or revised corrective action or implementation schedule based on EPA's comments.

(2) If a corrective action that EPA has identified as deficient has already commenced or is already completed, then ExxonMobil is not obligated to implement any alternative or additional corrective action identified by EPA. However, ExxonMobil shall be on notice that EPA considers such corrective action deficient and not acceptable for remedying any subsequent, similar root cause(s) of any future CEMS monitor downtime.

iii. If EPA and ExxonMobil cannot agree on the appropriate corrective action(s) or implementation schedule(s), if any, to be taken in response to a CEMS Downtime Root Cause Analysis and Corrective Action Report, either party may invoke the dispute resolution provisions of Section XI of this Fourth Decree Amendment.

E. Joliet Refinery Targeted Leak Detection and Repair Program

30. ExxonMobil represents that it has developed and maintains a written Leak Detection and Repair ("LDAR") Program Description for compliance with all federal and state LDAR regulations applicable to the Joliet Refinery. In order to ensure continuing compliance with LDAR requirements at the Joliet Refinery, ExxonMobil represents that it has updated the LDAR Program Description for the Joliet Refinery by including procedures for identifying and removing excess insulation at valves to ensure proper monitoring. Prior to the Date of Lodging, EPA has reviewed the updated LDAR Program Description for the Joliet Refinery.

31. As prescribed by this Paragraph, ExxonMobil shall perform two separate monitoring events with an optical gas imaging ("OGI") instrument that can image hydrocarbon

leaks from any open-ended lines ("OELs") or leaking bull plugs in accordance with the OGI instrument protocol described below.

a. Prior to the initial monitoring, ExxonMobil shall establish a protocol that, at a minimum, addresses the following operational criteria:

i. calibration procedures consistent with manufacturer's recommended practice and procedures and 40 C.F.R. § 60.18(i)(2);

ii. startup (i.e., warming-up the OGI instrument) and shutdown procedures;

iii. video recording and storage;

iv. site-specific impact of weather conditions (*e.g.*, wind, speed, temperature, and visibility);

v. maintenance of the OGI instrument consistent with manufacturer's recommended practice and procedures;

vi. qualification and certification of personnel to use the OGI instrument; and

vii. prior to initiating the monitoring survey, the equipment operator must complete initial certification training and demonstrate proficiency with the OGI instrument and any associated equipment to be utilized for detecting a potential leak. Training should include instruction on the OGI instrument and associated equipment, monitoring techniques, and other aspects of leak detection and repair programs that are relevant to the facility's optical gas imaging monitoring efforts.

b. The initial monitoring event of each OEL or leaking bull plug shall be conducted within 270 Days after the Effective Date.

c. The second monitoring event of each OEL or leaking bull plug shall take place after the next Joliet Refinery turnaround but no later than June 30, 2025.

d. For any leaks identified with the OGI instrument, ExxonMobil must make a first attempt at repair within five Days after identifying the leak and a final attempt at repair within 15 Days after identifying the leak.

e. All repair verification monitoring events shall use either the OGI instrument or an instrument complying with EPA Method 21 to confirm that the leak has been eliminated. When using an instrument complying with Method 21, an instrument reading below 500 ppm would confirm that the leak is repaired.

F. Incorporation of Requirements Into Federally Enforceable Permits

32. Permits Needed to Meet Compliance Obligations. If any compliance obligation under this Section V (Affirmative Relief) requires ExxonMobil to obtain a federal, state, or local permit or approval, ExxonMobil shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. ExxonMobil may seek relief under the provisions of Section X (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if ExxonMobil has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

33. Permits to Ensure Survival of Limits and Standards After Termination of Fourth Decree Amendment.

a. Prior to termination of this Fourth Decree Amendment, ExxonMobil shall submit to the Illinois permitting authority complete applications, amendments and/or supplements to incorporate as "applicable requirements" the limits and standards listed in Subparagraph 33.b. into non-Title V, federally enforceable permits that will survive termination of this Fourth Decree Amendment.

b. The limits and standards imposed by the following Subparagraphs of this Fourth Decree Amendment and its Appendices shall survive termination:

i. FCCU NO_X Emission Control and Limits. All of the requirements and final NO_X limits set forth in Paragraph 10 (NO_X Emissions Control for the Joliet FCCU).

ii. FCCU SO_2 Emission Control and Limits. All of the requirements and final SO_2 limits set forth in Paragraph 14 (SO_2 Emissions Control for the Joliet FCCU).

iii. Joliet Sulfur Recovery Plant and Sulfur Pit Emissions, Operation, and Maintenance. All of the requirements and limits set forth in Paragraphs 17-20, and a requirement to have and comply with a Sulfur Pit O&M Plan with the minimum elements specified in Subparagraph 21.a.

iv. All of Section VI (Emission Credit Generation); provided however, that ExxonMobil is not required to incorporate into a federally enforceable permit the prohibitions/other language of Section VI on the use of any Amended CD Emissions Reductions or Original CD Emissions Reductions (as defined in Section VI) if ExxonMobil, upon seeking termination of this Fourth Decree Amendment, demonstrates that those Amended CD Emissions Reductions and/or Original CD Emissions Reductions no longer are capable of being used in a manner prohibited by Section VI.

34. Modifications to Title V Operating Permits. Prior to termination of this Fourth Decree Amendment, ExxonMobil shall submit complete applications to the Illinois permitting authority to modify, amend, or revise the Title V permit for the Joliet Refinery to incorporate the Joliet Refinery limits and standards identified in Paragraph 33 into the Joliet Refinery Title V permit. The Parties agree that the incorporation of these emission limits and standards into Title V Permits shall be done in accordance with applicable state or local Title V rules. The

Parties agree that the incorporation may be by "amendment" under 40 C.F.R. § 70.7(d) and analogous state Title V rules, where allowed by state law.

35. Agreement Required for Changes to Surviving Requirements. Paragraph 145 of the Original Consent Decree and Paragraph 33 of this Fourth Decree Amendment identify certain requirements concerning the Joliet Refinery that shall survive consent decree termination. In the event ExxonMobil should ever seek to delete or modify any emission limit or standard surviving termination by virtue of Subparagraph 145.a of the Original Consent Decree or Subparagraph 33.b of this Fourth Decree Amendment, any such emission limit or standard concerning the Joliet Refinery shall not be deleted or modified unless EPA and Illinois EPA have first agreed in writing to the deletion or modification. In addition, in the event ExxonMobil should ever seek to delete or modify any of the certain other requirements surviving termination pursuant to Subparagraph 145.b of the Original Consent Decree, any such requirement concerning the Joliet Refinery shall not be deleted or modified unless EPA and Illinois EPA have first agreed in writing to the deletion or modification.

VI. EMISSION CREDIT GENERATION

36. Definitions.

a. "Amended CD Emissions Reductions" shall mean any emissions reductions that result from any projects, controls, or any other actions used to comply with this Fourth Decree Amendment.

b. "Original CD Emissions Reductions" shall mean any emissions reductions that result from any projects, controls, or any other actions at the Joliet Refinery used to comply with the Original Consent Decree.

37. Prohibitions. ExxonMobil shall neither generate nor use any Amended CD Emissions Reductions nor any Original CD Emissions Reductions: (i) as netting reductions;

(ii) as emissions offsets; or (iii) to apply for, obtain, trade, or sell any emission reduction credits. Baseline actual emissions ("BAE") for each unit during any 24-month period selected by ExxonMobil shall be adjusted downward to exclude any portion of the baseline emissions that would have been eliminated as Amended CD Emissions Reductions or Original CD Emissions Reductions had ExxonMobil been complying with this Fourth Decree Amendment and the Original Consent Decree during that 24-month period. (For example, BAE for the Joliet FCCU would be adjusted based upon the limit in Subparagraph 10.c of 15 ppmvd NO_X at 0% O_2 on a 365-day rolling average basis.) Any plant-wide applicability limits ("PALs") or PAL-like limits that apply to emissions units addressed by this Fourth Decree Amendment and the Original Consent Decree must be adjusted downward to exclude any portion of the baseline emissions used in establishing such limit(s) that would have been eliminated as Amended CD Emissions Reductions or Original CD Emissions Reductions had ExxonMobil been complying with this Fourth Decree Amendment during such baseline period.

38. Outside the Scope of the Prohibitions. Nothing in this Section is intended to prohibit ExxonMobil from seeking to, nor Illinois from denying ExxonMobil's request to:

a. Use or generate emission reductions from emissions units that are covered by this Fourth Decree Amendment to the extent that the proposed emissions reductions represent the difference between Amended CD Emissions Reductions and more stringent control requirements that ExxonMobil may elect to accept for those emissions units in a permitting process;

b. Use or generate emissions reductions from emissions units that are not subject to an emission limitation or control requirement pursuant to this Fourth Decree Amendment and were not subject to an emission limitation or control requirement pursuant to the Original Consent Decree; or

c. Use Amended CD Emissions Reductions or Original CD Emissions Reductions for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding Prevention of Significant Deterioration and non-attainment New Source Review rules, but including, for example, Reasonably Achievable Control Technology (RACT) rules that apply to the Joliet Refinery); provided, however, that ExxonMobil shall not be allowed to trade or sell any Amended CD Emissions Reductions or Original CD Emissions Reductions.

VII. REPORTING AND RECORDKEEPING

39. Semi-Annual Compliance Status Reports. On the dates and for the time periods set forth in Paragraph 41, ExxonMobil shall submit to EPA in the manner set forth in Section XV (Notices) the following information:

a. A progress report on the implementation of the requirements of Fourth Decree Amendment Section V (Affirmative Relief);

b. For each CEMS at the Joliet Refinery:

i. The calculated downtime and total downtime (including both the calculated downtime and the excluded downtime) for the CEMS – as those terms are defined at Subparagraph 29.a. – expressed as a percentage of operating time for the semiannual period;

ii. Where the calculated downtime for the CEMS (as defined at Subparagraph 29.a.) is greater than 5% of the total operating time in a semiannual period for a unit, identify the periods of calculated downtime and excluded downtime by time and date, and any identified cause of the downtime (including maintenance or Malfunction), and, if it was a Malfunction, an explanation and any corrective action taken;

iii. Each CEMS Downtime Root Cause Analysis and Corrective Action Report required to be generated during the reporting period pursuant to Subparagraph 29.b; and

iv. Each CEMS Downtime Third Party Report generated during the reporting period pursuant to Subparagraph 29.d, as well as documentation of ExxonMobil's basis for not implementing any

element of the third party's recommended corrective action, if applicable;

c. For the FCCU and SRP CEMS at the Joliet Refinery: The total period during which emission limits in the following Paragraphs were exceeded:

i. FCCU NO_X limits in Subparagraph 10.b or 10.c;

ii. FCCU SO_2 emission limits in Subparagraph 14.b; and/or

iii. SRP SO_2 limits in Paragraph 18 or 19.

Any such report shall include a copy of the CEMS data associated with such exceedance.

d. A list of any CEMS that should be removed from the list of Existing CEMS because an underlying legal requirement (*e.g.*, this Fourth Decree Amendment, a federal or state statute or regulation, or a permit) no longer requires the operation of the CEMS, since the submittal of the previous Semi-Annual Compliance Status Report, including a description of the legal requirement that formerly required the CEMS' operation and the date that the legal requirement no longer was applicable or the date that a physical or operational change (such as process equipment removal or shutdown) rendered CEMS operation moot;

e. A summary of the results of any OGI instrument LDAR monitoring as required by Paragraph 31 of this Fourth Decree Amendment, including information regarding the number of OELs or leaking bull plugs monitored, and information concerning any leaks discovered;

f. A description of each time ExxonMobil did not comply with the SRP O&M Plan submitted pursuant to this Fourth Decree Amendment;

g. For the Joliet SRP Pit air flow, identification of all times during the reporting period that the sulfur pit flow was below the minimum set point and a description of the corrective action(s) taken to address the incident;

h. A description of any problems anticipated with respect to meeting the requirements of Section V;

i. Any additional matters required by any other Paragraph of this Fourth Decree Amendment to be submitted in the Semi-Annual Compliance Status Report; and

j. Any additional matters that ExxonMobil believes should be brought to the attention of EPA.

40. Emissions Data. In the Semi-Annual Compliance Status Report required to be submitted on February 28 of each year, ExxonMobil will provide a summary of annual emissions data for the prior calendar year for the Joliet FCCU (NO_x & SO_2) and the Joliet SRP (SO_2).

41. Due Dates. The first Semi-Annual Compliance Status Report shall be due two calendar months after the first full half-year after the Effective Date of this Fourth Decree Amendment (*i.e.,* either: (i) February 28 of the year after the Effective Date, if the Effective Date is between January 1 and June 30 of the preceding year; or (ii) August 31 of the year after the Effective Date, if the Effective Date is between July 1 and December 31). The initial report shall cover the period between the Effective Date and the first full half-year after the Effective Date (a "half-year" runs between January 1 and June 30 and between July 1 and December 31). Until termination of this Fourth Decree Amendment, each subsequent report will be due on February 28 and August 31 and shall cover the prior half-year (*i.e.*, January 1 to June 30 or July 1 to December 31).

42. Each report submitted under this Fourth Decree Amendment shall be signed by the plant manager (or his/her designee) or the person responsible for environmental management and compliance and shall include the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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

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

44. Any information provided pursuant to this Fourth Decree Amendment may be used by the United States in any proceeding to enforce the provisions of this Fourth Decree Amendment and as otherwise permitted by law.

VIII. CIVIL PENALTY

45. By no later than 30 Days after the Effective Date of this Fourth Decree Amendment, ExxonMobil shall pay the sum of $1,515,463 for civil penalties and stipulated penalties to the United States and Illinois, together with interest accruing from the Date of Lodging at the rate specified in 28 U.S.C. Section 1961 as of the Date of Lodging. Of this total amount, $1,086,640 (plus the corresponding interest) shall be paid to the United States in accordance with Paragraph 46 and $428,823 (plus the corresponding interest) shall be paid to Illinois in accordance with Paragraph 47.

46. ExxonMobil shall pay the penalty owed to the United States by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to ExxonMobil following entry of the Fourth Decree Amendment, by the Financial Litigation Unit of the U.S. Attorney's Office for the Northern District of Illinois. At the time of payment, ExxonMobil shall send a copy of the EFT authorization form, the EFT transaction record, and a transmittal letter: (i) to the United States in accordance with Section XV (Notices); (ii) by email to acctsreceivable.CINWD@epa.gov; and (iii) by mail to:

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

The transmittal letter shall state that the payment is for the civil penalty owed pursuant to the Fourth Decree Amendment in *United States, et al. v. Exxon Mobil Corporation, et al.*, and shall reference the civil action number and DOJ case number 90-5-2-1-07030/6.

47. ExxonMobil shall pay the penalty owed to Illinois by certified or corporate check, payable to the "Illinois Environmental Protection Agency" for deposit into the Environmental Protection Trust Fund, and shall be sent, along with one (1) copy thereof, by first class mail and delivered to:

Chief, Environmental Bureau
Illinois Attorney General's Office
69 West Washington Street, Suite 1800
Chicago, Illinois 60602

The name and number of the case shall appear on the check.

48. If any portion of the civil penalty due to the United States or Illinois is not paid when due, ExxonMobil shall pay interest on the amount past due, accruing from the Effective Date through the date of payment, at the rate specified in 28 U.S.C. § 1961. Interest payment under this Paragraph shall be in addition to any stipulated penalty due.

49. ExxonMobil shall not deduct any penalties paid under this Decree pursuant to this Section or Section IX (Stipulated Penalties) in calculating its federal income tax.

IX. STIPULATED PENALTIES

50. Failure to Pay Civil Penalty. If ExxonMobil fails to pay any portion of the civil penalty required to be paid under Section VIII (Civil Penalty) when due, ExxonMobil shall pay a stipulated penalty of $4,000 per day for each day that the payment is late.

51. Failure to Meet Other Fourth Decree Amendment Obligations.

a. ExxonMobil shall be liable for stipulated penalties for violations of this Fourth Decree Amendment as specified in Paragraph 52 unless excused under Section X (Force Majeure).

b. A violation of an emission limit that is based on a 7-day rolling average or a 365-day rolling average is a violation on every Day on which the average is based. Each subsequent Day of violation after a violation of a rolling average emission limit is subject to the corresponding penalty per Day specified in Paragraph 52, below. Where a violation of a rolling average emission limit (for the same pollutant and from the same emission unit) recurs within periods less than the averaging period, Defendant shall not be obligated to pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty is already payable. Stipulated penalties may only be assessed once for a given Day or month within any averaging period for violation of any particular emission limit. Stipulated penalties for consecutive periods of violation of an emission limit shall be calculated based upon the violation of the emission limit for the same pollutant from the same emission unit.

c. 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 of which alternative to seek shall rest exclusively within the discretion of the United States. For the purposes of this Section IX, the term "economic benefit of non-compliance" means the economic benefit accrued from delaying a capital investment, delaying a one-time expenditure, and avoiding recurring costs (such as operation and maintenance costs) over the period of non-compliance. The overall "economic benefit of non-compliance" will be calculated based on the total number of Days of non-compliance, and will be multiplied by 1.2 to compute the total stipulated penalty amount under a particular provision of this Section IX. That total stipulated penalty amount will be

assessed for the full period of non-compliance, and will not be assessed "per day." In no event shall any stipulated penalty assessed against ExxonMobil exceed $101,439 (or any inflation-adjusted increase in that Clean Air Act maximum penalty amount set pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996) per day for any individual violation of this Fourth Decree Amendment.

52. Failure to Meet Specified Obligations.

Violation	Stipulated Penalty
52.a. Violation of FCCU NO_X Emission Limits Under Subsection V.A. For failure to meet any FCCU interim NO_X limit or final NO_X limit set forth in or established pursuant to Subparagraphs 10.b or 10.c	$1,500 for each calendar Day in a calendar quarter in which the specified 7-day rolling average exceeds the applicable limit; and $2,500 for each calendar Day in a calendar quarter on which the specified 365-day rolling average exceeds the applicable limit.
52.b. Violation of FCCU SO_2 Emission Limits Under Subsection V.B. For failure to meet any FCCU final SO_2 limit set forth in or established pursuant to Subparagraph 14.b	$1,500 for each calendar Day in a calendar quarter in which the specified 7-day rolling average exceeds the applicable limit; and $2,500 for each calendar Day in a calendar quarter on which the specified 365-day rolling average exceeds the applicable limit.
52.c. Failure to use CEMS. For failure to certify, calibrate, maintain, or operate a CEMS in accordance with the requirements of Paragraphs 12, 16, or 25	Period of Delay or Noncompliance — Penalty per Day per CEMS Days 1–30 — $ 500 Days 31–60 — $1,000 Days 61 and later — $2,000 or an amount equal to 1.2 times the economic benefit of noncompliance
52.d. Violation of Joliet SRP NSPS Compliance Obligations and Emission Limits Under Subsection V.C. For failure to comply with any requirement of Paragraph 18 or Paragraph 19	Period of Delay or Noncompliance — Penalty per Day Days 1–30 — $1,500 Days 31–60 — $2,500 Days 61 and later — $3,000 or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.

52.e. Violation of Joliet SRP Sulfur Pit Emissions Control Requirements Under Subparagraphs 20.a, 20.b.(i), and 20.c. For failure to comply with any requirement of Subparagraphs 20.a, 20.b.(i), and 20.c	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $1,000 $2,000 $3,000 or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater.
52.f. Violation of Joliet SRP Sulfur Pit O&M Plan Requirements Under Subparagraph 20.b.(ii) and Paragraph 21. For failure to develop and implement the Sulfur Pit O&M plan in accordance with the requirements of Subparagraph 20.b.(ii) and Paragraph 21	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $ 500 $1,500 $2,000
52.g. Violation of Joliet CEMS O&M Plan Requirements Under Paragraph 22 or Paragraph 24. For failure to develop or submit a CEMS O&M Plan in accordance with the requirements of Paragraph 22 or for failure to include the CEMS Testing and Calibration requirements in the CEMS O&M Plan as required by Paragraph 24.	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $ 200 $1,000 $2,000
52.h. Violation of Joliet CEMS Training Requirements Under Paragraph 23. For failure to develop or implement the CEMS training requirements in accordance with Paragraph 23.	For failing to develop: $5,000 per month or partial month For failing to implement: $1,000 per person per month or partial month late	
52.i. Violation of Joliet CEMS Improvement Program Requirements Under Paragraph 27. For failure to develop or implement a preventive maintenance program, a QA/QC program or a repair program in accordance with the requirements of Paragraph 27.	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $ 500 $1,000 $2,000
52.j. Violation of Joliet CEMS Improvement Program Requirements Under Subparagraph 29.b. For failure to prepare a CEMS Root Cause Analysis and Corrective Action Report in accordance with the requirements of Subparagraph 29.b	$5,000 per month or partial month, per Report.	

52.k. Violation of Joliet CEMS Improvement Program Requirements Under Subparagraph 29.c. For failure to undertake and complete CEMS corrective action(s) in accordance with the requirements of Subparagraph 29.c	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $1,250 $3,000 $3,000 or an amount equal to 1.2 times the economic benefit of non-compliance, whichever is greater
52.l. Violation of Joliet CEMS Improvement Program Requirements Under Subparagraph 29.d. For failure to retain a third party, have the third party prepare a report, or implement any recommendations made by the third party in accordance with the requirements of Subparagraph 29.d (unless ExxonMobil documents its basis for not implementing any elements of the third party's recommended corrective action(s), as provided in Subparagraph 29.d)	$10,000 per month or partial month	
52.m. Violations of LDAR Requirements under Paragraph 31. For failure to perform LDAR monitoring as required by Paragraph 31	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $ 500 $1,500 $3,000
52.n. Violation of Permit Application Requirements under Paragraph 33 or Paragraph 34. For failure to submit a permit application, amendment and/or supplement in accordance with the requirements of Paragraph 33 or Paragraph 34	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day $ 500 $1,500 $3,000
52.o. Violation of Section VII. For failure to submit reports as required by Section VII, per report, per day:	Period of Delay or Noncompliance Days 1–30 Days 31–60 Days 61 and later	Penalty per Day per Report $ 300 $1,000 $5,000 per month

53. Waiver of Payment. The United States and/or Illinois may, in their unreviewable discretion, reduce or waive payment of stipulated penalties otherwise due to it under this Fourth Decree Amendment.

54. Stipulated Penalties Payment Due Date. Stipulated penalties shall be paid no later than 60 Days after receipt of a written demand by the United States unless the demand is disputed through compliance with the requirements of the dispute resolution provisions of this Fourth Decree Amendment. Prior to sending a written demand for penalties relating to the Joliet Refinery, the United States will provide Illinois with a reasonable opportunity for review and comment.

55. Contents of Demand for Stipulated Penalties. A written demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount that is being demanded for each violation (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based. Prior to issuing a written demand for stipulated penalties, the United States, after notifying Illinois and providing an opportunity for consultation, may, in its unreviewable discretion, contact ExxonMobil for informal discussion of matters that the United States believes may merit stipulated penalties.

56. Stipulated Penalties Accrual. 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 Fourth Decree Amendment.

57. Pre-Entry Obligations. Obligations of ExxonMobil under this Fourth Decree Amendment to perform actions scheduled to occur before the Effective Date will be legally enforceable only on and after the Effective Date. Liability for stipulated penalties, if applicable, will accrue for violations of such obligations and payment of such stipulated penalties may be demanded, as provided in Paragraph 55, by the United States, after notifying Illinois and

providing an opportunity for consultation; provided however, that any stipulated penalties that may have accrued before the Effective Date may not be collected unless and until this Fourth Decree Amendment is entered by the Court.

58. Apportionment of Stipulated Penalties. For all stipulated penalties accruing for noncompliance with this Fourth Decree Amendment, 70% of stipulated penalties shall be paid to the United States in the manner set forth in Paragraph 59 and 30% of stipulated penalties shall be paid to Illinois in the manner set forth in Paragraph 60.

59. Manner of Payment of Stipulated Penalties to the United States. ExxonMobil shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 46, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

60. Manner of Payment of Stipulated Penalties to Illinois. Payment to Illinois shall be made by certified or corporate check made payable to the "Illinois Environmental Protection Agency" for deposit into the Environmental Protection Trust Fund ("EPTF") and shall be sent by first class mail and delivered to:

Illinois Environmental Protection Agency
Fiscal Services
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

The name and number of the case shall appear on the check. A copy of the certified or corporate check and the transmittal letter shall be sent to:

Chief, Environmental Bureau
Illinois Attorney General's Office
69 West Washington Street, Suite 1800
Chicago, Illinois 60602

61. Stipulated Penalties Dispute. Stipulated penalties shall continue to accrue as provided in Paragraph 56, during any dispute resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, ExxonMobil shall pay accrued penalties determined to be owing, together with interest, to the United States and Illinois within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, ExxonMobil shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph 61.c, below.

c. If the District Court's decision is appealed, ExxonMobil shall pay all accrued penalties determined to be owing, together with interest, within 15 business Days of receiving the final appellate court decision.

62. If ExxonMobil fails to pay stipulated penalties according to the terms of this Fourth Decree Amendment, ExxonMobil shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or Illinois from seeking any remedy otherwise provided by law for ExxonMobil's failure to pay any stipulated penalties.

63. Subject to the provisions of Section XIII (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Fourth Decree Amendment shall be in addition to any other rights, remedies, or sanctions available to the United States and Illinois for ExxonMobil's violation of this Fourth Decree Amendment or applicable law. ExxonMobil shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

X. FORCE MAJEURE

64. "Force majeure," for purposes of this Fourth Decree Amendment, is defined as any event arising from causes beyond the control of ExxonMobil, of any entity controlled by ExxonMobil, or of ExxonMobil's contractors, that delays or prevents the performance of any obligation under this Fourth Decree Amendment despite ExxonMobil's best efforts to fulfill the obligation. The requirement that ExxonMobil 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 ExxonMobil's financial inability to perform any obligation under this Fourth Decree Amendment.

65. If any event occurs or has occurred that may delay the performance of any obligation under this Fourth Decree Amendment for which ExxonMobil intends or may intend to assert a claim of force majeure, ExxonMobil shall notify EPA, with a copy to Illinois, in writing not later than 20 business Days after the time that ExxonMobil first knew that the event might cause a delay. In the written notice, ExxonMobil shall specifically reference this Paragraph 65 and shall provide 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; ExxonMobil'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 ExxonMobil, such event may cause or contribute to an endangerment to public health, welfare or the environment. ExxonMobil shall be deemed to know of any circumstance of which ExxonMobil, any entity controlled by ExxonMobil, or ExxonMobil's contractors knew or should have known.

ExxonMobil shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. The written notice required by this Paragraph shall be effective upon the mailing of the same by overnight mail or by certified mail, return receipt requested, to EPA in the manner set forth in Section XV (Notices).

66. Failure by ExxonMobil to substantially comply with the notice requirements of Paragraph 65 will render this Section X (Force Majeure) voidable by the United States as to the specific event for which ExxonMobil has failed to comply with such notice requirement, and if voided, is of no effect as to the particular event involved.

67. If EPA, after notifying Illinois and providing an opportunity for consultation, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Fourth Decree Amendment 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. EPA will notify ExxonMobil in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

68. If EPA, after notifying Illinois and providing an opportunity for consultation, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, or if the EPA and ExxonMobil fail to agree on the length of the delay attributable to the force majeure event, EPA will notify ExxonMobil in writing of its decision.

69. If ExxonMobil elects to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), it shall do so no later than 45 Days after receipt of EPA's notice. In any such proceeding, ExxonMobil 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 ExxonMobil complied with the requirements of Paragraphs 64 and 65. If ExxonMobil carries this burden, the delay at issue shall be deemed not to be a violation by ExxonMobil of the affected obligation of this Fourth Decree Amendment identified to EPA and the Court.

XI. DISPUTE RESOLUTION

70. Unless otherwise expressly provided for in this Fourth Decree Amendment, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Fourth Decree Amendment.

71. Informal Dispute Resolution. Any dispute subject to dispute resolution under this Fourth Decree Amendment shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when one Party sends the other Party a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The United States always shall be a necessary Party to a dispute. The period of informal negotiations shall not exceed 60 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States, after notifying Illinois and providing an opportunity for consultation, shall be considered binding unless, within 30 Days after the United States has notified ExxonMobil of the conclusion of the informal negotiation period, ExxonMobil invokes formal dispute resolution procedures set forth below.

72. Formal Dispute Resolution. ExxonMobil shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States, with a copy to Illinois, a written Statement of Position regarding the matter in dispute.

The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting ExxonMobil's position and any supporting documentation relied upon by ExxonMobil.

73. The United States, after a reasonable opportunity for review and comment by Illinois, shall serve its Statement of Position within 45 Days of receipt of ExxonMobil's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on ExxonMobil unless ExxonMobil files a motion for judicial resolution of the dispute in accordance with the following Paragraph.

74. ExxonMobil may seek judicial review of the dispute by filing with the Court and serving on the United States, with a copy to Illinois, a motion requesting judicial resolution of the dispute. The motion must be filed within 45 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of ExxonMobil's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Fourth Decree Amendment.

75. The United States, after a reasonable opportunity for review and comment by Illinois, shall respond to ExxonMobil's motion within the time period allowed by the Local Rules of this Court. ExxonMobil may file a reply memorandum, to the extent permitted by the Local Rules.

76. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their filings with the Court, the Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

77. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of ExxonMobil under this Fourth Decree Amendment unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 61. If ExxonMobil does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties). As part of the resolution of any dispute under this Section, the Parties, by agreement, or the Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Fourth Decree Amendment to account for the delay in work that occurred as a result of the dispute resolution process. ExxonMobil shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extension or modified schedule.

XII. INFORMATION COLLECTION AND RETENTION

78. The United States and Illinois and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into the Joliet Refinery, at all reasonable times, upon presentation of credentials, for the purposes set forth in Subparagraphs 78.a-78.d.

a. To monitor the progress of activities required under this Fourth Decree Amendment;

b. To verify any data or information submitted to the United States and Illinois in accordance with the terms of this Fourth Decree Amendment;

c. To obtain documentary evidence, including photographs and similar data pertaining to ExxonMobil's compliance with this Fourth Decree Amendment; and

d. To assess ExxonMobil's compliance with this Fourth Decree Amendment.

79. Until one year after the termination of this Fourth Decree Amendment, ExxonMobil shall retain all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its possession or control that directly relate to ExxonMobil's performance of its obligations under this Fourth Decree Amendment. Until one year after termination of this Fourth Decree Amendment, ExxonMobil shall instruct its contractors and agents to preserve all documents, records, or other information, regardless of storage medium (*e.g.*, paper or electronic) in its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, that demonstrate or document ExxonMobil's compliance or non-compliance with the obligations of this Fourth Decree Amendment. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or Illinois, ExxonMobil shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

80. ExxonMobil may assert that certain records are privileged under the attorney-client privilege or any other privilege recognized by federal law. If ExxonMobil asserts such a privilege, it shall comply with Federal Rule of Civil Procedure 26(b)(5) regarding claims of privilege. However, no records created or generated pursuant to the requirements of the Original Consent Decree or this Fourth Decree Amendment shall be withheld on grounds of privilege.

81. Except for emissions data, ExxonMobil may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2 and/or under 5 ILCS 140/7(1)(g), 415 ILCS 5/7, and 35 Ill. Admin. Code Part 130. As to any information that ExxonMobil seeks to protect as CBI, ExxonMobil shall

follow the procedures set forth in 40 C.F.R. Part 2 and, if applicable, 2 Ill. Adm. Code 1828.401, 5 ILCS 140/7(1)(g), 415 ILCS 5/7, and 35 Ill. Admin. Code Part 130.

82. This Fourth Decree Amendment in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or Illinois pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of ExxonMobil to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

83. Replacement of Original Consent Decree. The Court's entry of this Fourth Decree Amendment shall replace, supersede, and terminate the Original Consent Decree as it pertains to the Joliet Refinery, so that the only requirements applicable to the Joliet Refinery are as expressly stated in this Fourth Decree Amendment. For the avoidance of doubt, the Court's entry of this Fourth Decree Amendment shall not replace, supersede, or terminate any requirements of the Original Consent Decree concerning any of the Defendants' Six Refineries other than the Joliet Refinery.

84. Resolution of Liability for Joliet Refinery Stipulated Penalty Claims Arising Under the Original Consent Decree. For the avoidance of doubt, all claims of the United States and Illinois for stipulated penalties for violations of the Original Consent Decree at the Joliet Refinery prior to the Date of Lodging shall be resolved by ExxonMobil's payment of the penalties owed under Section VIII (Civil Penalty).

85. Resolution of Liability for Certain Other Civil Claims Relating to the Joliet Refinery. Entry of this Fourth Decree Amendment and ExxonMobil's payment of the penalties owed under Section VIII (Civil Penalty) shall resolve the civil claims of the United States and

Illinois under the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, and the Illinois Environmental Protection Act, 415 ILCS 5/1 et seq.,

a. for the violations alleged in the EPA Notice of Violation (attached as Appendix A to this Fourth Decree Amendment) through the Date of Lodging;

b. for alleged failure to continuously operate the following CEMS on various occasions between 2007 and 2013: (i) CEMS ID A14713 monitoring CO emissions from the Joliet FCCU; (ii) CEMS ID A14202 monitoring the opacity of emissions from the Joliet FCCU; and (iii) CEMS ID A59011 and CEMS ID A0241 measuring the H_2S content of fuel gases burned in multiple heaters and boilers at the Joliet Refinery;

c. for alleged failure to install, certify, calibrate, maintain, and operate NO_x and O_2 CEMS required for compliance with Paragraph 54 of the Original Consent Decree through the Date of Lodging;

d. for alleged failure to eliminate, control or monitor all sulfur pit emissions from the Joliet SRP through the Date of Lodging;

e. for alleged failure to monitor or repair insulated LDAR components or LDAR components in fireboxes through the Date of Lodging; and

f. for alleged failure to comply with the Emission Credit Generation General Prohibition in Paragraph 148 of the Original Consent Decree in obtaining IEPA Permit No. 09040008 (originally issued on September 9, 2009, and revised on April 6, 2010, and March 27, 2014).

86. The resolutions of liability in Paragraphs 84 and 85 are based exclusively on claims arising at ExxonMobil's Joliet Refinery.

87. The United States and Illinois reserve all legal and equitable remedies available to enforce the provisions of this Fourth Decree Amendment. This Fourth Decree Amendment shall

not be construed to limit the rights of the United States or Illinois to obtain penalties or injunctive relief under the Clean Air Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraphs 84 and 85. The United States and Illinois further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Joliet Refinery, whether related to the violations addressed in this Fourth Decree Amendment or otherwise.

88. In any subsequent administrative or judicial proceeding initiated by the United States or Illinois for injunctive relief, civil penalties, or other appropriate relief relating to the Joliet Refinery or ExxonMobil's alleged Clean Air Act violations, ExxonMobil shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States and Illinois in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraphs 84 and 85 of this Section.

89. This Fourth Decree Amendment is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. ExxonMobil is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and ExxonMobil's compliance with this Fourth Decree Amendment shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and Illinois do not, by their consent to the entry of this Fourth Decree Amendment, warrant or aver in any manner that ExxonMobil's compliance with any aspect of this Fourth Decree Amendment will result in compliance with provisions of

the Act, 42 U.S.C. § 7401 *et seq.*, or with any other provisions of federal, state, or local laws, regulations, or permits.

90. This Fourth Decree Amendment does not limit or affect the rights of ExxonMobil or of the United States or of Illinois against any third parties, not party to this Fourth Decree Amendment.

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

XIV. COSTS

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

XV. NOTICES

93. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Fourth Decree Amendment, they shall be made in writing and addressed as follows:

As to the United States:

Required only where the "United States" (and not "EPA") is a recipient:

As to the United States by email: eescdcopy.enrd@usdoj.gov
Re: DJ # 90-5-2-1-07030/6

As to the United States by mail: EES Case Management Unit
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-5-2-1-07030/6

Required where either the "United States" or "EPA" is a recipient.

As to EPA by email: r5airenforcement@epa.gov
wagner.william@epa.gov

As to Illinois:

Chief, Environmental Bureau
Illinois Attorney General's Office
69 West Washington Street, Suite 1800
Chicago, Illinois 60602

Maureen Wozniak, Counsel
Illinois EPA
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794-9276

Manager
Compliance & Enforcement Section
Illinois EPA
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794-9276

As to ExxonMobil:

Refinery Manager
ExxonMobil Joliet Refinery
25915 S. Frontage Road
Channahon, IL 60410

Refinery Attorney
ExxonMobil Joliet Refinery
25915 S. Frontage Road
Channahon, IL 60410

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

95. Notices submitted pursuant to this Section shall be deemed submitted upon mailing (or e-mailing), unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVI. EFFECTIVE DATE

96. The Effective Date of this Fourth Decree Amendment shall be the date upon which this Fourth Decree Amendment is entered by the Court or a motion to enter the Fourth Decree Amendment is granted, whichever occurs first, as recorded on the Court's docket; provided however, that ExxonMobil hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Fourth Decree Amendment before entry, or the Court declines to enter the Fourth Decree Amendment, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XVII. RETENTION OF JURISDICTION

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

XVIII. MODIFICATION

98. The terms of this Fourth Decree Amendment may be modified only by a subsequent written agreement signed by the United States, Illinois, and ExxonMobil. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

99. The nature and frequency of reports required by this Fourth Decree Amendment may be modified by mutual agreement of the United States and ExxonMobil. The agreement of

the United States to such modification must be in the form of a written notification from EPA, but need not be filed with the Court to be effective.

100. Any disputes concerning modification of this Fourth Decree Amendment shall be resolved pursuant to Section XI (Dispute Resolution); provided, however, that the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XIX. TERMINATION

101. Termination.

a. Conditions Precedent. Prior to termination of the obligations of this Fourth Decree Amendment, ExxonMobil must have completed all of the following requirements of this Fourth Decree Amendment:

i. Payment of all civil penalties, stipulated penalties and other monetary obligations relating to the Joliet Refinery;

ii. Satisfactory compliance with all provisions of Section V (Affirmative Relief);

iii. Application for and receipt of all non-Title V air permits or amendments thereto necessary to ensure survival of the Fourth Decree Amendment limits and standards for the Joliet Refinery after termination of this Fourth Decree Amendment, as required by Paragraph 33; and

iv. Application for a modification or amendment to the Title V permit to incorporate the limits and standards in Paragraph 33 into the Title V permit for the Joliet Refinery, as required by Paragraph 34.

b. Procedures.

i. When ExxonMobil believes that it has satisfied the conditions for termination set forth in Subparagraph 101.a, ExxonMobil may submit a request for termination to the United States and Illinois by certifying such compliance in accordance with the certification language in Paragraph 42. In the Request for Termination, ExxonMobil must demonstrate that it has satisfied the conditions for termination set forth in Subparagraph 101.a. The Request for Termination shall include all necessary supporting documentation.

ii. Following receipt by the United States and Illinois of ExxonMobil's Request for Termination, the Parties shall confer informally concerning the Request. If the United States and Illinois agree that the Fourth Decree Amendment may be terminated, the United States shall submit an unopposed motion for termination of this Fourth Decree Amendment.

iii. If the United States and Illinois do not agree that the Fourth Decree Amendment may be terminated, or if ExxonMobil does not receive a written response from the United States within 60 Days of ExxonMobil's submission of the Request for Termination, ExxonMobil may invoke dispute resolution under Section XI (Dispute Resolution).

XX. 26 U.S.C. § 162(f)(2)(A)(ii) IDENTIFICATION

102. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of Section V (Affirmative Relief) at Paragraphs 9–34; Section VII (Reporting and Recordkeeping) at Paragraphs 39–42; and Section XII (Information Collection and Retention) at Paragraphs 78–79 is restitution or required to come into compliance with law.

XXI. PUBLIC PARTICIPATION

103. This Fourth Decree Amendment shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Fourth Decree Amendment disclose facts or considerations indicating that the Fourth Decree

Amendment is inappropriate, improper, or inadequate. ExxonMobil consents to entry of this Fourth Decree Amendment without further notice and agrees not to withdraw from or oppose entry of this Fourth Decree Amendment by the Court or to challenge any provision of this Fourth Decree Amendment, unless the United States has notified ExxonMobil in writing that it no longer supports entry of this Fourth Decree Amendment.

XXII. SIGNATORIES/SERVICE

104. Each undersigned representative of ExxonMobil, the Illinois Attorney General's Office, and 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 Fourth Decree Amendment and to execute and legally bind the Party he or she represents to this document.

105. This Fourth Decree Amendment may be signed in counterparts, and its validity shall not be challenged on that basis. ExxonMobil agrees to accept service of process by mail with respect to all matters arising under or relating to this Fourth Decree Amendment and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXIII. INTEGRATION/APPENDIX

106. This Fourth Decree Amendment and its Appendix constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and its Appendix. This Fourth Decree Amendment shall supersede all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein, except that this Fourth Decree Amendment recognizes that certain provisions of the Original Consent Decree shall survive termination. No other document, nor any

representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

107. The following Appendix is attached to and made part of this Fourth Decree Amendment:

> "Appendix A" is the September 27, 2013 Notice of Violation and Finding of Violation issued to ExxonMobil by EPA.

XXIV. FINAL JUDGMENT

108. Upon approval and entry of this Fourth Decree Amendment by the Court, this Fourth Decree Amendment shall constitute a final judgment of the Court as to the United States, Illinois, and ExxonMobil. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

Dated and entered this _____ day of _____, 2021.

_____
UNITED STATES DISTRICT JUDGE.

Signature Page for Fourth Consent Decree Amendment in *United States v. Exxon Mobil Corp.*, Case No. 05 C 5809 (N.D. Ill.)

FOR THE UNITED STATES OF AMERICA

JEAN E. WILLIAMS
Acting Assistant Attorney General
Environment and Natural Resources Division

RANDALL STONE

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Signature Page for Fourth Consent Decree Amendment in *United States v. Exxon Mobil Corp.*, Case No. 05 C 5809 (N.D. Ill.)

FOR THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

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

Signature Page for Fourth Consent Decree Amendment in *United States v. Exxon Mobil Corp.*, Case No. 05 C 5809 (N.D. Ill.)

FOR THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

T. Leverett Nelson

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T. LEVERETT NELSON
Regional Counsel
U.S. Environmental Protection Agency, Region 5

Signature Page for Fourth Consent Decree Amendment in *United States v. Exxon Mobil Corp.*, Case No. 05 C 5809 (N.D. Ill.)

FOR THE STATE OF ILLINOIS

KWAME RAOUL, Attorney General
of the State of Illinois

MATTHEW J. DUNN, Chief
Environmental Enforcement/
Asbestos Litigation Division

By: Stephen J. Sylvester

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Signature Page for Fourth Consent Decree Amendment in *United States v. Exxon Mobil Corp.*, Case No. 05 C 5809 (N.D. Ill.)

FOR DEFENDANT
EXXONMOBIL OIL CORPORATION

Dated: March 15, 2021

Monica M. Mainland
Power of Attorney
Refinery Manager
ExxonMobil Joliet Refinery
25915 S. Frontage Road
Channahon, IL 60410

Appendix A to Fourth Decree Amendment:

September 27, 2013 Notice of Violation and Finding of Violation issued to ExxonMobil by EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
ExxonMobil Refining and Supply Company	)	**NOTICE OF VIOLATION and**
Channahon, Illinois	)	**FINDING OF VIOLATION**
	)	
	)	**EPA-5-13-IL-46**
Proceedings Pursuant to	)	
the Clean Air Act	)	
42 U.S.C.§ § 7401 et seq	)	

NOTICE AND FINDING OF VIOLATION

ExxonMobil Refining and Supply Company (you or ExxonMobil) owns and operates a petroleum refinery located at I-55 and Arsenal Road, Channahon, Illinois (facility or refinery). The refinery consists of a number of pieces of equipment that generate air pollution and are subject to provisions of the Clean Air Act (the Act). The equipment includes flares, storage vessels, a fluidized catalytic cracking unit (FCCU), and other emission units.

The U.S. Environmental Protection Agency is sending this Notice and Finding of Violation (NOV/FOV) to notify you that we have found that you have violated certain provisions of the Clean Air Act, 42 U.S.C. §§ 7401 – 7671q (Act or CAA), and certain federal and State regulations promulgated thereunder, including, New Source Performance Standards (NSPS) (40 C.F.R. Part 60); NSPS General Provisions (40 C.F.R. Part 60, Subpart A); NSPS for Petroleum Refineries (40 C.F.R. Part 60, Subpart J); NSPS for Volatile Organic Liquids Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984 (40 C.F.R. Part 60, Subpart Kb); NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (40 C.F.R. Part 60, Subpart VV); NSPS for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006 (40 C.F.R. Part 60, Subpart GGG); the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories (40 C.F.R. Part 63); NESHAP for Source Categories General Provisions (40 C.F.R. Part 63, Subpart A); NESHAP from Petroleum Refineries (40 C.F.R. Part 63, Subpart CC); the Prevention of Significant Deterioration program under the Act, Title I, Part C, 42 U.S.C. §§ 7470 – 7492, the Illinois State Implementation Plan, a construction permit and the facility's operating permit issued under Title V of the Act and the approved State Title V permit program.

Explanation of Violations

I. Statutory and Regulatory Background

Clean Air Act

1. The Clean Air Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

Section 111 of the Act, New Source Performance Standards

2. Section 111(b) of the Act, 42 U.S.C. § 7411(b), requires EPA to publish a list of categories of stationary sources and, within a year after the inclusion of a category of stationary sources in the list, to publish proposed regulations establishing Federal standards of performance for new sources within the source category.

3. Section 111(f) of the Act, 42 U.S.C. § 7411(f), requires the promulgation of standards of performance for new stationary sources.

4. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits the operation of a new source in violation of any applicable standard of performance.

NSPS General Provisions, 40 C.F.R. Part 60, Subpart A

5. EPA proposed General Provisions to the New Source Performance Standards (NSPS Subpart A) on August 17, 1971. *See* 36 Fed. Reg. 15704. EPA promulgated NSPS Subpart A on December 23, 1971. *See* 36 Fed. Reg. 24877. The subpart has been subsequently amended. NSPS Subpart A is codified at 40 C.F.R. §§ 60.1 – 60.19.

6. 40 C.F.R. § 60.2 defines modification as "any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted."

7. 40 C.F.R. § 60.7(a)(1) requires that any owner or operator subject to the provisions of this part shall furnish the Administrator written or electronic notification "of the date construction (or reconstruction as defined under § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date."

8. 40 C.F.R. § 60.7(a)(3) requires that any owner or operator subject to the provisions of this part shall furnish the Administrator written or electronic "notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date."

9. 40 C.F.R. § 60.7(a)(4) requires that any owner or operator subject to the provisions of this part shall furnish the Administrator written or electronic "notification of any physical

or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change."

10. 40 C.F.R. § 60.11(d) requires that "at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions."

11. 40 C.F.R. § 60.14(a) provides that "[e]xcept as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere."

12. 40 C.F.R. § 60.18(d) provides that "[o]wners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs."

NSPS for Petroleum Refineries, 40 C.F.R. Part 60, Subpart J

13. EPA proposed Standards of Performance for Petroleum Refineries on June 11, 1973 (NSPS Subpart J). *See* 38 Fed. Reg. 15406. EPA promulgated NSPS Subpart J on March 8, 1974. *See* 39 Fed. Reg. 9308. NSPS Subpart J has been subsequently amended. The subpart is codified at 40 C.F.R. §§ 60.100 – 60.109.

14. 40 C.F.R. § 60.100(a) provides that NSPS Subpart J is applicable to certain listed affected facilities in petroleum refineries, including fuel gas combustion devices. 40 C.F.R. § 60.100(b) provides that fuel gas combustion devices that are flares that have commenced construction, reconstruction, or modification after June 11, 1973, and on or before June 24, 2008, are subject to the requirements of NSPS Subpart J.

15. 40 C.F.R. § 60.101(d) defines "fuel gas" to mean "any gas which is generated at a petroleum refinery and which is combusted. Fuel gas includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. . . ."

16. 40 C.F.R. § 60.101(g) defines "fuel gas combustion device" to be "any equipment, such as process heaters, boilers and flares used to combust fuel gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid."

17. 40 C.F.R. § 60.104(a)(1) prohibits the owner or operator of a petroleum refinery subject

to the provisions of NSPS Subpart J to "[b]urn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph."

18. 40 C.F.R. § 60.105(a)(3) requires that "continuous monitoring systems shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart as follows: . . . [f]or fuel gas combustion devices subject to § 60.104(a)(1), either an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO_2 emissions into the atmosphere or monitoring as provided in paragraph (a)(4) of this section. . . ."

19. As an alternative to the monitoring required by 40 C.F.R. § 60.105(a)(3), 40 C.F.R. § 60.105(a)(4) allows for a continuous monitoring system that uses "an instrument for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device."

NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage vessels), 40 C.F.R. Part 60, Subpart Kb

20. EPA proposed Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984 (NSPS Subpart Kb) on July 23, 1984. *See* 49 Fed. Reg. 29698. EPA promulgated NSPS Subpart Kb on April 8, 1987. *See* 52 Fed. Reg. 11420. NSPS Subpart Kb has been subsequently amended. The subpart is codified at 40 C.F.R. §§ 60.110b – 60.117b.

21. 40 C.F.R. § 60.113b(b)(1) requires the owner or operator of a facility subject to NSPS Subpart Kb to "[d]etermine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel" within 60 days of the initial fill with volatile organic liquids (VOL).

22. 40 C.F.R. § 60.113b(b)(5) requires the owner or operator of a facility subject to NSPS Subpart Kb to "[n]otify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present."

23. Each time a vessel is emptied and degassed, following the required inspection, 40 C.F.R. § 60.113b(b)(6)(ii) requires the owner or operator of a facility subject to NSPS Subpart Kb to notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel, or, if advance notice is not possible, at least 7 days beforehand.

24. 40 C.F.R § 60.115b(b)(1) requires that the owner or operator of a facility subject to NSPS Subpart Kb "[f]urnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of § 60.112b(a)(2) and § 60.113b(b)(2), (b)(3), and (b)(4)" as an attachment to the

notification required by § 60.7(a)(3).

25. 40 C.F.R. § 60.115(b)(2) requires that within 60 days of performing the seal gap measurements required by § 60.113b(b)(1) the owner or operator of a facility subject to NSPS Subpart Kb furnish the Administrator with a report containing specified information.

NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI), 40 C.F.R. Part 60, Subpart VV

26. On October 18, 1983, EPA promulgated the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (NSPS Subpart VV). *See* 48 Fed. Reg. 48335. NSPS Subpart VV has been subsequently amended. The subpart is codified at 40 C.F.R. § 60.480 – 60.489.

27. NSPS Subpart VV, at 40 C.F.R. § 60.482-6(a)(1), provides that "[e]ach open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 60.482–1(c) and paragraphs (d) and (e) of this section."

28. NSPS Subpart VV, at 40 C.F.R. § 60.482-4, allows pressure relief valves to be controlled by a closed vent system releasing to a flare in lieu of leak monitoring via Method 21.

29. NSPS Subpart VV, at 40 C.F.R. § 60.482-10(d), provides that flares used to comply with Subpart VV must comply with 40 C.F.R. § 60.18 of Part 60, Subpart A, General Provisions.

30. NSPS Subpart VV, at 40 C.F.R. § 60.482-10(e), provides that owners of control devices, including flares, that are used to comply with the requirements of Subpart VV, "shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs."

NSPS for Equipment Leaks of VOC in Petroleum Refineries, 40 C.F.R. Part 60, Subpart GGG

31. On May 30, 1984, EPA promulgated the Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006 (NSPS Subpart GGG). *See* 49 Fed. Reg. 22606. NSPS Subpart GGG has been subsequently amended. The subpart is codified at 40 C.F.R. §§ 60.590 – 60.593.

32. 40 C.F.R. § 60.592 requires that owners or operators subject to NSPS Subpart GGG comply with certain requirements of NSPS Subpart VV.

Section 112 of the Act, NESHAP for Source Categories

33. Section 112(b) of the Act, 42 U.S.C. § 7412(b) lists 188 Hazardous Air Pollutants (HAPs) that cause adverse health or environmental effects.

34. Section 112(d)(1) of the Act, 42 U.S.C. § 7412(d), requires EPA to promulgate regulations establishing emissions standards for each category or subcategory of major and area sources of HAPs that are listed for regulation pursuant to subsection (c) of Section 112.

35. Section 112(d)(2) of the Act requires that emission standards promulgated under Section 112(d)(1) require "the maximum degree of reduction in emissions of the hazardous air pollutants . . . that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies . . ." (hereinafter, "MACT").

NESHAP for Source Categories, General Provisions, 40 C.F.R. Part 63, Subpart A

36. On March 16, 1994, U.S. EPA promulgated the General Provisions to Part 63 at 40 C.F.R. Part 63, Subpart A, §§ 63.1 - 63.16. *See* 59 Fed. Reg. 12408.

37. 40 C.F.R. § 63.6(e)(1)(i) requires that "[a]t all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions."

NESHAP from Petroleum Refineries, 40 C.F.R. Part 63, Subpart CC

38. EPA promulgated National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (the Refinery MACT) on August 18, 1995. *See* 60 Fed. Reg. 43244. The subpart has been subsequently amended. The Refinery MACT is codified at 40 C.F.R. §§ 63.640 – 63.656.

39. 40 C.F.R. § 63.640(c) provides that for "the purpose of this subpart, the affected source shall comprise all emission points, in combination," listed at 40 C.F.R. § 63.640(c)(1) through (c)(7). These emission points include miscellaneous process vents and all equipment leaks.

40. 40 C.F.R. § 63.641 defines Group 1 storage vessel as "a storage vessel at an existing source that has a design capacity greater than or equal to 177 cubic meters and stored-liquid maximum true vapor pressure greater than or equal to 10.4 kilopascals and stored-liquid annual average true vapor pressure greater than or equal to 8.3 kilopascals and annual average HAP liquid concentration greater than 4 percent by weight total organic HAP; a storage vessel at a new source that has a design storage capacity greater than or equal to 151 cubic meters and stored-liquid maximum true vapor pressure greater than or

equal to 3.4 kilopascals and annual average HAP liquid concentration greater than 2 percent by weight total organic HAP; or a storage vessel at a new source that has a design storage capacity greater than or equal to 76 cubic meters and less than 151 cubic meters and stored-liquid maximum true vapor pressure greater than or equal to 77 kilopascals and annual average HAP liquid concentration greater than 2 percent by weight total organic HAP."

41. 40 C.F.R. § 63.640(n)(1) provides that "[a]fter the compliance dates specified in paragraph (h) of this section, a Group 1 or Group 2 storage vessel that is part of an existing source and is also subject to the provisions of [NSPS Subpart Kb], is required to comply only with the requirements of [NSPS Subpart Kb], except as provided in paragraph (n)(8) of this section."

42. 40 C.F.R. § 63.640(n)(2) provides that "[a]fter the compliance dates specified in paragraph (h) of this section a Group 1 storage vessel that is part of a new source and is subject to [NSPS Subpart Kb] is required to comply only with this subpart."

43. 40 C.F.R. § 63.640(n)(8) provides that "[s]torage vessels described by paragraphs (n)(1) and (n)(3) of this section are to comply with [NSPS Subpart Kb] except as provided for in paragraphs (n)(8)(i) through (n)(8)(vi) of this section." Section (n)(8)(v) states that "[o]wners and operators of storage vessels complying with [NSPS Subpart Kb] may submit the inspection reports required by §§ 60.115b(a)(3), (a)(4), and (b)(4) of [NSPS Subpart Kb] as part of the periodic reports required by this subpart, rather than within the 30-day period specified in §§ 60.115b(a)(3), (a)(4), and (b)(4) of [NSPS Subpart Kb]."

44. 40 C.F.R. § 63.648(a) provides that "[e]ach owner or operator of an existing source subject to the provisions of this subpart shall comply with the provisions of [NSPS Subpart VV] . . .."

45. Table 6 to the Refinery MACT, titled "General Provisions Applicability to Subpart CC," specifically provides that Section 63.6(e) of the General Provisions applies to affected sources under the Refinery MACT (except for "Group 2 emission points").

Illinois State Implementation Plan Background and Certain Provisions

46. On March 23, 2004, EPA approved the incorporation of Illinois rule 218 into the Illinois State Implementation Plan (SIP). *See* 69 Fed. Reg. 13474.

47. Illinois SIP Rule 218.441 requires that organic emissions in waste gas streams from any petroleum or petrochemical manufacturing process be limited to 100 ppm as equivalent methane, or meet the standards in Illinois SIP Rules 218.301 or 218.302.

48. Illinois SIP Rule 218.301 limits organic emissions from any emissions unit to 8 lbs/hr.

49. Illinois SIP Rule 218.302 limits organic emissions to 10 ppm as equivalent methane or requires that they be reduced by 85%.

Title I, Part C, of the Act, Prevention of Significant Deterioration

50. Section 108(a) of the Act, 42 U.S.C. § 7408(a), requires EPA to identify and prepare air quality criteria for each air pollutant, emissions of which may endanger public health or welfare. For each such "criteria" pollutant, Section 109 of the Act, 42 U.S.C. § 7409, requires EPA to promulgate national ambient air quality standards (NAAQS) necessary to protect the public health and welfare.

51. Pursuant to Sections 108 and 109 of the Act, 42 U.S.C. §§ 7408 and 7409, EPA has identified sulfur dioxide (SO_2), nitrogen dioxide (NO_2), a form of nitrogen oxides (NO_x), ozone, and particulate matter with a diameter of less than or equal to 10 micrometers (PM_{10}) as criteria pollutants, and, as of 2003, had promulgated NAAQS for these pollutants. 40 C.F.R. §§ 50.4 – 50.7, 50.9, and 50.11.

52. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant or where the air quality cannot be classified due to insufficient data. An area that meets the NAAQS for a particular pollutant is termed an "attainment" area with respect to such pollutant. An area that does not meet the NAAQS for a particular pollutant is termed a "nonattainment" area with respect to such pollutant.

53. Part C of Title I of the Act, 42 U.S.C. §§ 7470-7492, sets forth requirements for the prevention of significant deterioration of air quality in those areas designated as attainment or unclassifiable for purposes of meeting the NAAQS. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources, and to assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after public participation in the decision making process. 42 U.S.C. § 7470. These provisions are referred to herein as the "PSD program."

54. Section 165(a) of the Act, 42 U.S.C. § 7475(a), prohibits the construction and operation of a "major emitting facility" in an area designated as attainment or unclassifiable unless a permit has been issued that comports with the requirements of Section 165 and the facility employs the best available control technology (BACT) for each pollutant subject to regulation under the Act that is emitted from the facility.

55. Pursuant to Section 169 of the Act, 42 U.S.C. § 7479(1), a "major emitting facility" is defined to include any petroleum refinery which emits, or has the potential to emit, 100 tons per year or more of any air pollutant.

56. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a SIP containing regulations implementing the PSD program as provided in the PSD provisions of the Act set forth at 42 U.S.C. §§ 7470-7492.

Prevention of Significant Deterioration Program, 40 C.F.R. Part 52, Section 52.21

57. Pursuant to 40 C.F.R. § 52.21(a), if a state does not have PSD regulations that EPA has approved and incorporated into its SIP, EPA may incorporate the federal PSD regulations set forth at 40 C.F.R. § 52.21 into the SIP. On August 7, 1980, EPA incorporated the PSD regulations of 50 C.F.R. § 52.21(b) through (w) into the Illinois SIP. 40 C.F.R. § 52.738(b). EPA delegated to the Illinois Environmental Protection Agency (IEPA) the authority to review and process PSD permit applications and to implement the federal PSD program. 40 C.F.R. § 52.738(c).

58. Pursuant to 40 C.F.R. § 52.21(b)(2)(i), a "major modification" is defined as any physical change in or change in the method of operation of a major stationary source that would result in a "significant emissions increase" and a "significant net emissions increase" of any regulated PSD pollutant.

59. A "significant emissions increase" is defined as "an increase in emissions that is significant" for a regulated PSD pollutant. 40 C.F.R. § 52.21(b)(40).

60. "Significant" means a rate of emissions that would equal or exceed any of the following rates for the following pollutants: 40 tons per year of NO_x; 40 tons per year of SO_2; 25 tons per year of PM; and 15 tons per year of PM_{10}. 40 C.F.R. § 52.21(b)(23)(i).

61. Pursuant to 40 C.F.R. § 52.21(b)(3)(i), a "net emissions increase" means the amount by which the sum of the following exceeds zero: (1) any increase in emissions from a particular physical change or change in the method of operation at a stationary source; and (2) any other increases and decreases in emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

62. Pursuant to 40 C.F.R. § 52.21(j)-(r), to construct a major modification in an attainment area, a major stationary source subject to the PSD program must, among other things, perform an analysis of source impacts, perform air quality modeling and analysis, obtain a PSD permit, and install and operate BACT controls for each regulated PSD pollutant for which the modification would result in a significant net emissions increase.

63. BACT means an emissions limitation reflecting the maximum degree of reduction of each regulated PSD pollutant which the permitting authority determines is achievable for a facility on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs. Section 169(3) of the Act, 42 U.S.C. § 7479(3).

64. "Emission limitation" is defined at section 302(k) of the Act, 42 U.S.C. § 7602(k), as a requirement which "limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction . . .."

65. Pursuant to 40 C.F.R. § 52.21(r)(4), when a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation on the capacity of the source or modification otherwise to emit a

pollutant, such as a restriction on hours of operation, then the requirements of PSD shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Title V of the Act, Permits, and 40 C.F.R. Part 70, Operating Permit Program

66. Section 502(a) of the Clean Air Act, 42 U.S.C. § 7661a(a), states that "[a]fter the effective date of any permit program approved or promulgated under this subchapter, it shall be unlawful for any person to violate any requirement of a permit issued under this subchapter, or to operate…a major source…except in compliance with a permit issued by a permitting authority under this subchapter."

67. 40 C.F.R. § 70.7(b) states that, with minor exceptions inapplicable to the violations alleged herein, "no part 70 source may operate after the time that it is required to submit a timely and complete application under an approved permit program, except in compliance with a permit issued under a part 70 program."

68. EPA gave final interim approval the Illinois Title V Permit program, effective March 7, 1995. 60 Fed. Reg. 12478 (March 7, 1995). EPA fully approved the Illinois Title V Permit program, effective November 30, 2001. 66 Fed. Reg. 62946 (December 4, 2011). Illinois' Title V Permit program requirements are codified at IAC Title 35, Part 270.

69. The Illinois Environmental Protection Agency (IEPA) issued a Title V Permit to the facility on August 15, 2000.

70. Paragraph 7.28.3(a) of the Title V Permit requires compliance with the equipment leak requirements of the Refinery MACT by complying with the provisions of NSPS Subpart VV, pursuant to 40 C.F.R. § 63.648(a).

71. Paragraph 7.28.5(c) of the Title V Permit requires flares being used to comply with the requirements of NSPS Subpart VV comply with the requirements of 40 C.F.R. § 60.18.

72. Paragraph 7.28.8(e)(i) of the Title V Permit states that "[t]he Permittee shall monitor the flare(s) used to comply with [NSPS Subpart VV] to ensure that they are operated and maintained in conformance with their designs [40 C.F.R. § 60.482-10(e)]."

II. Factual Background

73. ExxonMobil owns and operates a petroleum refinery located at I-55 and Arsenal Road, Channahon, Will County, Illinois. The refinery consists of a number of pieces of equipment that generate air pollution and are subject to provisions of the Act and are described in further detail below.

Flares

NSPS Subpart J

74. On November 9, 2010, ExxonMobil provided information to EPA in response to a Section 114 Information Request that details a number of projects that ExxonMobil has undertaken since June 11, 1973 through 2008, which resulted in new or larger streams going to a flare.

75. These projects constituted "modifications," as that term is defined at 40 C.F.R. § 60.2, because they caused increases in the amount of SO_2 emitted into the atmosphere from the flares.

NSPS Subpart VV, NESHAP Subpart CC, Illinois SIP and Title V

76. The South Flare and the East Flare at the Joliet Refinery control emissions from the refinery's process units. Studies such as the one in Paragraph 77, below, show that properly operated flares can achieve an efficiency of 98% or greater.

77. In July 1983, EPA released report EPA 600/2-83-052, titled Flare Efficiency Study (1983 Flare Study). This study, partially funded by EPA and the Chemical Manufacturers Association (CMA), included various tests to determine the combustion efficiency and hydrocarbon destruction efficiency of flares under a variety of operating conditions. Certain tests were conducted on a steam-assisted flare provided by John Zink Company. The tests performed included a wide range of steam flows and steam-to-vent gas ratios. The data collected showed decreasing combustion efficiencies when the steam-to-vent gas ratio was above 3.5. The tests showed the following efficiencies at the following steam-to-vent gas ratios:

Pounds of Steam to One Pound of Vent Gas	Combustion Efficiency (%)
3.45	99.7
5.67	82.18
6.86	68.95

The report concluded that excessive steam-to-vent gas ratios caused steam quenching of the flame during the tests which resulted in lower combustion efficiency.

78. On January 18, 2008, ExxonMobil provided information to EPA in response to a Section 114 Information Request. One of the documents was the operating instructions for the flares. These operating instructions, written by the flare manufacturer, prescribe adding enough steam to the flare tip to prevent the formation of visible smoke while maintaining a flame that is a yellow-orange color. It further provides the amount of steam that is expected to achieve this, as pounds of steam per pound of waste hydrocarbon (steam-to-vent gas ratio).

79. On January 18, 2008, ExxonMobil also supplied to EPA an excerpt from a Mobil Engineering Guide as well as an email dated January 13, 1998. The documents relate to the addition of steam for smokeless operation and state the "operating requirements" for gases that ExxonMobil flares as a certain amount of steam per pound of flare gas.

80. EPA performed an inspection of the ExxonMobil facility on October 19, 2010. During this inspection, EPA representatives observed the South Flare while it was in operation. The representatives observed periods where there was only steam and no "yellow-orange color" flame visible, in contradiction of the flare system's Operating Instructions. Furthermore, when ExxonMobil's representatives reduced the steam rate to the flare at EPA's request, a flame appeared.

81. ExxonMobil provided EPA with steam and vent gas flow rates for the period from September 1, 2008, to October 4, 2010. These records show that ExxonMobil regularly exceeded the steam-to-vent gas ratio recommended by the flare manufacturer and its own Engineering Guide.

82. Publicly available documents such as the one identified in Paragraph 77 show that operating flares with excessive steam-to-vent gas ratios will cause flare efficiency to drop below that which it was designed to achieve. ExxonMobil added more steam than is necessary for proper operation and is recommended, thereby reducing the flares' efficiency. Furthermore, available flare performance data demonstrates that the destruction efficiency of the flares has been less than 85% over periods of the flares' operating time.

Storage Tanks

Tank 319

83. According to ExxonMobil's Title V Operating Permit, ExxonMobil installed Tank 319 in 1997, and it was thus a new source under NSPS Subpart Kb and under the Refinery MACT upon startup.

84. On December 18, 2010, ExxonMobil emptied and degassed Tank 319 in order to undertake a project to add a slotted guidepole to it. This project is considered a modification under 40 C.F.R. § 60.2.

85. On December 30, 2010, ExxonMobil filled Tank 319 with volatile organic liquids (VOL) after modifying it to add a slotted guidepole.

86. On January 4, 2011, ExxonMobil tested the primary and secondary seals on Tank 319, including taking primary and secondary seal gap measurements.

87. Pursuant to 40 C.F.R. § 60.7(a)(1), ExxonMobil should have submitted a notification of commencement of construction of the project by January 17, 2011.

88. Pursuant to 40 C.F.R. § 60.7(a)(3), ExxonMobil should have submitted a notification of initial startup by January 14, 2011.

89. Pursuant to 40 C.F.R. § 60.7(a)(4), ExxonMobil should have submitted a notification of the planned project by October 19, 2010.

90. Pursuant to 40 C.F.R. § 60.113b(b)(5), ExxonMobil should have submitted a notification of the planned seal gap measurements for Tank 319 by December 5, 2010.

91. Pursuant to 40 C.F.R. § 60.113b(b)(6)(ii), ExxonMobil should have submitted a notification of the refilling of Tank 319 by November 30, 2010.

92. Pursuant to 40 C.F.R. § 60.115b(b)(2), ExxonMobil should have submitted a report detailing the results of the seal gap measurements on Tank 319 by March 5, 2011.

Tank 205

93. According to ExxonMobil's Title V Operating Permit, ExxonMobil installed Tank 205 in 1980, and it was thus an existing source under NSPS Subpart Kb and under the Refinery MACT when those rules were promulgated.

94. On July 28, 2010, ExxonMobil emptied and degassed Tank 205 in order to undertake a project to add a slotted guidepole to it. This project is considered a modification under 40 C.F.R. § 60.2.

95. On April 30, 2011, ExxonMobil filled Tank 205 with VOL after modifying it to add a slotted guidepole.

96. Pursuant to 40 C.F.R. § 60.7(a)(1), ExxonMobil should have submitted a notification of commencement of construction of the project by August 27, 2010.

97. Pursuant to 40 C.F.R. § 60.7(a)(3), ExxonMobil should have submitted a notification of initial startup by May 15, 2011.

98. Pursuant to 40 C.F.R. § 60.7(a)(4), ExxonMobil should have submitted a notification of the planned project by May 29, 2010.

99. Pursuant to 40 C.F.R. § 60.113b(b)(1)(i) and (ii), ExxonMobil should have tested the primary and secondary seals on Tank 205, including taking gap measurements, by June 29, 2011.

Tank 402

100. According to ExxonMobil's Initial Notification of Compliance Status, Tank 402 was an existing source under NSPS Subpart Kb. This means that it was installed prior to 1984, making it an existing source under the Refinery MACT.

101. On January 22, 2010, ExxonMobil emptied and degassed Tank 402 in order to undertake a project to add a slotted guidepole to it. This project is considered a modification under 40 C.F.R. § 60.2.

102. On September 16, 2011, ExxonMobil filled Tank 402 with VOL after modifying it to add a slotted guidepole.

103. Pursuant to 40 C.F.R. § 60.7(a)(1), ExxonMobil should have submitted a notification of commencement of construction of the project by February 21, 2010.

104. Pursuant to 40 C.F.R. § 60.7(a)(3), ExxonMobil should have submitted a notification of initial startup by October 1, 2011.

105. Pursuant to 40 C.F.R. § 60.7(a)(4), ExxonMobil should have submitted a notification of the planned project by November 23, 2009.

106. Pursuant to 40 C.F.R. § 60.113b(b)(1)(i) and (ii), ExxonMobil should have tested the primary and secondary seals on Tank 402, including taking gap measurements, by November 15, 2010.

Tank 101

107. According to ExxonMobil's Title V Operating Permit, Tank 101 was installed in 1971, and was thus an existing source under NSPS Subpart Kb and under the Refinery MACT when those rules were promulgated.

108. On March 19, 2011, ExxonMobil emptied and degassed Tank 101 in order to undertake a project to add a slotted guidepole to it. This project is considered a modification under 40 C.F.R. § 60.2.

109. On January 7, 2012, ExxonMobil filled Tank 101 with VOL after modifying it to add a slotted guidepole.

110. Pursuant to 40 C.F.R. § 60.7(a)(1), ExxonMobil should have submitted a notification of commencement of construction of the project by April 18, 2011.

111. Pursuant to 40 C.F.R. § 60.7(a)(4), ExxonMobil should have submitted a notification of the planned project by January 18, 2011.

112. Pursuant to 40 C.F.R. § 60.113b(b)(1)(i) and (ii), ExxonMobil should have tested the primary and secondary seals on Tank 101, including taking gap measurements, by March 7, 2012.

Submitted Reports

113. On October 12, 2011, ExxonMobil submitted a Notification of Initial Startup for Tanks 205, 319 and 402 pursuant to 40 C.F.R. § 60.7(a)(3). The Notification provided start-up dates of each tank, though the start-up dates for Tanks 319 and 205 were incorrectly reported as January 2, 2011 and May 3, 2011, respectively.

114. On October 25, 2011, EPA and ExxonMobil discussed the October 12, 2011 Notification. EPA requested ExxonMobil submit the report describing the control equipment and

certifying that the control equipment meets the specifications of § 60.112b(a)(2) and § 60.113b(b)(2), (b)(3), and (b)(4), pursuant to 40 C.F.R § 60.115b(b)(1).

115. On October 28, 2011, ExxonMobil submitted an Addendum to the Notification. This Addendum addressed the compliance status of the tanks and the type of control used on each tank. It also provided additional information about the modifications that were made to each tank.

116. On June 28, 2012, ExxonMobil submitted a response to a Section 114 Information Request. In the response, ExxonMobil notified EPA of the correct start-up dates for Tanks 319 and 205.

June 2012 Leak Detection and Repair (LDAR) Inspection

117. From June 11 – 14, 2012, EPA conducted an on-site inspection at the Joliet Refinery located in Channahon, Illinois. During the inspection EPA representatives performed comparative monitoring to evaluate the LDAR program. During the inspection, EPA identified at least 8 open-ended lines.

PSD Program

118. The Joliet Refinery is located in Will County, Illinois. In 2003, Will County was designated severe-17 nonattainment for one-hour ozone and attainment or unclassifiable for all other criteria pollutants. *See* 56 Fed. Red. 56694. A NO_x waiver was in place for the ozone nonattainment area. *See* 61 Fed. Red. 2428. On April 30, 2004, Will County was designated moderate nonattainment for eight-hour ozone. The one-hour ozone standard was revoked, effective June 15, 2005. *See* 69 Fed. Reg. 23898.

119. On March 11, 2003, ExxonMobil received Construction Permit 03030025 from the IEPA for installation of a main air blower rotor to replace the existing FCCU main air blower rotor.

120. Permit 03030025 was explicitly based on the "project not constituting a major modification subject to the federal rules for Prevention of Significant Deterioration" because the permit required ExxonMobil to install a mechanical stop and computer stop on the main air blower for flow rate to ensure that "no increase in the amount of air to the regenerator will occur compared to the existing main air blower configuration." ExxonMobil Oil Corporation Construction Permit 03030025, pages 1 and 2 (March 11, 2003). These stops constituted enforceable limitations on the capacity of the source and were used to prevent the main air blower replacement project from being a "major modification" under the PSD program.

121. Permit 03030025 provides that, "[i]t should be noted that the Permittee has indicated that they are currently evaluating projects that could increase the feedstock available to be processed by the FCCU. In conjunction with any such project, the Permittee will apply for an appropriate permit to allow the removal of the mechanical and computer stops on the main air blower of the FCCU."

122. On April 6, 2009, ExxonMobil received a construction permit for "NSR Controls Phase II and Other Construction" that authorized "removal of the mechanical and computer stops on the Main Air Blower of the FCC Unit." ExxonMobil Oil Corporation Construction Permit 09040008, page 4 (April 6, 2009).

123. Based on information provided by ExxonMobil in response to an information request issued pursuant to Section 114 of the Act, EPA calculated that projected increases in emissions associated with increased air flow capacity to the regenerator and attendant increased throughput capacity at the FCCU exceed the significance thresholds for SO_2, NO_x, PM and PM_{10}, and ozone.

III. Violations

40 C.F.R. Part 60, Subpart A

Storage Tanks

124. ExxonMobil failed to submit the notification of commencement of construction within 30 days of commencing construction on each project at Tanks 101, 205, 319 and 402, in violation of 40 C.F.R. § 60.7(a)(1).

125. ExxonMobil failed to submit notifications of initial startup for Tanks 205 and 402 within 15 days of initial startup, in violation of 40 C.F.R. § 60.7(a)(3).

126. ExxonMobil failed to submit notifications of the planned projects at Tanks 101, 205, 319 and 402 at least 60 days before commencement of the projects, in violation of 40 C.F.R. § 60.7(a)(4).

Flares

127. ExxonMobil failed to submit the notification of commencement of construction within 30 days of commencing construction for each of several projects identified by ExxonMobil in response to EPA's Section 114 Information Request which were modifications to one or more flares, in violation of 40 C.F.R. § 60.7(a)(1).

128. ExxonMobil failed to submit notifications of initial startup for its flares within 15 days of initial startup for any of these projects, in violation of 40 C.F.R. § 60.7(a)(3).

129. ExxonMobil failed to submit notifications for these projects at least 60 days before commencement of the projects, in violation of 40 C.F.R. § 60.7(a)(4).

40 C.F.R. Part 60, Subpart J

130. Since the completion of the first project on each flare which constituted a "modification" under 40 C.F.R. § 60.2, ExxonMobil has failed to comply with the requirements of NSPS Subpart J at that flare, including, but not limited to, emission limitations and monitoring requirements set forth at 40 C.F.R. §§ 60.104(a)(1) and 60.105(a)(3).

40 C.F.R. Part 60, Subpart Kb

131. For Tanks 205 and 402, ExxonMobil failed to submit reports that describe "the control equipment and certifies that the control equipment meets the specifications of § 60.112b(a)(2) and §§ 60.113b(b)(2), (b)(3), and (b)(4)" as attachments to the Notification required under 40 C.F.R. § 60.7(a)(3), in violation of 40 C.F.R § 60.115b(b)(1).

132. ExxonMobil did not test the primary seal during hydrostatic testing or within 60 days of initial fill of VOL for Tanks 101, 205 or 402, in violation of 40 C.F.R. § 60.113b(b)(1).

133. ExxonMobil did not test the secondary seal within 60 days of initial fill of VOL for Tanks 101, 205, or 402, in violation of 40 C.F.R. § 60.113b(b)(1).

134. ExxonMobil failed to submit a notification to EPA 30 days in advance of performing the gap measurements on Tank 319, in violation of 40 C.F.R. § 60.113b(b)(5).

135. ExxonMobil failed to submit a notification of the refilling of Tank 319, in violation of 40 C.F.R. § 60.113b(b)(6)(ii).

136. For Tank 319, ExxonMobil failed to submit reports to EPA containing the results of the gap measurements within 60 days of completing the measurements, in violation of 40 C.F.R. § 60.115b(b)(2).

40 C.F.R. Part 60, Subparts VV and GGG

LDAR Program

137. ExxonMobil failed to cap, blind flange, plug or install a second valve on at least 8 open-ended lines, in violation of 40 C.F.R. §§ 60.482-6(a)(1) and 60.592(a).

Flares

138. ExxonMobil failed to follow the flare manufacturer's operating instructions and operate the flares at their design efficiencies, in violation of 40 C.F.R. § 60.482-10(e).

40 C.F.R. Part 63, Subpart A

139. ExxonMobil failed to follow the flare manufacturer's operating instructions and operate the flares at their design efficiencies, in violation of 40 C.F.R. § 63.6(e)(1)(i).

40 C.F.R. Part 63, Subpart CC

140. ExxonMobil failed to follow the flare manufacturer's operating instructions and operate the flares at their design efficiencies, in violation of 40 C.F.R. § 63.648(a).

Illinois SIP

141. ExxonMobil did not operate the flares at a destruction efficiency of at least 85%, in violation of Illinois SIP Rule 218.441.

PSD Program, including 40 C.F.R. § 52.21(r)(4)

142. Because the projected increases in SO_2, NO_x, PM and PM_{10} emissions associated with the increased air flow capacity to the FCCU regenerator exceed the relevant significance thresholds, the removal of the mechanical and computer stops caused the main air blower replacement project to become a major modification.

143. Pursuant to 40 C.F.R. § 52.21(r)(4), relaxation of the mechanical and computer stops as enforceable limitations in ExxonMobil's permits required ExxonMobil to comply with paragraphs (j) through (r) of 40 C.F.R. § 52.21, including the requirement to apply BACT for SO_2, NO_x, PM and PM_{10}, and the requirement to perform a source impact analysis to demonstrate that allowable emission increases from the modification would not cause or contribute to a violation of the NAAQS or PSD increment.

144. ExxonMobil failed to comply with the requirements of paragraphs (j) through (r) of 40 C.F.R. § 52.21 as of the date that the above-described enforceable limitations were relaxed, April 6, 2009, in violation of 40 C.F.R. § 52.21(r)(4).

IEPA Construction Permit #03030025

145. ExxonMobil failed to apply for a PSD permit for the removal of the mechanical and computer stops on the air blower at the FCCU, in violation of IEPA Construction Permit 03030025.

Title V Permit

146. ExxonMobil failed to follow the flare manufacturer's operating instructions and operate the flares at their design efficiencies, in violation of Paragraphs 7.28.3(a), 7.28.5(c), and 7.28.8(e)(i) of the facility's Title V Permit.

147. By violating the conditions of its Title V Permit, ExxonMobil also violated 40 C.F.R. § 70.7(b) and Title V of the Act.

Enforcement Provisions

148. Sections 113(a)(1) and (3) of the Act, 42 U.S.C. § 7413(a)(1) and (3), provide that the Administrator may bring a civil action in accordance with Section 113(b) of the Act, 42 U.S.C. § 7413(b), whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of Title I of the Act, *inter alia*, the PSD requirements of Section 165(a) of the Act, 42 U.S.C. § 7475(a), the NSPS requirements of Section 111 of the Act, 42 U.S.C. § 7411, the NESHAP requirements of Section 112 of the Act, 42 U.S.C. § 7412, and any regulation or permit issued thereunder; Title V of the Act, 42

U.S.C. §§ 7661-7661f, and any regulation or permit issued thereunder; or the PSD provisions of the Illinois SIP. *See also* 40 C.F.R. § 52.23.

149. Section 113(b) of the Act, 42 U.S.C. § 7413(b), authorizes the Administrator to initiate a judicial enforcement action for a permanent or temporary injunction, and/or for a civil penalty of up to $25,000 per day for each violation occurring on or before January 30, 1997; up to $27,500 per day for each such violation occurring on or after January 31, 1997 and up to and including March 15, 2004; up to $32,500 per day for each such violation occurring on or after March 16, 2004 through January 12, 2009; and up to $37,500 per day for each such violation occurring on or after January 13, 2009, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701, 40 C.F.R. § 19.4, and 74 Fed. Reg. 626 (Jan. 7, 2009) against any person whenever such person has violated, or is in violation of, *inter alia,* the requirements or prohibitions described in the preceding paragraph.

150. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements in Part C of the Act.

9/27/13

Date

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Director
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