

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

UNITED STATES OF AMERICA and)	
LOUISIANA DEPARTMENT OF)	
ENVIRONMENTAL QUALITY,)	
)	Civil Action No. 4:17-cv-3302
Plaintiffs,)	
)	
v.)	
)	
EXXON MOBIL CORP. and)	
EXXONMOBIL OIL CORP.,)	
)	
Defendants.)	

COMPLAINT

Plaintiffs, the United States of America (“United States”), by the authority of the Attorney General of the United States and through the undersigned attorneys, acting at the request of the Administrator of the United States Environmental Protection Agency (“EPA”), and the Louisiana Department of Environmental Quality (“LDEQ”), file this Complaint and allege as follows:

NATURE OF ACTION

1. This civil action seeks injunctive relief and civil penalties from Exxon Mobil Corp. and ExxonMobil Oil Corp. (collectively “the Defendants”) for violations of the Clean Air Act, 42 U.S.C. § 7401 *et seq.* (“Clean Air Act”), the

Louisiana Environmental Quality Act, La. R.S. 30:2001 *et seq.* (“Louisiana Environmental Quality Act”), the regulations promulgated pursuant to those statutes, and the operating permits that incorporate those requirements.

2. The United States brings this case pursuant to Clean Air Act Sections 113(b) and 167, 42 U.S.C. §§ 7413(b) and 7477, based on the Defendants’ alleged failures to properly operate, maintain, monitor, and control steam-assisted flares and air-assisted flares at seven chemical, olefins, polymer, and plastics manufacturing facilities. Defendant Exxon Mobil Corp. owns and operates five of the facilities, which are located in Baytown, Texas and Baton Rouge, Louisiana. Defendant ExxonMobil Oil Corp. owns and operates two of the facilities, which are located in Beaumont, Texas. These seven facilities are collectively referred to as the “Defendants’ Facilities.”

3. The LDEQ brings this case pursuant to the Louisiana Environmental Quality Act based on these same failures at the Defendants’ three Baton Rouge, Louisiana facilities.

4. The Defendants’ alleged violations of the Clean Air Act and the Louisiana Environmental Quality Act resulted in thousands of tons of illegal emissions of volatile organic compounds (“VOCs”), hazardous air pollutants (“HAPs”), and other pollutants into the air in the States of Texas and Louisiana.

JURISDICTION AND VENUE

5. This Court has jurisdiction over the subject matter pursuant to Clean Air Act Section 113(b), 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1331, 1345, and 1355. This Court has personal jurisdiction over the Defendants because they do business in the State of Texas and in this judicial district.

6. This Court has jurisdiction pursuant to 28 U.S.C. § 1367 over the LDEQ's claims under the Louisiana Environmental Quality Act because those claims are so related to the claims alleged in the United States' action that they form part of the same case or controversy.

7. Venue is proper in this District 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), because violations alleged in this Complaint occurred at the Defendants' Facilities that are located in this District.

NOTICE

8. Notices of violations were given to the Defendants, the State of Texas, and the State of Louisiana as required by Clean Air Act Section 113(a)(1), 42 U.S.C. § 7413(a)(1). Notice of the commencement of this action was given to the State of Texas and the State of Louisiana as required by Clean Air Act Section 113(b), 42 U.S.C. § 7413(b).

9. The 30-day period established in Clean Air Act Section 113(a), 42 U.S.C. § 7413(a), between the notices of violation provided by the United States and the commencement of this civil action has elapsed.

AUTHORITY

10. The United States Department of Justice has authority to bring this action on behalf of the EPA under, *inter alia*, 28 U.S.C. §§ 516 and 519, and under Clean Air Act Section 305(a), 42 U.S.C. § 7605(a).

THE DEFENDANTS AND THE DEFENDANTS' FACILITIES

11. Defendant Exxon Mobil Corporation is a New Jersey corporation that does business in the State of Texas. Exxon Mobil Chemical Company operates and is organized as a business division of Exxon Mobil Corporation.

12. At all times relevant to the Complaint, Defendant Exxon Mobil Corporation, either directly or through Exxon Mobil Chemical Company, or a predecessor-in-interest, has owned and operated the following petrochemical manufacturing facilities: a) the Baytown Chemical Plant and the Baytown Olefins Plant located in Baytown, Harris County, Texas (the "Baytown Facilities") and b) the Baton Rouge Chemical Plant, Baton Rouge Polyolefins Plant, and the Baton Rouge Plastics Plant located in Baton Rouge, East Baton Rouge Parish, Louisiana (the "Baton Rouge Facilities").

13. Defendant ExxonMobil Oil Corporation is a New York corporation that does business in the State of Texas.

14. At all times relevant to the Complaint, Defendant ExxonMobil Oil Corporation, or a predecessor-in-interest, has owned and operated the following petrochemical manufacturing facilities located in Beaumont, Jefferson County, Texas: the Beaumont Chemical Plant and the Beaumont Polyethylene Plant (the “Beaumont Facilities”).

15. Each of the Baytown Facilities is located in the Houston/Galveston/Brazoria area as defined in 30 Tex. Admin. Code § 115.10(22) (defining “Houston-Galveston-Brazoria area” to include Harris County, Texas).

16. Each of the Beaumont Facilities is located in the Beaumont-Port Arthur area as defined in 30 Tex. Admin. Code § 115.10(2) (defining “Beaumont-Port Arthur area” to include Jefferson County, Texas).

17. At all times relevant to the Complaint, each of the Defendants has been a “person” within the meaning of Section 302(e) of the Clean Air Act, 42 U.S.C. § 7602(e) and the applicable federal and state regulations alleged herein.

CLEAN AIR ACT STATUTORY AND REGULATORY BACKGROUND

18. The Clean Air Act is designed to promote the public’s health, welfare, and its productive capacity by protecting and enhancing the nation’s air quality. 42 U.S.C. § 7401(b)(1).

A. National Ambient Air Quality Standards and “New Source Review”

i. General

19. Clean Air Act Section 108(a), 42 U.S.C. § 7408(a), requires that the EPA identify and prepare air quality criteria for certain air pollutants called “criteria pollutants.” Criteria pollutants are emitted from numerous or diverse mobile or stationary sources of air pollution, and emissions of criteria air pollutants may endanger public health or welfare. *Id.* For each criteria pollutant, Clean Air Act Section 109, 42 U.S.C. § 7409, requires that the EPA promulgate national ambient air quality standards (“NAAQS”) that will protect public health and welfare with an adequate margin of safety.

20. Pursuant to Clean Air Act Sections 108 and 109, 42 U.S.C. §§ 7408 and 7409, the EPA identified and issued NAAQS for the following criteria air pollutants, as well as for others: ozone, nitrogen oxides (“NO_x”), and carbon monoxide (“CO”). *See* 40 C.F.R. §§ 50.8-50.11 (primary NAAQS); *see also* 40 C.F.R. §§ 50.15 and 50.19 (secondary NAAQS).

21. VOCs readily react, in the presence of sunlight, with NO_x – forming the criteria pollutant ozone.

22. Pursuant to Clean Air Act Section 107(d), 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries (known as “air quality control regions”) where the air quality is better or worse than the NAAQS

for each criteria pollutant. An area that meets the NAAQS for a particular pollutant is deemed an “attainment” area. An area that does not meet the NAAQS for a particular pollutant is deemed a “non-attainment” area.

23. At all times relevant to this Complaint, Harris County, Texas, where the Baytown Facilities are located, and East Baton Rouge Parish, Louisiana, where the Baton Rouge Facilities are located, have been classified as non-attainment areas for ozone.

24. At all times relevant to this Complaint, Jefferson County, Texas, where the Beaumont Facilities are located, has been classified as an attainment area for ozone.

25. At all times relevant to this Complaint, all of the areas in which the Defendants’ Facilities are located have been classified as attainment areas for NO_x and CO.

ii. State Implementation Plans

26. Clean Air Act Section 110, 42 U.S.C. § 7410, requires each state to adopt and submit to the EPA for approval a plan to attain and maintain the NAAQS for each criteria pollutant in each air quality control region within a state. This plan is known as a state implementation plan (“SIP”).

27. A SIP is enforceable by the state in which it is adopted. After a SIP is approved by the EPA, it is also federally enforceable pursuant to Clean Air Act Section 113(b), 42 U.S.C. § 7413(b).

28. Clean Air Act Section 110(a)(2)(C), 42 U.S.C. § 7410(a)(2)(C), requires that each SIP regulate the “modification and construction of any stationary source...as necessary to assure that [NAAQS] are achieved, including [via] a permit program as required in parts C and D of [Subchapter I of the Clean Air Act].” The Clean Air Act’s requirements for newly constructed and modified sources of criteria air pollutants are often referred to as the “New Source Review” program.

29. Determining which set of New Source Review requirements applies for a newly constructed or modified source of criteria air pollutants depends upon the air quality designation of the air quality control region in which the new or modified facility is located.

iii. Prevention of Significant Deterioration (“PSD”) Requirements

30. Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470–7492, sets forth requirements to prevent significant deterioration of air quality in attainment areas. *See* 42 U.S.C. § 7470 (Purpose of PSD requirements). The EPA’s regulations that implement the PSD program are found at 40 C.F.R. § 52.21 (the “PSD Regulations”).

31. The PSD requirements generally prohibit the construction or modification of a “major emitting facility” in an attainment area unless various requirements are met. *See* 42 U.S.C. § 7475(a). These requirements include, among other things, obtaining a “PSD permit” that contains emission limitations based on the “best available control technology” (“BACT”) to control air emissions. *Id.*; *see also* 40 C.F.R. § 52.21(j) – (r). The PSD Regulations also require a demonstration that emissions from a newly constructed or modified facility will not contribute to a violation of a NAAQS. *See* 42 U.S.C. § 7475(a); 40 C.F.R. § 52.21(k).

32. Clean Air Act Section 169(1), 42 U.S.C. § 7479(1), defines “major emitting facility” to include any chemical process plant that emits or has the potential to emit 100 tons per year (TPY) or more of any air pollutant. Major emitting facilities also include any other source with the potential to emit 250 TPY or more of any air pollutant.

33. The PSD Regulations define “construction” as “any physical change in or change in the method of operation (including fabrication, erection, installation, demolition, or modification) which would result in a change in actual emissions.” 40 C.F.R. § 52.21(b)(8). “Construction” is also defined to include the “modification” (as defined in Clean Air Act Section 111(a), 42 U.S.C. § 7411(a)) of any source or facility. 42 U.S.C. § 7479(2)(C).

34. “Modification” is defined as “any change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.” 42 U.S.C. § 7411(a).

35. The PSD Regulations define “major modification” as “any physical change in or change in the method of operation of a major stationary source that would result in a significant net emission increase of any pollutant subject to regulation under the Act.” 40 C.F.R. § 52.21(b)(2)(i).

36. The PSD Regulations set individual thresholds for each criteria pollutant that define whether a net emissions increase of a pollutant is “significant.” *See* 40 C.F.R. § 52.21(b)(23)(i). For ozone, “significant” means a net emissions increase of, or the potential of a source to emit 40 TPY or more of VOCs or NO_x. *Id.* For NO_x, the significance threshold is 40 TPY. *Id.* For CO, the significance threshold is 100 TPY. *Id.*

37. The PSD Regulations define “net emissions increase” as “the amount by which the sum of the following exceeds zero: (a) any increase in actual emissions from a particular physical change or change in method of operation at a stationary source and (b) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.” 40 C.F.R. § 52.21(b)(3).

38. In an attainment area, a newly constructed stationary source or a major modification to an existing stationary source must install and operate BACT, as defined in 40 C.F.R. § 52.21(b)(12), for each pollutant subject to regulation under the Clean Air Act that it would have the potential to emit in significant amounts or for which the modification would result in a significant net emissions increase. 40 C.F.R. § 52.21(j)(2)-(j)(3).

iv. Non-attainment New Source Review Requirements

39. Part D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7501-7515, sets forth requirements that are intended, *inter alia*, to reduce emissions of air pollutants in areas that have not attained the NAAQS.

40. Clean Air Act Sections 110(a)(2)(C) and (I) and 172(c), 42 U.S.C. §§ 7410(a)(2)(C) and (I) and 7502(c), require that each SIP contain requirements to review and permit newly constructed or modified sources of criteria air pollutants in non-attainment areas (“Non-attainment New Source Review”). Permits for these actions must be issued in accordance with Clean Air Act Section 173, 42 U.S.C. § 7503, and contain requirements that will facilitate “reasonable further progress” towards attainment of NAAQS. 42 U.S.C. § 7502(c)(2) and (c)(5).

41. Clean Air Act Section 173, 42 U.S.C. § 7503, requires that, in order to obtain a permit for the construction or major modification of a major stationary source in a non-attainment area, the owner and operator of the source must, *inter*

alia: (a) comply with the lowest achievable emission rate (“LAER”), as defined in Clean Air Act Section 171(3), 42 U.S.C. § 7501(3); (b) obtain federally enforceable emission offsets at least as great as the new or modified source’s emissions; (c) conduct an air quality impact analysis; and (d) analyze alternative sites, sizes, production processes, and environmental control techniques for the proposed source, and then demonstrate that the benefits of the proposed source significantly outweigh the environmental and social costs imposed due to its location, construction, or modification. 42 U.S.C. §§ 7503(a)–(c); 40 C.F.R. Part 51, Appendix S, Part IV, Conditions 1–4.

42. “Major stationary source” generally means any stationary source with the potential to emit 100 TPY or more of any regulated New Source Review pollutant. 40 C.F.R. § 51.165(a)(1)(iv)(A). However, in areas that are in non-attainment for ozone, lower thresholds may qualify a stationary source of VOCs as a major stationary source. *Id.*

43. “Significant” has the same meaning as under the PSD Regulations, except that under the Non-attainment New Source Review program, lower TPY thresholds may qualify as being significant. 40 C.F.R. § 51.165(a)(1)(x)(B).

v. PSD and Non-attainment New Source Review in Texas and Louisiana

44. Clean Air Act Section 161, 42 U.S.C. § 7471, requires SIPs to contain emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality in attainment areas.

45. A state may comply with Clean Air Act Section 161, 42 U.S.C. § 7471, if the EPA delegates authority to enforce the federal PSD Regulations to the state. A state may also comply by promulgating its own PSD regulations that then must be approved by the EPA as part of the SIP. In order to be approved, the state's PSD regulations must be at least as stringent as the requirements set forth at 40 C.F.R. § 51.166.

46. Clean Air Act Sections 110(a)(2)(C) and (I) and 172(c), 42 U.S.C. §§ 7410(a)(2)(C) and (I) and 7502(c), require that each SIP contain requirements to attain the primary NAAQS in non-attainment areas.

47. A state may comply with Clean Air Act Sections 172 and 173 if EPA delegates authority to enforce the federal Non-attainment New Source Review regulations to the state. A state may also comply by promulgating its own Non-attainment New Source Review regulations that then must be approved by the EPA as part of the SIP. In order to be approved, a state's Non-attainment New Source Review regulations must be at least as stringent as those in 40 C.F.R. § 51.165.

48. The EPA has approved Texas' PSD and Non-attainment New Source Review permit programs. *See* 30 Tex. Admin. Code §§ 116.160–116.163 (PSD program) (approved Sept. 27, 1995, 60 Fed. Reg. 49,781) and 30 Tex. Admin. Code §§ 116.150–116.151 (Non-attainment New Source Review program) (approved Sept. 27, 1995, 60 Fed. Reg. 49,781). *See also* 40 C.F.R. §§ 52.2273 and 52.2303 (EPA approvals of subsequent revisions to Texas PSD and Non-attainment New Source Review program requirements).

49. The EPA has approved Louisiana's PSD and Non-attainment New Source Review permit programs. *See* LAC 33:III.501 and 509 (PSD program) (approved Mar. 8, 1989, 54 Fed. Reg. 9795) and LAC 33:III.504 (Non-attainment New Source Review program) (approved Sept. 30, 2002, 67 Fed. Reg. 61,260). *See also* 40 C.F.R. §§ 52.970 and 52.999(c) (EPA approvals of subsequent revisions to Louisiana PSD and Non-attainment New Source Review program requirements).

50. At all times relevant herein, Texas and Louisiana have been authorized to issue and enforce PSD and Non-attainment New Source Review permits. In all respects relevant to this Complaint, the Texas and Louisiana PSD and Non-attainment New Source Review regulations applicable to this action closely, if not exactly, mirror the federal PSD Regulations and Non-attainment

New Source Review requirements at 40 C.F.R. §§ 51.165 and 51.166, and 40 C.F.R. Part 51, Subpart S, Part IV.

51. Pursuant to Clean Air Act Section 113(b), 42 U.S.C. § 7413(b), and 40 C.F.R. § 52.23, the EPA may enforce violations of Texas' and Louisiana's federally approved PSD program and Non-attainment New Source Review program, as well as violations of permits issued pursuant to those programs.

B. New Source Performance Standards

i. Background

52. Clean Air Act Section 111(b)(1)(A), 42 U.S.C. § 7411(b)(1)(A), requires the EPA to publish and periodically revise a list of categories of stationary sources that, in the EPA's judgment, cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. These categories generally correspond to distinct manufacturing processes or equipment within a given industry. For example, 40 C.F.R. Part 60, Subpart J applies to certain process units found at most petroleum refineries, while 40 C.F.R. Part 60, Subpart VV applies to leaks of VOCs from equipment within the Synthetic Organic Chemicals Manufacturing Industry ("SOCMI").

53. Once a category is included on the list, Clean Air Act Section 111(b)(1)(B), 42 U.S.C. § 7411(b)(1)(B), requires the EPA to promulgate a federal

“New Source Performance Standard” (NSPS) to regulate emissions from new sources within the category.

54. “New source” is defined as any stationary source for which construction or modification is commenced after an applicable NSPS is published or proposed. 42 U.S.C. § 7411(a)(2).

55. “Stationary source” is defined as a building, structure, facility, or installation which emits or may emit any air pollutant. 42 U.S.C. § 7411(a)(3).

56. The NSPS are located at 40 C.F.R. Part 60. 40 C.F.R. § 60.1 explains that the provisions of 40 C.F.R. Part 60 “apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the publication [in Part 60] of any [NSPS] (or, if earlier, the date of publication of any proposed [NSPS]) applicable to that facility.”

57. “Affected facility” is defined as “any apparatus to which a standard is applicable.” 40 C.F.R. § 60.2.

58. Clean Air Act Section 111(e), 42 U.S.C. § 7411(e), prohibits an owner or operator of a new source from operating that source in violation of an NSPS after the effective date of the NSPS applicable to such source.

ii. Part 60, Subpart A: NSPS General Standards

59. Pursuant to Clean Air Act Section 111(b)(1)(B), 42 U.S.C.

§ 7411(b)(1)(B), the EPA promulgated general regulations that apply to all stationary sources subject to a NSPS, regardless of their industrial category. These general NSPS standards are found at 40 C.F.R. Part 60, Subpart A, §§ 60.1 - 60.19 (“NSPS Subpart A”).

a. NSPS Subpart A: Good Air Pollution Control Practices

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

b. NSPS Subpart A: Requirements for Flares Used as Control Devices (40 C.F.R. § 60.18)

61. NSPS Subpart A contains specific regulations that apply to flares that are used as control devices for affected facilities subject to a NSPS. 40 C.F.R. §§ 60.18(b) – (f).

62. Among other things, NSPS Subpart A requires that flares must be: a) designed and operated with no visible emissions (40 C.F.R. § 60.18(c)(1)), b) operated with a flame present at all times (40 C.F.R. § 60.18(c)(2)), c) monitored to ensure that they are operated and maintained in conformance with their design (40 C.F.R. § 60.18(d)), and d) operated at all times when emissions are vented to them (40 C.F.R. § 60.18(e)).

63. NSPS Subpart A also requires, among other things, that: a) the net heating value of gas being combusted in a flare must be 300 British Thermal Units (“BTU”) per standard cubic foot (“scf”) or greater (40 C.F.R. § 60.18(c)(3)(ii)) and b) certain exit velocity requirements must be met for steam-assisted flares (40 C.F.R. § 60.18(c)(4)) and for air-assisted flares (40 C.F.R. § 60.18(c)(5)).

iii. Specific NSPS Categorical Standards

64. Pursuant to Clean Air Act Section 111(b)(1)(A), 42 U.S.C. § 7411(b)(1)(A), the EPA has promulgated NSPS for the following categories of stationary sources, among others:

SOURCE CATEGORY	NSPS REGULATION (40 C.F.R. Part 60)
Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (between Jan. 5, 1981 and Nov. 7, 2006)	Subpart VV - 40 C.F.R. §§ 60.480 – 60.489
Standards of Performance for VOC Emissions from the Polymer Manufacturing Industry	Subpart DDD – 40 C.F.R. §§ 60.560 – 60.566
Standards of Performance for VOC Emissions from Synthetic Organic Chemicals Manufacturing Industry Distillation Operations	Subpart NNN – 40 C.F.R. §§ 60.660 – 60.668

65. Flares used as a control device for affected facilities subject to 40 C.F.R. Part 60, Subparts VV, DDD, or NNN must comply with the requirements of NSPS Subpart A, including 40 C.F.R. §§ 60.11(d) and 60.18.

66. 40 C.F.R. Part 60, Subparts VV, DDD, and NNN explicitly require that flares used as a control device for affected facilities subject to those subparts must comply with the requirements of 40 C.F.R. § 60.18. *See* 40 C.F.R. § 60.482-10(d); 40 C.F.R. §§ 60.562-1(a)(1)(i)(C) and (ii) and 60.562-2; and 40 C.F.R. § 60.662(b).

67. 40 C.F.R. Part 60, Subparts VV and DDD explicitly require that flares used as a control device for affected facilities subject to those subparts must be monitored to ensure that they are operated and maintained in conformance with their design. *See* 40 C.F.R. § 60.482-10(e) and 40 C.F.R. § 60.563(c).

C. Clean Air Act Section 112 Regulation of HAPs Pre-1990

i. Background

68. Clean Air Act Section 112 contains requirements to control certain HAPs, such as benzene. *See* 42 U.S.C. § 7412 and 40 C.F.R. § 61.01(a). These requirements are known as “national emission standards for hazardous air pollutants” (“NESHAPs”). NESHAPs established before the Clean Air Act was amended in 1990 are promulgated at 40 C.F.R. Part 61.

ii. Part 61, Subpart A: NESHAP General Standards

69. Pursuant to Clean Air Act Section 112, 42 U.S.C. § 7412, before it was amended on November 15, 1990 (the “1990 Amendments”), the EPA promulgated general regulations that apply to all stationary sources of HAPs that are subject to the NESHAPs, regardless of their source category. *See* 40 C.F.R. § 61.01(c). These general NESHAP standards are found at 40 C.F.R. Part 61, Subpart A, §§ 61.01–61.19.

70. Like NSPS Subpart A, Subpart A of the NESHAPs requires that “the owner and operator of each stationary source [of HAPs] shall maintain and operate the source, including associated equipment for air pollution control, in a manner consistent with good air pollution control practices for minimizing emissions.” 40 C.F.R. § 61.12(c).

iii. Specific Categorical NESHAPs

71. Pursuant to Clean Air Act Section 112, as it existed before the 1990 Amendments, the EPA promulgated NESHAPs for the following categories of stationary sources of HAPs:

SOURCE CATEGORY	NESHAP (40 C.F.R. Part 61)
National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene	Subpart J - 40 C.F.R. §§ 61.110 – 61.112

National Emission Standard for Equipment Leaks (Fugitive Emission Sources)	Subpart V – 40 C.F.R. §§ 61.240 – 61.247
National Emission Standard for Benzene Waste Operations	Subpart FF – 40 C.F.R. §§ 61.340 – 61.358

72. Flares used as a control device for sources subject to 40 C.F.R. Part 61, Subparts J, V, or FF must comply with the requirements of 40 C.F.R. § 60.18. *See* 40 C.F.R. § 61.112; 40 C.F.R. § 61.242-11(d) and (e); and 40 C.F.R. § 61.349(a)(2)(iii) and (d).

73. Flares used as a control device for sources subject to 40 C.F.R. Part 61, Subparts J, V, or FF must comply with the requirement that each flare be maintained and operated “in a manner consistent with good air pollution control practice for minimizing emissions.” 40 C.F.R. § 61.12(c).

74. The Clean Air Act’s 1990 Amendments did not alter the pre-1990 NESHAPs, and those regulations remain in effect.

D. Clean Air Act Section 112 Regulation of HAPs Post-1990

i. Background

75. The Clean Air Act’s 1990 Amendments amended Clean Air Act Section 112 and updated the program for controlling HAPs. *See* H.R. Rep. No. 101-490, 101st Cong., 2d Sess., Part 1 at 324 (1990).

76. The Clean Air Act's 1990 Amendments established a list of 188 HAPs that Congress determined could cause adverse health or environmental effects. *See* 42 U.S.C. § 7412(b)(1). Pursuant to 42 U.S.C. § 7412(c), the EPA was required to publish a list of all categories and sub-categories of, *inter alia*, major sources of HAPs.

77. Clean Air Act Section 112, as amended, defines "major source" as any stationary source or group of stationary sources located within a contiguous area and under common control that, in the aggregate, emits or has the potential to emit, considering controls, 10 TPY or more of any single HAP or 25 TPY or more of any combination of HAPs. 42 U.S.C. § 7412(a)(1).

78. Clean Air Act Section 112, as amended, defines "stationary source" in the same way as the term is defined under the NSPS. 42 U.S.C. § 7412(a)(3) and 42 U.S.C. § 7411(a)(3).

79. After publishing the list of emission sources required by 42 U.S.C. § 7412(c), the Clean Air Act's 1990 Amendments required the EPA to promulgate regulations establishing emission standards for each category and subcategory of major sources of HAPs. *See* 42 U.S.C. § 7412(d)(1).

80. These emission standards must require the maximum degree of reduction in emissions of HAPs that the EPA, 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 the new or existing sources in the category or subcategory to which the emission standard applies. *See* 42 U.S.C. § 7412(d)(2).

81. If it is not feasible to prescribe or enforce an emission standard for the control of a HAP, the EPA may promulgate “design, equipment, work practice, or operational” standards, which are to be treated as emission standards.

42 U.S.C. § 7412(h).

82. The emission standards promulgated under Clean Air Act Section 112, 42 U.S.C. § 7412, as amended, are classified as NESHAPs, however, they are often also referred to as “maximum achievable control technology” (“MACT”) standards. The MACT regulations are found at 40 C.F.R. Part 63.

83. Clean Air Act Section 112, as amended, prohibits any person from operating a stationary source subject to a MACT regulation in violation of such standard after it becomes effective. *See* 42 U.S.C. § 7412(i)(3).

ii. Part 63, Subpart A: MACT General Standards

84. Pursuant to Clean Air Act Section 112, 42 U.S.C. § 7412, as amended, the EPA promulgated regulations that apply to stationary sources of HAPs that are subject to the MACT standards, regardless of their source category. *See* 40 C.F.R. § 63.1(b) and (c). These general MACT standards are found at 40 C.F.R. Part 63, Subpart A, §§ 63.1–63.16.

85. The categorical MACT standards in Part 63 explicitly identify which specific provisions of the MACT Subpart A regulations apply or do not apply to that source category. *See* 40 C.F.R. § 63.1(a)(4).

a. MACT Subpart A: Good Air Pollution Control Practices

86. Like the good air pollution control practice requirement of NSPS Subpart A and Subpart A of the NESHAPs, the MACT Subpart A regulations require 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.” 40 C.F.R. § 63.6(e)(1)(i).

b. MACT Subpart A: Requirements for Flares Used as Control Devices (40 C.F.R. § 63.11(b))

87. Like NSPS Subpart A, the MACT Subpart A regulations include requirements that apply to flares that are used as control devices for affected sources subject to a MACT standard. *See* 40 C.F.R. § 63.11(b). These requirements generally mirror the requirements of 40 C.F.R. § 60.18.

88. The MACT Subpart A regulations require, among other things, that:

- i. Flares must be monitored to ensure that they are operated and maintained in conformance with their design. *See* 40 C.F.R. § 63.11(b)(1);

- ii. Flares must be operated at all times when emissions are vented to them. *See* 40 C.F.R. § 63.11(b)(3);
- iii. Flares must be designed and operated with no visible emissions. *See* 40 C.F.R. § 63.11(b)(4);
- iv. Flares must be operated with a flame present at all times. *See* 40 C.F.R. § 63.11(b)(5);
- v. Flares must be operated so that the gas being combusted in it has a net heating value of 300 BTU per scf or greater. *See* 40 C.F.R. § 63.11(b)(6)(ii); and
- vi. Flares must be operated in accordance with exit velocity requirements. *See* 40 C.F.R. §§ 63.11(b)(7) (for steam-assisted flares) and 63.11(b)(8) (for air-assisted flares).

iii. Specific Categorical MACT Standards

89. Pursuant to Clean Air Act Section 112(c), 42 U.S.C. § 7412(c), as amended, the EPA promulgated MACT regulations for the following categories of stationary sources of HAPs:

SOURCE CATEGORY	MACT (40 C.F.R. Part 63)
National Emission Standards for Organic HAPs from the Synthetic Organic Chemical Manufacturing Industry	Subpart F - 40 C.F.R. §§ 63.100 – 63.107
National Emission Standards for Organic HAPs from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	Subpart G – 40 C.F.R. §§ 63.110 – 63.123

National Emission Standards for Organic HAPs for Equipment Leaks	Subpart H – 40 C.F.R. §§ 63.160 – 63.183
National Emission Standards for HAPs for Source Categories: Generic Maximum Achievable Control Technology Standards	Subpart YY – 40 C.F.R. §§ 63.1100 – 63.1114
National Emission Standards for HAPs: Miscellaneous Organic Chemical Manufacturing	Subpart FFFF – 40 C.F.R. §§ 63.2430 – 63.2550

90. Flares used as a control device for sources subject to 40 C.F.R. Part 63, Subparts F, G, H, YY, and FFFF must comply with the requirements of 40 C.F.R. § 63.11(b). *See* 40 C.F.R. Part 63, Subpart F, Table 3 (applicability for Subparts F, G, and H); 40 C.F.R. Part 63.113(a)(1)(i) (Subpart G); 40 C.F.R. Part 63.172(d) and (e) (Subpart H); 40 C.F.R. § 63.1103(e), Table 7 (applicability for Subpart YY ethylene production sources) (cross-referencing 40 C.F.R. §§ 63.982(b) and, in turn, 63.987(a)); and 40 C.F.R. Part 63, Subpart FFFF, Table 12.

91. Under 40 C.F.R. Part 63, Subpart YY, owners and operators of an ethylene process vent must abide by the less stringent of two options to control emissions of organic HAPs. Emissions of organic HAPs from an ethylene process vent must either: (i) be reduced by 98 weight-percent, or (ii) be reduced to a concentration of 20 ppmv (of organic HAPs or total organic compounds). These

emissions must be vented through a closed vent system to any combination of control devices, including, but not limited to, flares, and meeting the requirements specified in 40 C.F.R. §§ 63.982(b) and (c)(2). 40 C.F.R. § 63.1103(e)(3) and Table 7 at (d).

92. Flares used as a control device for sources subject to 40 C.F.R. Part 63, Subpart FFFF must comply with the requirement in 40 C.F.R. § 63.6(e)(1)(i) that each flare be maintained and operated “in a manner consistent with good air pollution control practice for minimizing emissions.” *See* 40 C.F.R. Part 63, Subpart FFFF, Table 12.

E. Texas SIP Requirements

93. The federally enforceable Texas SIP includes the following prohibition: “[n]o person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property.” 30 Tex. Admin. Code § 101.4.

94. The federally enforceable Texas SIP contains a general requirement that: “[a]ll pollution emission capture equipment and abatement equipment must be

maintained in good working order and operated properly during facility operations.” 30 Tex. Admin. Code § 101.221(a).

95. The federally enforceable Texas SIP requires that vent gas streams in the Houston-Galveston-Brazoria area and Beaumont-Port Arthur area that contain VOCs may not be emitted from any process vent, unless the vent gas stream is controlled properly in accordance with 30 Tex. Admin. Code § 115.122(a)(1). 30 Tex. Admin. Code § 115.121(a)(1).

96. The federally enforceable Texas SIP requires that vent gas streams from certain chemical manufacturing processes in the Houston-Galveston-Brazoria area and Beaumont-Port Arthur area may not be emitted unless the vent gas stream is controlled in accordance with 30 Tex. Admin. Code § 115.122(a)(2). 30 Tex. Admin. Code § 115.121(a)(2).

97. The federally enforceable Texas SIP requires that any vent gas streams affected by 30 Tex. Admin. Code § 115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices) in a smokeless flare or other specified control systems. 30 Tex. Admin. Code § 115.122(a)(1).

98. The federally enforceable Texas SIP requires that any vent gas streams affected by 30 Tex. Admin. Code § 115.121(a)(2) must be controlled

properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices): (A) in a smokeless flare that is lit at all times when VOC vapors are routed to the flare; or (B) by any other vapor control system, as defined in 30 Tex. Admin. Code §115.10. 30 Tex. Admin. Code § 115.122(a)(2).

99. The federally enforceable Texas SIP requires that any vent gas stream in the Houston-Galveston-Brazoria area which includes a “Highly-Reactive Volatile Organic Compound” (“HRVOC”) is subject to the requirements of 30 Tex. Admin. Code Chapter 115, Subchapter H in addition to the applicable requirements of 30 Tex. Admin. Code Chapter 115, Subchapter B, Division 2. 30 Tex. Admin. Code § 115.121(a)(4).

100. In the Houston/Galveston/Brazoria area, HRVOCs include the compounds listed in 30 Tex. Admin. Code § 115.10(21).

101. The federally enforceable Texas SIP requires that HRVOC emissions at each site in the Houston/Galveston/Brazoria area must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination. 30 Tex. Admin. Code § 115.722(c)(1)-(2).

102. The federally enforceable Texas SIP requires that all flares must continuously meet the requirements of 40 C.F.R. § 60.18(c)(2)-(6) and (d) when vent gas containing HRVOC is being routed to the flare. 30 Tex. Admin. Code

§ 115.722(d).

F. Title V Operating Permits

103. Title V of the Clean Air Act, 42 U.S.C. §§ 7661–7661f, establishes a permit program for certain stationary sources of air pollution, including major sources subject to Clean Air Act Section 111 (NSPS regulations), Section 112 (NESHAP/MACT regulations), or New Source Review requirements. *See* 42 U.S.C. § 7661a(a).

104. The purpose of Title V is to ensure that all “applicable requirements” governing a facility’s compliance with the Clean Air Act, including SIP requirements, are consolidated and expressed in one document – an “operating” permit (*a.k.a.* a “Title V permit”). *See* 42 U.S.C. § 7661c(a).

105. Pursuant to Clean Air Act Section 502(b), 42 U.S.C. § 7661a(b), the EPA promulgated regulations implementing the requirements of Title V and establishing the minimum elements of a Title V permit program to be administered by any state or local air pollution control agency. 57 Fed. Reg. 32250 (July 21, 1992). These regulations are codified at 40 C.F.R. Part 70.

106. EPA has approved Texas’ Title V air operating permit program. 30 Tex. Admin. Code, Chapter 122. *See* 66 Fed. Reg. 63,318 (Dec. 6, 2001). Texas is therefore authorized to issue and enforce Title V permits in the State of Texas.

The regulations governing Texas' Title V air operating permit program are set forth at 30 Tex. Admin. Code, Chapter 122 (Federal Operating Permits Program).

107. EPA has approved Louisiana's Title V air operating permit program. 60 Fed. Reg. 47,296-97 (Sept. 12, 1995) (effective October 12, 1995); 40 C.F.R. Part 70 Appendix A. Louisiana is therefore authorized to issue and enforce Title V permits in the State of Louisiana. The regulations governing Louisiana's Title V air operating permit program are set forth at LAC Title 33, Part III, Chapter 5 ("Permit Procedures").

108. In all respects relevant to this Complaint, the Title V regulations of Texas and Louisiana closely mirror the federal Title V regulations codified at 40 C.F.R. Part 70.

109. Clean Air Act Section 504(a), 42 U.S.C. § 7661c(a), the implementing regulations at 40 C.F.R. § 70.6(a) and (c), and the Title V permit programs of Texas and Louisiana require that each Title V permit include, among other things, enforceable emission limitations, compliance schedules, and such other conditions as are necessary to assure compliance with "applicable requirements" of the Clean Air Act and the requirements of the relevant SIP. *See* LAC 33:III.501.C and 507.A.3; 30 Tex. Admin. Code § 122.142.

110. "Applicable requirements" are defined to include any relevant NSPS, NESHAP/MACT, and New Source Review requirements. *See* 40 C.F.R. § 70.2;

see also LAC 33:III.502 (defining “Federally Applicable Requirement”); 30 Tex. Admin. Code § 122.10(I).

111. Clean Air Act Section 502(a), 42 U.S.C. § 7661a(a), and the Title V permit programs of Texas and Louisiana prohibit violations of any requirement of a Title V permit. *See* LAC 33:III.501.C and 507.B; 30 Tex. Admin. Code § 122.143(4).

112. Clean Air Act Section 502(a), 42 U.S.C. § 7661a(a), the implementing regulations at 40 C.F.R. §§ 70.1(b) and 70.7(b), and the Title V permit programs of Texas and Louisiana provide that no source subject to Title V may operate except in compliance with a Title V permit. *See* LAC 33:III.501.C and 507.B; 30 Tex. Admin. Code § 122.121.

113. Under Louisiana’s operating permit program, no construction, modification, or operation of a facility that ultimately may result in an initiation or increase in emissions may begin until a Title V permit has been approved and issued by LDEQ. LAC 33:III.501.C, 507.B.2, and 517.A. Any such permit issued must incorporate all federally applicable requirements. *See* LAC 33:III.501.C, 507.A.3, and 507.B.2.

114. Clean Air Act Section 503(c), 42 U.S.C. § 7661b(c), the implementing regulations at 40 C.F.R. § 70.5(a), and the Title V permit programs

of Texas and Louisiana provide that each owner and operator of a source subject to Title V permitting requirements must submit a permit application.

115. Clean Air Act Section 503(b), 42 U.S.C. § 7661b(b), and 40 C.F.R. §§ 70.5(a)(2) and (c), provide that any person required to have a Title V permit must submit, among other things as part of its permit application, a compliance plan to the permitting authority that describes how the source will comply or come into compliance with each applicable requirement of the Clean Air Act. *See also* LAC 33:III.501.C, 507.H, and 517.D and E; 30 Tex. Admin. Code §§ 122.130 - 122.134 and 122.142 - 122.148.

116. In addition, the Title V permit application must contain information sufficient to evaluate the relevant characteristics of the source and its permit application, and to determine all applicable requirements (including any requirement to meet the applicable control technology requirements under the PSD and Non-attainment New Source Review programs, and requirements to comply with the applicable NSPS and/or NESHAP/MACT standards). *See* 40 C.F.R. § 70.5(a) and (c); LAC 33:III.501.C, 507.H, and 517.B, D, and E; 30 Tex. Admin. Code §§ 122.132 - 122.134 and 122.142 - 122.148.

117. The permit application must also contain a compliance plan for all applicable requirements for which the source is not in compliance and a

certification of compliance with all applicable requirements. *See* 42 U.S.C. § 7661b(b) and 40 C.F.R. § 70.5(a) and (c)(8)-(9).

118. Under 40 C.F.R. § 70.5(b) and the Title V permit programs of Texas and Louisiana, any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. *See* LAC 33:III.501.C, and 517(C); 30 Tex. Admin. Code § 122.136.

119. All terms and conditions of a Title V permit are enforceable by the EPA. 42 U.S.C. § 7413(b); 40 C.F.R. § 70.6(b).

G. Enforcement of the Clean Air Act

120. Clean Air Act Sections 113(a)(1) and (a)(3), 42 U.S.C. §§ 7413(a)(1) and (a)(3), authorize the EPA to bring a civil action under Section 113(b) whenever, on the basis of any information available to the EPA, the EPA finds that any person has violated or is in violation of, *inter alia*, any requirement or prohibition of a SIP, PSD or Non-attainment New Source Review requirement, a PSD or Non-attainment New Source Review permit, NSPS requirements, NESHAP/MACT requirements, the Title V permit program, or a Title V permit.

121. Clean Air Act Section 113(b), 42 U.S.C. § 7413(b), authorizes the EPA to initiate a judicial enforcement action for a permanent or temporary

injunction to address Clean Air Act violations, as well as to seek civil penalties of up to \$32,500 per day for each violation that occurs between March 16, 2004 and January 12, 2009; up to \$37,500 per day for each violation that occurs between January 13, 2009 and November 2, 2015, and up to \$95,284 per day for each violation that occurs after November 2, 2015. *See* Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 (note), as amended by 31 U.S.C. § 3701 (note); 40 C.F.R. § 19.4; and 82 Fed. Reg. 3633 (January 12, 2017).

122. La. R.S. 30:2025(E)(1)(a) authorizes civil penalties “of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than [\$32,500] for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than [\$1,000,000].” Further, LDEQ is entitled to injunctive relief without the requisite showing of irreparable injury when the conduct sought to be restrained is unconstitutional or unlawful, *i.e.*, when the conduct sought to be enjoined constitutes a direct violation of a prohibitory law and/or a violation of a constitutional right. *Jurisich v. Jenkins*, 749 So. 2d 597 (La. 1999).

GENERAL ALLEGATIONS

123. A flare is a combustion device that uses an uncontrolled volume of ambient air to burn and dispose of gases generated by industrial manufacturing processes. Flares are used at chemical manufacturing processes like the Defendants' Facilities, petroleum refineries, and other types of facilities.

124. Gas generated by facility operations that is directed to a flare for combustion is known as "vent gas."

125. "Steam-assisted" flares use steam that is piped to the flare tip and injected into the combustion zone to assist in combustion by promoting turbulence within a flare's flame.

126. "Air-assisted" flares inject air via fans or other means to the flare tip to assist in combustion by promoting turbulence within a flare's flame.

127. Flares constitute "air pollution control equipment" within the meaning of 40 C.F.R. §§ 60.11(d), 61.12(c), and 63.6(e)(1)(i).

128. Flares constitute a "combustion device" and "control equipment" within the meaning of LAC Title 33, Part III, Chapter 1.

129. Flares are designed, in part, to achieve high combustion efficiency of VOCs and HAPs.

130. The steam-to-vent-gas ratio (sometimes referred to as "S:VG") is one operational parameter used to monitor flare operation and combustion efficiency.

The net heating value (“NHV”) of the gases in the combustion zone of a flare (“Combustion Zone Gas”) is another operational parameter that is an indicator of flare combustion efficiency.

131. As part of its design, a steam-assisted flare must be operated within a range of steam-to-vent gas ratios that, at one end, avoids smoking through an insufficient steam-to-vent gas ratio, and on the other end, avoids incomplete combustion due to an excessive steam-to-vent gas ratio. Both insufficient and excessive steam-to-vent gas ratios reduce VOC and HAP combustion efficiency below a flare’s designed efficiency.

132. Air-assisted flares must be also operated within a range of assist-air-to-vent gas ratios so that these flares achieve their designed combustion efficiency.

133. Excessive levels of assist-steam or assist-air will reduce combustion efficiency and may effectively quench or snuff the flame.

134. In order to monitor an assisted flare to ensure that it is operated and maintained in conformance with its design, several actions must be taken. The amount of vent gas and either assist-steam or assist-air flowing to the flare must be monitored. The ratio of the flows of vent gas to either assist-steam or assist-air must be calculated. And, the flow of assist-steam or assist-air must be subject to sufficient control to enable increasing or decreasing it in order to maintain a

design-appropriate steam-to-vent gas ratio or air-to-vent gas ratio and a high VOC combustion efficiency.

135. Good air pollution control practices to minimize emissions from flares include, *inter alia*, combusting essentially all molecules of hydrocarbons (which include VOCs) and HAPs in the vent gas sent to a flare. In order to allow for complete combustion of these substances, vent gas must have sufficient heating value and oxygen.

136. For assisted flares, good air pollution control practices to minimize emissions from flares requires, *inter alia*, injecting either assist-steam or assist-air at a rate that maximizes flame stability and flare combustion efficiency.

137. In order to inject assist-steam or assist-air at a proper rate, good air pollution control practices to minimize emissions from assisted flares includes taking the following actions. The amount of vent gas and either assist-steam or assist-air flowing to the flare must be monitored. The ratio of the flows of vent gas to either assist-steam or assist-air must be calculated. And, the flow of assist-steam or assist-air must be subject to sufficient control to enable increasing or decreasing it in order to optimize the S:VG or assist-air-to-vent gas ratio, maintain a sufficient NHV of the Combustion Zone Gas, and maintain a high VOC and HAP combustion efficiency.

138. At all times relevant to the Complaint, Defendant Exxon Mobil Corporation, directly or through Exxon Mobil Chemical Company, or a predecessor-in-interest, has owned and operated: a) five steam-assisted flares located at the Baton Rouge Chemical Plant (Flare 7, Flare 10, Flare 16, Flare 25, and Flare 26), b) three flares located at the Baton Rouge Plastics Plant (Flare 1 and Flare 3, both of which are steam-assisted, and the Finishing Flare, which is air-assisted), and c) two flares located at the Baton Rouge Polyolefins Plant (Flare S-1301 and Flare S-4001, both of which are steam-assisted). These ten flares are collectively referred to as the “Baton Rouge Flares.”

139. At all times relevant to the Complaint, Defendant Exxon Mobil Corporation, directly or through Exxon Mobil Chemical Company, or a predecessor-in-interest, has owned and operated: a) four steam-assisted flares located at the Baytown Chemical Plant (FS-9, FS-12, FS-23, and FS-24) and b) three steam-assisted flares located at the Baytown Olefins Plant (Primary Flare, Secondary Flare, and BOP-X Flare). These seven flares are collectively referred to as the “Baytown Flares.”

140. At all times relevant to the Complaint, Defendant ExxonMobil Oil Corporation, or a predecessor-in-interest, has owned and operated: a) five steam-assisted flares located at the Beaumont Chemical Plant (LP East, HP West, UDEX, Paraxylene, and CS), and b) two air-assisted flares located at the Beaumont

Polyethylene Plant (LP and HP). These seven flares are collectively referred to as the “Beaumont Flares.”

141. At all times relevant to the Complaint, subject to a reasonable opportunity for further investigation and discovery, each of the Defendants’ Facilities is a chemical process plant that has emitted or had the potential to emit at least 100 TPY of NO_x and VOCs.

142. At all times relevant to the Complaint, subject to a reasonable opportunity for further investigation and discovery, each of the Defendants’ Facilities is a chemical process plant that has emitted or had the potential to emit at least 10 TPY or more of any individual HAP or 25 TPY or more of any combination of HAPs.

143. At all times relevant to the Complaint, subject to a reasonable opportunity for further investigation and discovery, each of the Defendants’ Facilities has met the definition of:

- a. “Major emitting facility,” as defined by Clean Air Act Section 169(1), 42 U.S.C. § 7479(1), and the implementing New Source Review regulations;
- b. “Major stationary source,” as defined by 40 C.F.R. § 52.21(b)(1)(i)(a);
- c. “Stationary source” as defined by 42 U.S.C. § 7411(a)(3) and the implementing NSPS regulations;
- d. “Major source” of HAPs, as defined by 42 U.S.C. § 7412(a)(1) and the implementing NESHAP and MACT regulations; and

- e. “Major source,” as defined by 42 U.S.C. § 7661(a)(2) and the implementing Clean Air Act Title V regulations.

144. At all times relevant to the Complaint, subject to a reasonable opportunity for further investigation and discovery, each of the Baytown Facilities and Beaumont Facilities has met the definitions in the federally approved Texas SIP that adopt, incorporate, and/or implement the programs and regulations listed in Paragraph 143.

145. At all times relevant to the Complaint, subject to a reasonable opportunity for further investigation and discovery, both of the Baton Rouge Facilities have met the definitions in the federally approved Louisiana SIP that adopt, incorporate, and/or implement the programs and regulations listed in Paragraph 143.

146. At all times relevant to this Complaint, each of the Baytown Facilities and Beaumont Facilities has been subject to the Title V permitting requirements in 40 C.F.R. Part 70 and the federally approved Texas SIP.

147. At all times relevant to this Complaint, both of the Baton Rouge Facilities have been subject to the Title V permitting requirements in 40 C.F.R. Part 70 and the federally approved Louisiana SIP.

A. NSPS general allegations:

- i. NSPS Subpart VV (Equipment Leaks of VOCs from SOCFMI Sources)

148. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Olefins Plant and at one or more other of the Defendants' Facilities has been subject to the requirements of NSPS Subpart VV. 40 C.F.R. § 60.482-10.

149. At all times relevant to this Complaint, the Defendants have owned and operated SOCFMI process units, within the meaning of NSPS Subpart VV, at the Baytown Olefins Plant and at one or more other of the Defendants' Facilities. 40 C.F.R. § 60.480(a).

150. At all times relevant to this Complaint, the Defendants have owned and operated equipment that is subject to NSPS Subpart VV within SOCFMI process units at the Baytown Olefins Plant and at one or more other of the Defendants' Facilities. The group of all of the following types of equipment within the SOCFMI process units constitutes an affected facility within the meaning of NSPS Subpart VV: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, and flanges or other connectors in VOC service and/or devices or systems required by NSPS Subpart VV. 40 C.F.R. § 60.480(a).

151. At all times relevant to this Complaint, the Defendants have used one or more closed vent systems and flares as control devices to comply with provisions of NSPS Subpart VV at the Baytown Olefins Plant and at one or more other of the Defendants' Facilities. 40 C.F.R. § 60.482-10.

ii. NSPS Subpart DDD (VOC Emissions from Polymer Manufacturing)

152. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Chemical Plant, Beaumont Polyethylene Plant, and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities, has been subject to the requirements of NSPS Subpart DDD. 40 C.F.R. § 60.560-1(a)(1).

153. At all times relevant to this Complaint, the Defendants have owned and operated process units and equipment involved in the manufacture of polypropylene, polyethylene, polystyrene, and/or poly (ethylene terephthalate), as defined in 40 C.F.R. § 60.561, at the Baytown Chemical Plant, Beaumont Polyethylene Plant, and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 60.560(a).

154. The process units and equipment involved in the manufacture of polypropylene, polyethylene, polystyrene, and/or poly (ethylene terephthalate), as

defined in 40 C.F.R. § 60.561, constitute affected facilities within the meaning of NSPS Subpart DDD. 40 C.F.R. § 60.560(a).

155. At all times relevant to this Complaint, the Defendants have used one or more flares to control continuous emission streams from affected facilities subject to NSPS Subpart DDD at the Baytown Chemical Plant, Beaumont Polyethylene Plant, and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. §§ 60.560-1(a)(1)(i)(C) and (ii) and 60.563(c).

iii. NSPS Subpart NNN (VOC Emissions from SOCFI Distillation Units)

156. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Facilities and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities, has been subject to the requirements of NSPS Subpart NNN. 40 C.F.R. § 60.662(b).

157. At all times relevant to this Complaint, the Defendants have owned and operated distillation units, which are affected facilities within the meaning of NSPS Subpart NNN, that produce one or more of the chemicals listed in 40 C.F.R. § 60.667 at the Baytown Facilities and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 60.660(a) and (b).

158. At all times relevant to this Complaint, the Defendants have used one or more flares to combust vent streams and emissions from affected facilities subject to NSPS Subpart NNN at the Baytown Facilities and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 60.662(b).

B. NESHAP general allegations:

- i. Part 61, Subpart J (NESHAP for Equipment Leaks (Fugitive Emission Sources) of Benzene)

159. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities, has been subject to the requirements of 40 C.F.R. Part 61, Subpart J. 40 C.F.R. § 61.112(a); 40 C.F.R. § 61.242-11(d) and (e).

160. At all times relevant to this Complaint, the Defendants have owned and operated equipment, including pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and/or control devices or systems, that either contain or contact a liquid or gas that is at least 10 percent benzene by weight, as determined according to the provisions of 40 C.F.R. § 61.245(d), at the Baytown Olefins Plant and, subject to a reasonable opportunity for further

investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 61.110(a).

161. This equipment constitutes equipment "in benzene service" and an affected source within the meaning of 40 C.F.R. Part 61, Subpart J. 40 C.F.R. § 60.110(a).

162. At all times relevant to this Complaint, the Defendants have used one or more closed vent systems and flares as control devices for the equipment subject to the NESHAP for Equipment Leaks (Fugitive Emission Sources) of Benzene at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 61.112(a); 40 C.F.R. § 61.242-11(d) and (e).

ii. Part 61, Subpart V (NESHAP for Equipment Leaks (Fugitive Emission Sources))

163. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities, has been subject to the requirements of 40 C.F.R. Part 61, Subpart V. 40 C.F.R. § 61.242-11(d) and (e).

164. At all times relevant to this Complaint, the Defendants have owned and operated equipment, including pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors,

surge control vessels, bottoms receivers, and/or control devices or systems, that either contain or contact a liquid or gas that is at least 10 percent by weight a volatile HAP, as determined according to the provisions of 40 C.F.R. § 61.245(d), at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 61.240(a).

165. This equipment constitutes equipment in "volatile hazardous air pollutant service" and an affected source within the meaning of 40 C.F.R. Part 61, Subpart V. 40 C.F.R. § 60.240(a).

166. At all times relevant to this Complaint, the Defendants have used one or more closed vent systems and flares as control devices for the equipment subject to the NESHAP for Equipment Leaks (Fugitive Emission Sources), Subpart V at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 61.242-11(d) and (e).

iii. Part 61, Subpart FF (NESHAP for Benzene Waste Operations)

167. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Facilities, Beaumont Chemical Plant, Baton Rouge Chemical Plant, and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities, has been subject

to the requirements of 40 C.F.R. Part 61, Subpart FF. 40 C.F.R. § 61.349(a)(2)(iii) and (d).

168. At all times relevant to this Complaint, the Baytown Facilities, Beaumont Chemical Plant, Baton Rouge Chemical Plant, and, subject to a reasonable opportunity for further investigation and discovery, one or more other of the Defendants' Facilities have been chemical manufacturing plants within the meaning of 40 C.F.R. Part 61, Subpart FF. 40 C.F.R. § 61.341.

169. Chemical manufacturing plants as defined by 40 C.F.R. § 61.341, including the Baytown Facilities, Beaumont Chemical Plant, Baton Rouge Chemical Plant, and, subject to a reasonable opportunity for further investigation and discovery, one or more other of the Defendants' Facilities, are affected sources within the meaning of 40 C.F.R. Part 61, Subpart FF. 40 C.F.R. § 61.340(a).

170. At all times relevant to this Complaint, the Defendants have owned and operated one or more process units that generate benzene-containing waste streams subject to the NESHAP for Benzene Waste Operations at the Baytown Facilities, Beaumont Chemical Plant, Baton Rouge Chemical Plant, and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 60.342(c).

171. At all times relevant to this Complaint, the Defendants have used one or more closed vent systems and flares as control devices for the benzene-

containing waste streams and process units subject to the NESHAP for Benzene Waste Operations at the Baytown Facilities, Beaumont Chemical Plant, Baton Rouge Chemical Plant, and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 61.349(a)(2)(iii) and (d).

C. MACT general allegations:

i. Part 63, Subparts F, G, and H – the “HON” MACT standards

172. 40 C.F.R. Part 63, Subparts F, G, and H set forth a group of related Clean Air Act requirements for stationary sources involved in synthetic organic chemical manufacturing (“SOCMI Sources”). This set of regulations is sometimes referred to as the “hazardous organic NESHAP” (“HON”) standards.

173. 40 C.F.R. Part 63, Subpart F provides general applicability criteria for SOCMI Sources, including whether certain SOCMI Sources are, in turn, subject to 40 C.F.R. Part 63, Subpart G (for process vents, storage vessels, transfer operations, and wastewater at SOCMI Sources) and Subpart H (for equipment leaks from SOCMI Sources). 40 C.F.R. § 63.110(a).

174. Owners and operators of SOCMI Sources that are subject to 40 C.F.R. Part 63, Subpart F are required to comply with applicable parts of 40 C.F.R. Part 63, Subparts G and H. 40 C.F.R. § 63.102(a).

175. The affected source under the HON standards also includes equipment required by or used as a method of compliance with 40 C.F.R. Part 63, Subparts F, G, or H, including control devices such as flares. 40 C.F.R. § 63.100(e).

176. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Facilities, Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities, has been subject to the requirements of 40 C.F.R. Part 63, Subparts F, G, and/or H.

177. At all times relevant to this Complaint, the Defendants have owned and operated "chemical manufacturing process units" within the meaning of 40 C.F.R. § 63.101(b) at the Baytown Facilities, Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities.

178. At all times relevant to this Complaint, the Defendants have manufactured as a primary product one or more of the chemicals listed in Table 1 of 40 C.F.R. Part 63, Subpart F at the Baytown Facilities, Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities. 40 C.F.R. § 63.100(b). These chemicals include benzene, butadiene, hexane, isobutylene, methyl ethyl ketone, naphthalene, and phthalic anhydride.

179. At all times relevant to this Complaint, the Defendants have used as a reactant or manufactured as a product, or co-product, one or more of the organic HAPs listed in Table 2 of 40 C.F.R. Part 63, Subpart F at the Baytown Facilities,

Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities. 40 C.F.R. § 63.100(b). These organic HAPs include benzene, butadiene, hexane, naphthalene, and phthalic anhydride.

180. At all times relevant to this Complaint, the Defendants have owned and operated process vents within SOCFI Sources that are subject to 40 C.F.R. Part 63, Subpart F at the Baytown Facilities, Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities. These process vents are affected sources subject to the requirements of 40 C.F.R. Part 63, Subpart G. 40 C.F.R. § 63.110(a).

181. At all times relevant to this Complaint, the Defendants have owned and operated equipment within SOCFI Sources that are subject to 40 C.F.R. Part 63, Subpart F, or subject to other subparts of 40 C.F.R. Part 63 that reference 40 C.F.R. Part 63, Subpart H, at the Baytown Facilities, Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities. This equipment includes pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and/or control devices or closed vent systems required by 40 C.F.R. Part 63, Subpart H that are intended to operate in organic HAP service 300 hours or more during the calendar year. This equipment

is an affected source subject to the requirements of 40 C.F.R. Part 63, Subpart H. 40 C.F.R. § 63.160(a).

182. At all times relevant to this Complaint, the Defendants have used one or more closed vent systems and flares as control devices for SOCFI Sources, process vents, and equipment subject to 40 C.F.R. Part 63, Subparts F, G, and/or H at the Baytown Facilities, Baton Rouge Chemical Plant, and at one or more other of the Defendants' Facilities. 40 C.F.R. Part 63, Subpart F, Table 3 (applicability for Subparts F, G, and H); 40 C.F.R. Part 63.113(a)(1)(i) (Subpart G); 40 C.F.R. Part 63.172(d) and (e) (Subpart H).

- ii. Part 63, Subpart YY (MACT for Ethylene Production Process Vents and Equipment)

183. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Olefins Plant, and subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities, has been subject to the requirements of 40 C.F.R. Part 63, Subpart YY.

184. At all times relevant to this Complaint, the Defendants have owned and operated ethylene process vents from continuous ethylene production unit operations within the meaning of 40 C.F.R. § 63.1103(e)(2) at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. These process vents are affected sources within the ethylene production source category regulated by

40 C.F.R. Part 63, Subpart YY. 40 C.F.R. §§ 63.1100(a), Table 1 and 63.1103(e)(1)(i)(B).

185. At all times relevant to this Complaint, the Defendants have owned and operated equipment that contains or contacts organic HAPs within the meaning of 40 C.F.R. § 63.1101 and that is subject to 40 C.F.R. Part 63, Subpart YY. This equipment includes pumps, compressors, agitators, pressure relief devices, sampling collection systems, open-ended valves or lines, valves, connectors, and/or instrumentation systems in organic HAP service, as defined in 40 C.F.R. § 63.1103, for the ethylene production process unit(s) at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. This equipment is an affected source under 40 C.F.R. Part 63, Subpart YY. 40 C.F.R. § 63.1103(e)(1)(i)(D).

186. At all times relevant to this Complaint, the Defendants have used one or more closed vent systems and flares as control devices for the process vents and equipment subject to 40 C.F.R. Part 63, Subpart YY at the Baytown Olefins Plant and, subject to a reasonable opportunity for further investigation and discovery, at one or more other of the Defendants' Facilities. 40 C.F.R. § 63.1103(e), Table 7 (for process vents, cross-referencing to: 40 C.F.R. § 63.982(b) and, in turn, 40 C.F.R. § 63.987(a)) and (for equipment, cross-referencing to: 40 C.F.R. § 63.1034(b)(2)(iii) and, in turn, 40 C.F.R. § 63.987(a)).

D. Texas SIP general allegations:

187. At all times relevant to this Complaint, one or more flares used by the Defendants at the Baytown Facilities has been subject to the requirements of 30 Tex. Admin. Code Chapter 115, Subchapter B, Division 2 and Subchapter H, Division 1. 30 Tex. Admin. Code § 115.121(a)(4).

188. At all times relevant to this Complaint, one or more flares used by the Defendants at the Beaumont Facilities and Beaumont Facilities has been subject to the requirements of 30 Tex. Admin. Code Chapter 115, Subchapter B, Division 2. 30 Tex. Admin. Code § 115.121(a)(1) and (2).

189. At all times relevant to this Complaint, the Defendants used one or more flares at the Baytown Facilities and Beaumont Facilities to control vent gas streams that contained VOCs from process vents within the meaning of 30 Tex. Admin. Code § 115.10. 30 Tex. Admin. Code § 115.121(a)(1).

190. At all times relevant to this Complaint, the Defendants used one or more flares at the Baytown Facilities and Beaumont Facilities to control vent gas streams that were emitted from the one or more of the following processes listed at 30 Tex. Admin. Code § 115.121(a)(2): a) SOCFI reactor processes or distillation operations, b) air oxidation synthetic organic chemical manufacturing processes, c) liquid phase polypropylene manufacturing processes, d) liquid phase slurry high-

density polyethylene manufacturing process, and/or e) continuous polystyrene manufacturing processes.

191. At all times relevant to this Complaint, the Defendants used one or more flares at the Baytown Facilities to control vent gas streams that contained HRVOCs within the meaning of 30 Tex. Admin. Code § 115.10(21). 30 Tex. Admin. Code § 115.121(a)(4). Subject to a reasonable opportunity for investigation and discovery, these HRVOCs included 1,3-butadiene, butene, ethylene, and propylene.

192. At all times relevant to this Complaint, the flares used by the Defendants at the Baytown Facilities and the Beaumont Facilities constituted “pollution emission capture equipment and abatement equipment” within the meaning of 30 Tex. Admin. Code § 101.221(a).

E. Title V general allegations:

193. At all times relevant to this Complaint, each of the Baytown Facilities and Beaumont Facilities has been subject to a federally enforceable Title V permit that has been issued pursuant to the Texas SIP.

194. At all times relevant to this Complaint, the Baytown Olefins Plant has been subject to Federal Operating Permit O1553, or a successor Title V permit, which requires, among other things, that the X Flare, Primary Flare, and Secondary Flare comply with the requirements of 40 C.F.R. §§ 60.11(d) and 61.12(c).

195. At all times relevant to this Complaint, Federal Operating Permit O1553, or a successor Title V permit, has required that the X Flare, Primary Flare, and Secondary Flare at the Baytown Olefins Plant comply with 30 Tex. Admin. Code § 101.221(a) and 30 Tex. Admin. Code, Chapter 115, including §§ 115.122(a)(2)(A) and 115.722(c)(1) and (d).

196. At all times relevant to this Complaint, the Baytown Chemical Plant has been subject to Federal Operating Permits O1278 and O02270, or successor Title V permits. Federal Operating Permit O1278 requires, among other things, that Flares FS9, FS23, and FS24 comply with the requirements of 40 C.F.R. §§ 60.11(d) and 61.12(c).

197. At all times relevant to this Complaint, Federal Operating Permits O1278 and O02270 have also required that Flares FS9, FS23, and FS24 comply with 30 Tex. Admin. Code § 101.221(a); 30 Tex. Admin. Code, Chapter 115, including §§ 115.122(a)(2)(A) and 115.722(c)(1) and (d); 40 C.F.R. Part 63, Subparts G and FFFF; 40 C.F.R. § 60.18; and 40 C.F.R. § 63.11.

198. At all times relevant to this Complaint, the Beaumont Polyethylene Plant has been subject to Federal Operating Permits O1243, O2277, and 8758, or successor Title V permits. Federal Operating Permits O1243, O2277, and 8758 require, among other things, that the LP and HP Flares comply with the

requirements of 40 C.F.R. § 60.18; 40 C.F.R. Part 60, Subpart DDD; 40 C.F.R. Part 63 Subpart A, F, G, H, and FFFF; and 30 Tex. Admin. Code § 101.221(a).

199. At all times relevant to this Complaint, each of the Baton Rouge Facilities has been subject to a federally enforceable Title V permit that has been issued pursuant to the Louisiana SIP.

FIRST CLAIM FOR RELIEF

(Violations of New Source Review Requirements)

200. Paragraphs 5–51, 113, and 120–145 are re-alleged and incorporated by reference.

201. Subject to a reasonable opportunity for investigation and discovery, from 2006 to the present, the Defendants “commenced construction” of one or more “major modification[s],” as defined in the Clean Air Act, Texas SIP, and Louisiana SIP, at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant.

202. Subject to a reasonable opportunity for investigation and discovery, the Defendants made physical changes and/or changes in the methods of operation to one or more of the flares or closed vent systems (also known as flare “headers”) that transport gases from manufacturing process units to the flares at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant. Subject to a reasonable opportunity for investigation and

discovery, these modifications included changes to the flare stacks, flare tips, main flare headers, and/or process unit sub-headers.

203. Subject to a reasonable opportunity for investigation and discovery, one or more of these modifications resulted in a significant net emissions increase of NO_x, VOCs, and/or CO from one or more of the flares at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant.

204. The Defendants did not apply for, obtain, or operate pursuant to either a PSD permit or a Non-attainment New Source Review permit, as applicable, for any of these major modifications.

205. Subject to a reasonable opportunity for investigation and discovery, the Defendants failed to comply with various requirements of the PSD Regulations for NO_x, VOCs and/or CO, at the Beaumont Chemical Plant and for NO_x and/or CO at the Baytown Chemical Plant, Baytown Olefins Plant, and/or Baton Rouge Chemical Plant. Subject to a reasonable opportunity for investigation and discovery, the Defendants failed to, among other things: (i) install and operate BACT for the flare systems for one or more flares at these facilities; (ii) demonstrate that the emissions increases from the modifications would not cause or contribute to violations of air quality standards; and (iii) otherwise comply

with the requirements of the PSD program and the corresponding implementing provisions of the Texas SIP and Louisiana SIP.

206. Subject to a reasonable opportunity for investigation and discovery, the Defendants failed to comply with various requirements of the Non-attainment New Source Review regulations for VOCs at the Baytown Chemical Plant, Baytown Olefins Plant, and/or Baton Rouge Chemical Plant. Subject to a reasonable opportunity for investigation and discovery, the Defendants have failed to, among other things: (i) install and operate LAER on the flare systems for one or more of these facilities; (ii) secure emissions reductions (offsets) from existing sources in the same air quality region where these facilities are located such that there would be reasonable progress toward attainment of the applicable NAAQS; and (iii) otherwise comply with the requirements of the Non-attainment New Source Review regulations and the corresponding implementing provisions of the Texas SIP and Louisiana SIP.

207. Subject to a reasonable opportunity for investigation and discovery, since the time the Defendants commenced construction of the major modifications alleged herein, the Defendants have violated:

- (a) 42 U.S.C. § 7475(a);
- (b) 40 C.F.R. §§ 52.21(a)(2)(iii) and 52.21(i)–52.21(r)(5);
- (c) 42 U.S.C. §§ 7502(c)(5), 7503(a)–(c);

- (d) 40 C.F.R. Part 51, Appendix S, Part IV, Conditions 1–4; and
- (e) The federally enforceable corollary provisions of the Texas SIP and Louisiana SIP that adopt, incorporate, and/or implement the requirements cited in sub-paragraphs 207(a)–(d).

208. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

209. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4. Defendant Exxon Mobil Corp. is also liable for injunctive relief and civil penalties pursuant to La. R.S. 30:2025(E)(1)(a) for the violations set forth above that occurred at the Baton Rouge Facilities.

SECOND CLAIM FOR RELIEF

(Violations of Title V Requirements for New Source Review Violations)

210. Paragraphs 5–51, 103–147, 193–199, and 201–207 are re-alleged and incorporated by reference.

211. Subject to a reasonable opportunity for investigation and discovery, as alleged in the First Claim for Relief, the Defendants commenced construction of one or more major modifications at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant. These activities triggered requirements, *inter alia*, to: a) obtain PSD and/or Non-attainment New Source Review permits establishing emissions limitations that

meet BACT or LAER, as applicable, for one or more of the flares at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant, b) operate in compliance with BACT or LAER, as applicable, at one or more of these flares, and c) otherwise comply with the requirements of the PSD or Non-attainment New Source Review permit programs, as applicable. Subject to a reasonable opportunity for investigation and discovery, the Defendants failed to comply with these requirements.

212. Subject to a reasonable opportunity for investigation and discovery, the Defendants failed to submit complete and timely applications for Title V operating permits for one or more of the flares at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant that, *inter alia*, included enforceable BACT or LAER limits, identified all applicable requirements, accurately certified compliance with such requirements, and contained a compliance plan for all applicable requirements for which the flares were not in compliance.

213. In the alternative, the Defendants failed to supplement and correct previously submitted incorrect or incomplete Title V permit applications in order to: a) seek enforceable BACT or LAER limits, as applicable, for one or more of the flares at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant, b) identify all applicable requirements,

c) accurately certify compliance with such requirements, and d) include a compliance plan for requirements for which the flares were not in compliance.

214. Subject to a reasonable opportunity for investigation and discovery, the Defendants have operated, and continue to operate, the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant without having valid Title V operating permits. The Defendants' Title V operating permits failed to, among other things, require compliance with BACT or LAER, as applicable, for one or more of the flares at the Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, and/or Baton Rouge Chemical Plant, failed to identify all applicable requirements, and/or failed to contain a compliance plan for coming into compliance with BACT or LAER, as applicable, at the flares.

215. Subject to a reasonable opportunity for investigation and discovery, the Defendants' acts and/or omissions constitute violations of:

- (a) 42 U.S.C. §§ 7661a(a), 7661b(c), and 7661c(a);
- (b) 40 C.F.R. §§ 70.1(b), 70.5(a) - (c), 70.6(a) and (c), and 70.7(b);
and
- (c) The federally enforceable corollary provisions of the Texas and Louisiana Title V programs that adopt, incorporate, and/or implement any of the federal provisions cited in subparagraphs 215(a) and (b).

216. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

217. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4. Defendant Exxon Mobil Corp. is also liable for injunctive relief and civil penalties pursuant to La. R.S. 30:2025(E)(1)(a) for the violations set forth above that occurred at the Baton Rouge Facilities.

THIRD CLAIM FOR RELIEF

Violations of NSPS, NESHAP, and MACT Requirements; Title V Permits that Incorporate these Requirements

Failure to Monitor to Ensure Flares Are Operated and Maintained in Conformance with their Design

218. Paragraphs 5–18, 52-92, 103-186, and 193-199 are re-alleged and incorporated by reference.

219. Since at least 2006, the flares at the Defendants' Facilities have been subject to one or more of the following Clean Air Act regulations: 40 C.F.R. Part 60, Subparts VV, DDD, and/or NNN; 40 C.F.R. Part 61, Subparts J, V, and/or FF; and/or 40 C.F.R. Part 63, Subparts, F, G, H, and/or YY.

220. Since at least 2006, the flares at the Defendants' Facilities have been subject to a federally enforceable Title V permit that compels compliance with one or more of the following Clean Air Act regulations: 40 C.F.R. Part 60, Subparts

VV, DDD, and/or NNN; 40 C.F.R. Part 61, Subparts J, V, and/or FF; and/or 40 C.F.R. Part 63, Subparts, F, G, H, and/or YY.

221. Since at least 2006, the flares at the Defendants' Facilities have been subject to the requirements of 40 C.F.R. §§ 60.18(d) and/or 63.11(b)(1).

222. At various times since the first calendar quarter of 2006, the Defendants failed to perform the following at the Baytown Flares and at one or more of the flares at the Beaumont Facilities and Baton Rouge Facilities: install and/or properly operate vent gas flow monitors and assist-steam (for steam-assisted flares) or assist-air (for air-assisted flares) flow monitors; calculate steam-to-vent gas ratios (for steam-assisted flares) or assist-air-to-vent gas ratios (for air-assisted flares); and have sufficient controls on steam flow (for steam-assisted flares) or assist-air (for air-assisted flares) to maintain steam-to-vent gas or assist-air-to-vent gas ratios, as applicable, within design parameters.

223. The Defendants' acts and omissions constitute violations of:

- (a) Clean Air Act Sections 111(e) and 112, 42 U.S.C. §§ 7411(e) and 7412;
- (b) 40 C.F.R. §§ 60.18(d), 63.11(b)(1);
- (c) The provisions of 40 C.F.R. Part 60, Subparts VV, DDD, and/or NNN; 40 C.F.R. Part 61, Subparts J, V, and/or FF; and/or 40 C.F.R. Part 63, Subparts, F, G, H, and/or YY that require flares to comply with the requirements identified in subparagraphs 223(a) and (b);

- (d) The federally enforceable corollary provisions of the Texas SIP and Louisiana SIP that adopt, incorporate, and/or implement any of the federal provisions cited in sub-paragraphs 223(a)–(c);
- (e) The terms of the Clean Air Act Title V permits for the Defendants’ Facilities that require compliance with the requirements identified in sub-paragraphs 223(a)–(d); and
- (f) The prohibition against violating a Clean Air Act Title V permit found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

224. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

225. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4. Defendant Exxon Mobil Corp. is also liable for injunctive relief and civil penalties pursuant to La. R.S. 30:2025(E)(1)(a) for the violations set forth above that occurred at the Baton Rouge Facilities.

FOURTH CLAIM FOR RELIEF

Violations of NSPS, NESHAP, and MACT Requirements; Title V Permits that Incorporate these Requirements

Failure to Operate Flares Consistent with Good Air Pollution Control Practices

226. Paragraphs 5–18, 52-92, 103-186, 193-199, 219-220, and 222 are re-alleged and incorporated by reference.

227. Since at least 2006, the flares at the Defendants' Facilities have been subject to the requirements of 40 C.F.R. §§ 60.11(d), 61.12(c), and/or 63.6(e)(1)(i).

228. At various times since at least the first calendar quarter of 2006, the Defendants operated the Baytown Flares without sufficient Net Heating Value in the Combustion Zone Gas.

229. At various times since at least the first calendar quarter of 2006, the Defendants operated one or more of the Beaumont Flares and Baton Rouge Flares without sufficient Net Heating Value in the Combustion Zone Gas.

230. Operating the flares at an insufficient NHV reduced combustion efficiency and resulted in excessive emissions from the flares to the atmosphere of un-combusted and partially-combusted HAPs and hydrocarbons (including VOCs), CO, and other pollutants.

231. At various times since at least the first calendar quarter of 2006, the Defendants operated the Baytown Flares with an excessively high S:VG.

232. At various times since at least the first calendar quarter of 2006, the Defendants operated one or more of the Beaumont Flares and Baton Rouge Flares with an excessively high S:VG or assist-air-to-vent gas ratio.

233. Operating the flares with an excessively high S:VG or assist-air-to-vent gas ratio increased the likelihood of flame quenching or snuffing, reduced flare combustion efficiency, and resulted in excessive emissions from the flares to

the atmosphere of un-combusted and partially-combusted HAPs and hydrocarbons (including VOCs), CO, and other pollutants.

234. Since at least the first calendar quarter of 2006, at one or more of the flares at the Defendants' Facilities, the Defendants failed to: a) install or use adequate monitoring to measure the flow of vent gas, assist-steam, and/or assist-air to the flares, b) calculate and monitor the ratio of the flows of vent gas to either assist-steam or assist-air, and c) failed to install sufficient controls on, or sufficiently control the flow of, assist-steam or assist-air to enable increasing or decreasing it in order to optimize the S:VG or assist-air-to-vent gas ratio, maintain a sufficient NHV of the Combustion Zone Gas, maximize flame stability, and maintain a high VOC combustion efficiency.

235. The Defendants' acts and omissions constitute violations of:

- (a) Clean Air Act Sections 111(e) and 112, 42 U.S.C. §§ 7411(e) and 7412;
- (b) 40 C.F.R. §§ 60.11(d), 61.12(c), and 63.6(e)(1)(i);
- (c) The provisions of 40 C.F.R. Part 60, Subparts VV, DDD, and/or NNN; 40 C.F.R. Part 61, Subparts J, V, and/or FF; and/or 40 C.F.R. Part 63, Subparts, F, G, H, and/or YY that require flares to comply with the requirements identified in sub-paragraphs 235(a) and (b);
- (d) The federally enforceable corollary provisions of the Texas SIP and Louisiana SIP that adopt, incorporate, and/or implement the federal provisions cited in sub-paragraphs 235(a)–(c);

- (e) The terms of the Clean Air Act Title V permits for the Defendants' Facilities that require compliance with the requirements identified in sub-paragraphs 235(a)–(d); and
- (f) The prohibition against violating a Clean Air Act Title V permit found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

236. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

237. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4. Defendant Exxon Mobil Corp. is also liable for injunctive relief and civil penalties pursuant to La. R.S. 30:2025(E)(1)(a) for the violations set forth above that occurred at the Baton Rouge Facilities.

FIFTH CLAIM FOR RELIEF

Violations of NSPS, NESHAP, and MACT Requirements; Title V Permits that Incorporate these Requirements

Combusting Gas in Flares with a Net Heating Value Less than 300 BTU/scf

238. Paragraphs 5–18, 52-92, 103-186, 193-199, 219-220, and 228-234 are re-alleged and incorporated by reference.

239. Since at least 2006, the flares at the Defendants' Facilities have been subject to the requirements of 40 C.F.R. §§ 60.18(c)(3) and/or 63.11(b)(6).

240. At various times since the first calendar quarter of 2006, the Defendants combusted gas that had a net heating value less than 300 BTU/scf in

one or more of the flares at the Defendants Facilities. These flares include the Baytown Flares and one or more of the Beaumont Flares and Baton Rouge Flares.

241. The Defendants' acts and omissions constitute violations of:

- (a) Clean Air Act Sections 111(e) and 112, 42 U.S.C. §§ 7411(e) and 7412;
- (b) 40 C.F.R. §§ 60.18(c)(3)(ii) and 63.11(b)(6)(ii);
- (c) The provisions of 40 C.F.R. Part 60, Subparts VV, DDD, and/or NNN; 40 C.F.R. Part 61, Subparts J, V, and/or FF; and/or 40 C.F.R. Part 63, Subparts, F, G, H, and/or YY that require flares to comply with the requirements identified in sub-paragraphs 241(a) and (b);
- (d) The federally enforceable corollary provisions of the Texas SIP and Louisiana SIP that adopt, incorporate, and/or implement the federal provisions cited in sub-paragraphs 241(a)–(c);
- (e) The terms of the Clean Air Act Title V permits for the Defendants' Facilities that require compliance with the requirements identified in sub-paragraphs 241(a)–(d); and
- (f) The prohibition against violating a Clean Air Act Title V permit found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

242. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

243. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4. Defendant Exxon Mobil Corp. is also liable

for injunctive relief and civil penalties pursuant to La. R.S. 30:2025(E)(1)(a) for the violations set forth above that occurred at the Baton Rouge Facilities.

SIXTH CLAIM FOR RELIEF

Violations of NSPS, NESHAP, and MACT Requirements; Title V Permits that Incorporate these Requirements

Visible Emissions; Operation without a Flame Present; Exit Velocity; and Failure to Operate When Emissions are Vented

244. Paragraphs 5–18, 52-92, 103-186, 193-199, 219-220, and 228-234 are re-alleged and incorporated by reference.

245. Since at least 2006, the flares at the Defendants’ Facilities have been subject to the requirements of 40 C.F.R. §§ 60.18(b) and/or 63.11(b).

246. At various times since at least 2006, the Defendants operated one or more flares at the Defendants’ Facilities: with visible emissions, at times when no flame was present, and/or without complying with maximum exit velocity requirements. During this time, the Defendants also failed to operate one or more flares at the Defendants’ Facilities at all times when emissions were vented to the flare(s).

247. The Defendants’ acts and/or omissions constitute violations of:

- (a) Clean Air Act Sections 111(e) and 112, 42 U.S.C. §§ 7411(e) and 7412;
- (b) 40 C.F.R. §§ 60.18(c)(1) and 63.11(b)(4);
- (c) 40 C.F.R. §§ 60.18(c)(2) and 63.11(b)(5);

- (d) 40 C.F.R. §§ 60.18(c)(4)-(5) and 63.11(b)(7)-(8);
- (e) 40 C.F.R. §§ 60.18(e) and 63.11(b)(3);
- (f) The provisions of 40 C.F.R. Part 60, Subparts VV, DDD, and/or NNN; 40 C.F.R. Part 61, Subparts J, V, and/or FF; and/or 40 C.F.R. Part 63, Subparts, F, G, H, and/or YY that require flares to comply with the requirements identified in sub-paragraphs 247(a)–(e);
- (g) The federally enforceable corollary provisions of the Texas SIP and Louisiana SIP that adopt, incorporate, and/or implement any of the federal provisions cited in sub-paragraphs 247(a)–(f);
- (h) The terms of the Clean Air Act Title V permits for the Defendants’ Facilities that require compliance with the requirements identified in sub-paragraphs 247(a)–(g); and
- (i) The prohibition against violating a Clean Air Act Title V permit found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

248. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

249. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4. Defendant Exxon Mobil Corp. is also liable for injunctive relief and civil penalties pursuant to La. R.S. 30:2025(E)(1)(a) for the violations set forth above that occurred at the Baton Rouge Facilities.

SEVENTH CLAIM FOR RELIEF

**Violations of Texas SIP Requirements Caused by Insufficient Heating Value
in
Combustion Zone Gas, Over-steaming, and Poor Operation of Flares**

250. Paragraphs 5-17, 27, 93-146, 187-198, 221-222, 227-234, 239-240, and 245-246 are re-alleged and incorporated by reference.

251. At various times since 2006, the Defendants, *inter alia*, operated one or more of the Baytown Flares and Beaumont Flares with an excessively high S:VG, assist-air-to-vent gas ratio, and/or a NHV in the vent gas of less than 300 BTU/scf. Operating the flares in this manner increased the likelihood of flame quenching or snuffing, reduced flare combustion efficiency, and resulted in emissions to the atmosphere of un-combusted and partially-combusted HAPs and hydrocarbons, including VOCs and HRVOCs, and CO.

252. At various times since 2006, the Defendants routed VOC-containing vent gas streams affected by 30 Tex. Admin. Code §115.121(a)(1) to one or more of the Baytown Flares and Beaumont Flares. The Defendants emitted VOC-containing vent gas streams from these flares without properly controlling the vent gas streams in accordance with 30 Tex. Admin. Code § 115.122(a)(1) to a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices) in a smokeless flare.

253. At various times since 2006, the Defendants routed VOC-containing vent gas streams from one or more chemical manufacturing processes listed at 30 Tex. Admin. Code § 115.121(a)(2)(A)-(E) to one or more of the Baytown Flares and Beaumont Flares. The Defendants emitted VOC-containing vent gas streams from these flares without properly controlling the vent gas streams in accordance with 30 Tex. Admin. Code § 115.122(a)(2) to a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

254. At various times since 2006, HRVOC emissions exceeded 1,200 pounds per hour, on one-hour block periods, from one or more of the Baytown Flares.

255. By failing to comply with the requirements of 40 C.F.R. § 60.18(b) as alleged in this Complaint, the Defendants cannot demonstrate compliance with the emission specifications and control efficiency requirements of 30 Tex. Admin. Code §§ 115.121 and 115.122. 30 Tex. Admin. Code § 115.125(3)(E).

256. The Defendants' acts and omissions constitute violations of:

- a. 30 Tex. Admin Code §§ 101.221(a), 115.121(a)(2), 115.122(a)(2), 115.722(c)(2), 101.201, and 101.211(a) and (b);
- b. The terms of the Clean Air Act Title V permits for the Defendants' Baytown Facilities that require compliance with the requirements identified in sub-paragraph 256(a);

- c. The federally enforceable corollary provisions of the Texas Title V program that adopt, incorporate, and/or implement the prohibitions in 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and
- d. The prohibition against violating a Clean Air Act Title V permit found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

257. Unless restrained by an order of this Court, the violations alleged in this Claim for Relief will continue.

258. As provided in Clean Air Act Sections 113(b), 42 U.S.C. § 7413(b), the violations set forth above subject the Defendants to injunctive relief and civil penalties. *See also* 40 C.F.R. § 19.4.

PRAYER FOR RELIEF

WHEREFORE, the United States and the LDEQ respectfully request that this Court:

- A. Enter judgment in favor of the United States and the LDEQ and against the Defendants, Exxon Mobil Corp. and ExxonMobil Oil Corp.;
- B. Order the Defendants to take all actions necessary to operate the flares at the Defendants' Facilities in compliance with the Clean Air Act requirements that this Complaint alleges the Defendants violated, including the applicable requirements of the Texas and Louisiana SIPs;
- C. Permanently enjoin the Defendants from operating the flares at the Defendants' Facilities except in accordance with the Clean Air Act and applicable regulatory requirements, including the Texas SIP and Louisiana SIP;

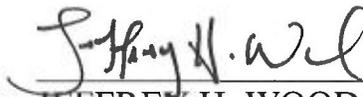
D. Order the Defendants to take other appropriate actions to remedy, mitigate, and offset the harm caused by their alleged Clean Air Act violations by, among other things, requiring the Defendants to address or offset their unlawful emissions;

E. Assess a civil penalty against the Defendants of up to \$32,500 for each Clean Air Act violation occurring between March 16, 2004 and January 12, 2009; up to \$37,500 per day for each violation occurring between January 13, 2009 and November 2, 2015; and up to \$95,284 per day for each violation occurring after November 2, 2015.

F. Award the United States and the LDEQ their costs and expenses incurred in this action; and

G. Grant the United States and the LDEQ any further and other relief that this Court may deem appropriate.

Respectfully Submitted,



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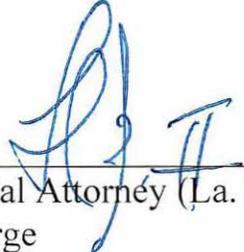
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