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Submitted via-email

Re: *United States and the Louisiana Department of Environmental Quality v. Exxon Mobil Corp. and ExxonMobil Oil Corp., D.J. Ref. No. 90-5-2-1-10128*

To Whom it May Concern:

Environmental Integrity Project, Sierra Club's Lonestar Chapter, Public Citizen's Texas Office, Louisiana Bucket Brigade, and Louisiana Environmental Action Network ("Commenters") appreciate this opportunity to submit public comments in response to the proposed consent decree lodged in *United States and the Louisiana Department of Environmental Quality v. Exxon Mobil Corp. and ExxonMobil Oil Corp.*, Civil Action No. 4:17-cv-03302 (hereafter, "Consent Decree").¹ The Consent Decree addresses alleged violations of various Clean Air Act requirements pertaining to the authorization and operation of flares at nine of Exxon Mobil and ExxonMobil Oil's (hereafter, "ExxonMobil") chemical manufacturing facilities in Texas and Louisiana.² Commenters' concerns are summarized below, and the discussion and exhibits that follow provide additional detail.

- Page 5 of the Consent Decree asserts that compliance with its requirements will reduce emissions of volatile organic compounds (VOC) by 7,061 tons per year, "between January 1, 2013, and full implementation of the Consent Decree's compliance requirements[.]" But ExxonMobil only reported combined VOC emissions of 972 tons from all of the flares covered by the Consent Decree in its 2012 emissions inventory submissions. ExxonMobil's current permits only authorize 1,100 tons per year of VOC emissions from the covered flares. EPA should explain the basis for its determination that Consent Decree requirements will eliminate more than 7,000 tons per year of VOC emissions from flares that are authorized and have reported emissions at a much lower rate.

¹ The proposed consent decree was noticed at 82 Fed. Reg. 51643 (November 7, 2017).

² The Consent Decree addresses alleged violations at ExxonMobil's Baytown Chemical Plant, Baytown Olefins Plant, Beaumont Chemical Plant, Beaumont Polyethylene Plant, and Mont Belvieu Plastics Plant in Texas, and its Baton Rouge Chemical Plant, Baton Rouge Plastics Plant, and Baton Rouge Polyolefins Plant in Louisiana.

- Page 5 of the Consent Decree states that, “implementing the Consent Decree’s requirements are estimated to cost approximately \$300 million.” Our analysis suggests that many of these requirements, including the obligation to install flare gas recovery systems, were already reflected in permits issued well before the Consent Decree was lodged. EPA should indicate which expenditures actually result from Consent Decree obligations, not including funds already spent (or that will be spent) to satisfy pre-existing permit or regulatory requirements.
- Paragraph 65 of the Consent Decree includes unusually broad exemptions to the Consent Decree’s prohibition on the use of Consent Decree reductions to generate netting reductions, emission credits, emissions offsets, or to avoid major New Source Review (“NSR”) preconstruction permitting requirements. Specifically, the Consent Decree provides that ExxonMobil (1) may rely on Consent Decree reductions to comply with the Plantwide Applicability Limit (“PAL”) permit for the Baytown Olefins Plant and (2) may use mandated reductions to generate offsets, emission credits, and to avoid Nonattainment New Source Review (“NNSR”) and Prevention of Significant Deterioration (“PSD”) requirements at its Baytown Olefins Plant. Federal law does not authorize a company to increase emissions above any limits that apply because it has reduced a corresponding amount of illegal pollution that it was not authorized to release in the first place. EPA should clarify how the paragraph 65 exemptions are consistent with federal law and explain why this Consent Decree departs from EPA’s established practice of sharply limiting a violator’s ability to use mandated reduction to its advantage.
- Paragraphs 65b(2), 65b(3), 65(c), and 65(d) of the Consent Decree authorize the use of “emission reductions, netting credits, or emission offsets,” for the purpose of permitting various projects, or from the installation and operation of flare gas recovery systems. EPA should clarify how consent decree requirements could generate emission reductions, credits or offsets under the various permits itemized in these paragraphs, and in particular how they would be quantified.
- Paragraph 44 of the Consent Decree requires covered flares to achieve a 98% combustion efficiency, which would effectively destroy about 98.26% of the VOCs and organic hazardous air pollutants (“HAPs”) routed to flares. But permits for several of ExxonMobil’s plants require covered flares to destroy at least 99% of these pollutants, which is a significantly more stringent emission rate. Paragraph 60 of the Consent Decree anticipates that ExxonMobil’s Clean Air Act permits will be modified to incorporate Consent Decree requirements. EPA should clarify that these modifications would not allow ExxonMobil to relax current permit conditions that appear to be more stringent than Consent Decree requirements.

Relevant Legal Requirements

The Department of Justice has considerable latitude when negotiating the terms of a consent decree to resolve alleged violations. Courts will affirm such agreements so long as they are “reasonable, fair, and consistent with the purpose of the statute under which the suit is brought.”³ The terms of the consent decree, however, must be clear and unambiguous in order to provide the public with a “meaningful opportunity to comment,” upon the decree before it is entered, and “objectors must be given reasonable notice and their objections heard and considered.”⁴ The court must, “undertake an analysis of the facts and the law relevant to the proposed compromise,” and “mere boiler-plate approval” will not suffice.⁵

The Clean Air Act requires major sources of emissions to obtain a NNSR or PSD permit before commencing any construction project that could increase emissions above thresholds specified by EPA.⁶ A facility can avoid (or “net out”) of these requirements by reducing emissions from existing units enough to offset any significant increases expected from a new project. But federal rules do not allow offsets based on emission reductions that are required under federal permits or by the terms of a consent decree to ensure compliance with applicable requirements.⁷

EPA should clarify the basis for its projection that mandated controls will reduce VOC emissions by 7,061 tons per year

EPA’s Complaint alleges that ExxonMobil released “thousands of tons of illegal volatile organic emissions (VOC’s), hazardous air pollutants (HAPs) and other pollutants into the air in the States of Louisiana and Texas.”⁸ As noted above, EPA estimates that full implementation of the Consent Decree’s requirements will reduce VOC emissions from the Covered Flares by 7,061 tons below 2012 levels. According to emission inventory reports that ExxonMobil submitted to Louisiana and Texas for the eight chemical plants subject to the Consent Decree, Covered Flares emitted a total of 972.17 tons of VOC’s in 2012 and current permits authorize these flares to emit no more than 1,100 tons of VOC per year.⁹

Based on EPA’s calculations, actual VOC emissions from the Covered Flares were up to 6,088 tons higher than ExxonMobil reported in 2012. Presumably, these excess emissions were caused by the failure to follow pollution control requirements, e.g., steam to vent gas ratios,

³ *United States v. Fina Oil & Chem. Co.*, No. 1:93-CV-114, 1993 WL 470430, at *1 (E.D. Tex. July 29, 1993).

⁴ *United States v. City of Miami*, 664 F.2d 435, 441 n. 13 (5th Cir. 1981); *accord Fina Oil*, 1993 WL 470430 at *1.

⁵ *Cotton v. Hinton*, 559 F.2d 1236, 1330 (5th Cir. 1977) (quoting *Protective Committee v. Anderson*, 390 U.S. 414, 434 (1968)).

⁶ The applicable “significance” thresholds for modifications to existing major sources are listed at 40 C.F.R. §§ 51.165(a)(1)(x)(A) and 51.166(b)(23).

⁷ 40 C.F.R. §§ 51.165(a)(1)(xxv)(B)(2) and (3), 51.166(b)(47)(ii)(b) and (c) (explaining that unauthorized and noncompliant emissions may not be included in a source’s baseline actual emissions for netting purposes).

⁸ Complaint, Paragraph 4.

⁹ (Attachment 1), Summary of Reported Flare Emissions; (Attachment 2), Summary of Required Control Efficiencies.

designed to maintain the high combustion efficiencies needed to destroy 98% of volatile organic compounds in flare gas. While these factors may be plausible, the government has not provided any basis for the emission reductions it expects.

- *Commenters request that the Justice Department or Environmental Protection Agency explain how the emission reductions expected to result from Consent Decree implementation were calculated; and*
- *If ExxonMobil significantly underreported actual emissions from its flares to Texas and Louisiana emissions inventories, EPA should require ExxonMobil to correct its submissions.*

The Consent Decree's estimated \$300 million compliance expenditures appear to include past expenditures

EPA has not explained the basis for its estimate that ExxonMobil will expend \$300 million to comply with the Consent Decree. It appears that ExxonMobil installed much of the equipment referenced in the Consent Decree before the Consent Decree was lodged to comply with pre-existing permit requirements or to avoid triggering PSD and NNSR preconstruction permitting requirements for recent expansion projects.

For example, ExxonMobil must install and operate flare gas recovery systems (FGRS) covering 10 flares at four different chemical plants as soon as the consent decree is entered.¹⁰ These units would have to be permitted and then purchased, installed, and tested before ExxonMobil could commence operation. An industry consultant recently estimated that the capital cost of FGRS at ethylene plants would cost from \$6.2 to \$12.2 million per flare. Based on likely capital cost and the time needed to install and test this equipment and to obtain the required permit approvals, the flare gas recovery systems for the Baton Rouge, Baytown and Beaumont Chemical Plants and the Baytown Olefins Plant were likely in place well before the Consent Decree was lodged on October 31, 2017.

This conclusion is supported by the Consent Decree and various permitting documents reviewed by Commenters:

- According to page 4 of the Consent Decree, ExxonMobil installed and subsequently improved a FGRS at its Baytown Chemical Plant before the Consent Decree was lodged. This is consistent with ExxonMobil's 2007 commitment to implement FGRS to reduce flaring from its Baytown Chemical Plant by 60-90% by 2011.¹¹ FGRS fans and an

¹⁰ Section XVII and Appendix 1.8 of Consent Decree. The four plants required to operate FGRS on the date the Consent Decree is entered are the Baton Rouge, Baytown and Beaumont Chemical Plants, and the Baytown Olefins plant.

¹¹ See, Houston Regional Benzene Air Pollution Reduction Report at 37. Available electronically at: <http://www.greenhoustontx.gov/reports/benzenereductionplan.pdf>

exchanger for the Baytown Chemical Plant were authorized in a Permit by Rule issued in 2008.

- Page 4 of the Consent Decree indicates ExxonMobil installed a compressor for flare operation at its Baytown Olefins plant before the Consent Decree was lodged. On June 5, 2015, Texas authorized a “process change” to recover gas from the Baytown Olefins Plant flares and route it to several boilers.¹²
- The version of the Title V permit for the Baton Rouge Chemical Plant issued on October 13, 2011 included a FGRS.¹³
- Other consent decree requirements, e.g., to monitor vent gas heating values based on 15 minute block averages, use thermocouples to confirm the continued presence of pilot flames, and measure the net heating value or composition of vent gas are also reflected in existing permits for many of the plants covered by the Consent Decree.

EPA’s use of 2012 as the starting point for estimating the emission reductions that will be realized after “full implementation of the Consent Decree’s compliance requirements” also suggests that much of the work to achieve those reductions occurred before the Consent Decree was lodged on October 31, 2017.

- *Commenters request that EPA (1) explain the basis for its estimate that ExxonMobil will spend \$300 million to comply with the Consent Decree, and (2) indicate how much of that amount was spent prior to October 31, 2017 to meet regulatory or permit requirements, requirements in state-issued enforcement orders,¹⁴ or to avoid triggering NNSR and/or PSD preconstruction permitting requirements for modifications to covered sources.¹⁵*

¹² (Attachment 3), Standard Permit Registration No. 13869.

¹³ (Attachment 4), Excerpt, Permit No. 2367-V2 (October 13, 2011) at Inventories Page 5 of 7.

¹⁴ For example, ExxonMobil interested into an Agreed Order with the TCEQ addressing violations at its Baytown Complex. (Attachment 5), Agreed Order, TCEQ Docket No. 2011-2336-AIR-E. This order required ExxonMobil to reduce VOC emissions and to improve flare monitoring practices at its Baytown Chemical Plant and Olefins Plant. This order also prohibits the use of required reductions to generate emission offsets, credits, or to net out of NNSR and/or PSD. Commenters requested documents from the TCEQ detailing projects undertaken to satisfy the order’s requirements, but were unable to access these files prior to the filing deadline for these comments.

¹⁵ For example, Environmental Integrity Project, Sierra Club, and Air Alliance Houston submitted comments on the Baytown Olefins Plant expansion project authorized by Permit No. 102982 demonstrating that VOC emissions increases from the project would trigger NNSR preconstruction permitting requirements. *See*, (Attachment 6), Comments on Draft Permit No. 102982 at 3-7. ExxonMobil did not propose to use FGRS as part of its TCEQ expansion application, but shortly thereafter committed to using FGRS to satisfy BACT in its application for a GHG PSD Permit from EPA authorizing the same project. *See*, Permit No. PSD-TX-102982-GHG at 7. Available Electronically at, <https://archive.epa.gov/region6/6pd/air/pd-r/ghg/web/pdf/exxonmobil-baytown-olefins-finalpermit.pdf>.

The Consent Decree should not allow ExxonMobil to rely on mandated reductions to avoid NNSR and PSD requirements for projects unrelated to the installation of required controls

While the Consent Decree purports to generally prohibit ExxonMobil from using pollution reductions resulting from Consent Decree requirements as netting reductions, emissions offsets, or for determining whether projects at the covered plants trigger NNSR and/or PSD requirements, it also (1) contains unusually broad exemptions to this prohibition that appear to undermine its effectiveness; and (2) fails to explain how the prohibition should be applied in conjunction with ExxonMobil's Texas Plantwide Applicability Limit (PAL) permits.

A PAL permit establishes source-wide pollutant-specific limits that reflect baseline actual emissions from an existing major source. So long as a source operates within the limits established by a PAL permit, construction and modification projects at the source do not trigger NNSR and/or PSD preconstruction permitting requirements. Baseline actual emissions reflected in PAL permits must be adjusted downward to exclude unauthorized emissions and emissions in excess of an applicable limit.¹⁶ Thus, where a consent decree requires pollution reductions from a source covered by a PAL permit to address past violations, the consent decree also should require the applicable PAL permit or permits to be adjusted downward to exclude baseline actual emissions used to establish PAL permit limits that would have been eliminated using controls mandated by the consent decree. This is important, because a source should not receive credit for implementing controls necessary to comply with applicable requirements after the fact. Many of EPA's previous Clean Air Act consent decrees reflect this common sense position. For example, paragraph 73 of the consent decree with Vopak that EPA announced on May 17, 2017 makes clear that:

Any plantwide applicability limits ("PALs") or PAL-like limits that apply to emissions units addressed by this Consent Decree must be adjusted downward to exclude any portion of the baseline emissions used in establishing such limit(s) that would have been eliminated as Consent Decree Emissions Reductions had Vopak been complying with this Consent Decree during such baseline period.¹⁷

Contrary to EPA's prior practice, the present Consent Decree (1) does not expressly require ExxonMobil to reduce limits in the PAL permits it has obtained for the Baytown Olefins Plant, the Baytown Chemical Plant, or the Beaumont Chemical Plant; and (2) expressly allows ExxonMobil to rely on Consent Decree reductions to demonstrate compliance with limits in its Baytown Olefins Plant PAL permit.¹⁸ For ExxonMobil's Louisiana chemical plants and its Texas plants that do not operate under a PAL permit, the Consent Decree also allows ExxonMobil to rely on mandated

¹⁶ 40 C.F.R. §§ 51.165(a)(1)(xxxv)(B)(2) and (3), 51.166(b)(47)(ii)(b) and (c).

¹⁷ The Vopak Consent Decree is available electronically at: <https://www.epa.gov/sites/production/files/2017-05/documents/vopaknorthamericainc-cd.pdf>. See also, *See*, Tesoro Par Refining Consent Decree, 5:16-cv-00722, 7/8/2016, at ¶ 159; J.R. Simplot Co. Consent Decree, 1:26-cv-00562-CWD, 12/3/2015, at ¶ 31.

¹⁸ Consent Decree, Paragraph 65(b) and (c).

controls and pollution reductions to net out of NNSR and PSD for past and future projects.¹⁹ These broad exemptions to the Consent Decree’s prohibition on use of mandated reductions to avoid otherwise-applicable Clean Air Act requirements is contrary to the Act and severely compromises major NSR preconstruction permitting requirements going forward.

- *EPA should explain how the emission reductions that result from compliance with the ExxonMobil Consent decree can be used, “for the purpose of maintaining compliance with plant-wide applicability limits authorized by Permit Nos. 102982 and 3452” at the Baytown Olefins, and how the Clean Air Act and EPA’s own regulations allow these reductions to offset future emissions growth and avoid NNSR and PSD pollution control requirements that would otherwise apply; and*
- *EPA should clarify the ExxonMobil must revise its PAL Permits to exclude emissions that would have been eliminated as Consent Decree Emissions Reductions had ExxonMobil been complying with this Consent Decree during such baseline period.*

Consent Decree combustion efficiency requirements may be less stringent than existing permit requirements

Paragraph 44 of the Consent Decree requires ExxonMobil to operate each covered flare with a minimum of a 98% combustion efficiency at all times when waste gas is vented to it. According to the definition on page 2 of the Consent Decree, waste gas does not include “pilot gas,” which is “the minimum amount of Sweep Gas and Purge Gas needed to perform the functions of Sweep Gas and Purge Gas,” and “Supplemental Gas” needed to maintain sufficient heat value in the combustion zone. These requirements may be actually less stringent than those found in ExxonMobil’s existing Texas permits.²⁰ For example:

- Mont Belvieu Chemical Plant Permit No. 19016 (September 18, 2017), Special Condition No. 3 requires the High Density Polyethylene (HDPE) flare to operate with, “no less than 99% efficiency in disposing of the carbon compounds captured by the vent gas system.”
- VOC emissions from the Primary and Secondary Flares at Baytown Olefins Plant are calculated based on emission factors from TCEQ, which assume 99% removal of ethylene, propane, and propylene.
- Other permits, e.g., for the Beaumont Chemical Plant, are based on applications that assume 99% removal of propane, which can be a major component of flare gas.²¹

¹⁹ *Id.* at Paragraph 65(c)-(e).

²⁰ (Attachment 7), Kunstman Memorandum Re: Combustion Efficiency vs. Destruction and Removal Efficiency re: Exxon CD (November 30, 2017).

²¹ *See*, (Attachment 2) for specific citations to required control efficiencies.

These mandated flare efficiencies are used to set hourly and annual mass emission limits for flares and to determine whether those limits have been met. Unlike the Consent Decree, Texas permits do not exclude pilot, sweep, purge, and supplemental gas when establishing requirements or expectations for flare performance.

- *Commenters request that EPA clarify that the minimum 98% Combustion Efficiency performance standard that applies to Waste Gas under the Consent Decree is not intended to replace any flare efficiency that is either explicitly required under existing permit or was used to establish emission limits for flares under such permits.*

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