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August 8, 2016

Administrator Gina McCarthy
U.S. Environmental Protection Agency
Ariel Rios Building, Mail Code 1101A
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Fax number (202) 501-1450

via Electronic Filing

Re: Petition for Objection to Texas Title V Permit No. O1553 for the Operation of ExxonMobil's Baytown Olefins Plant in Harris County, Texas

Dear Administrator McCarthy:

Enclosed is a petition requesting that the U.S. Environmental Protection Agency object to the TCEQ's minor revision of Title V Permit No. O1553, issued to ExxonMobil for operation of the Baytown Olefins Plant. This petition is timely submitted by the Environmental Integrity Project, Sierra Club, and Air Alliance Houston. As required by law, petitioners are filing this petition with the EPA Administrator, with copies to EPA Region VI, the Texas Commission on Environmental Quality, and ExxonMobil.

Thank you for your attention to this matter.

Sincerely,

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR

IN THE MATTER OF	§	PETITION FOR OBJECTION
	§	
Clean Air Act Title V Permit (Federal Operating Permit) No. O1553	§	
	§	
Issued to ExxonMobil Corporation	§	Permit No. O1553
	§	
Issued by the Texas Commission on Environmental Quality	§	
	§	
	§	

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT FOR THE BAYTOWN OLEFINS PLANT PERMIT NO. O1553

Pursuant to section 42 U.S.C. § 7661d(b)(2), Environmental Integrity Project, Sierra Club, and Air Alliance Houston ("Petitioners") hereby petition the Administrator of the U.S. Environmental Protection Agency ("Administrator" or "EPA") to object to Federal Operating Permit No. O1553 ("Proposed Permit") issued by the Texas Commission on Environmental Quality ("TCEQ" or "Commission") for the Baytown Olefins Plant, operated by the ExxonMobil Corporation ("ExxonMobil").

I. INTRODUCTION

ExxonMobil's Baytown Olefins Plant is part of the largest integrated refining and petrochemical complex in the United States. This complex is located in Baytown, Texas; approximately 30 miles east of Houston. The Baytown Olefins Plant is located in the Harris County ozone non-attainment area and is a major source of "criteria pollutants," including ozone-forming pollutants, and toxic air pollutants.

For more than a decade, the primary New Source Review ("NSR") authorization for the Baytown Olefins Plant has been state-only Flexible/PAL Permit No. 3452/PAL6. ExxonMobil's

Flexible/PAL permit was issued before Texas's *minor*-source flexible permitting program was approved by EPA and before Texas had even promulgated its initial Plantwide Applicability Limit rules (which were subsequently disapproved by EPA). These permits establish allowables-based limits that ExxonMobil has relied on to avoid otherwise-applicable minor and major preconstruction permitting requirements in the Texas State Implementation Plan ("SIP"). Though EPA has informed ExxonMobil that its flexible permit and state-only PAL permit do not modify the Company's obligations under the Act and the Texas State Implementation Plan ("SIP"), EPA has not taken action to require TCEQ to remove these permits from ExxonMobil's Title V permit or to identify them as state-only authorizations.

Because EPA has not objected to the TCEQ's incorporation of ExxonMobil's state-only Flexible/PAL permit into Title V Permit No. O1553 as a federally-enforceable authorization, the TCEQ relied on ExxonMobil's state-only PAL permit to determine that construction of a new ethylene production unit at the Baytown Olefins Plant may be authorized as a minor modification.[1] The TCEQ's issuance of Permit No. 102982 authorizing construction of the new ethylene production unit as a minor modification without properly determining whether it triggered major NSR preconstruction permitting requirements was inconsistent with the Act and the Texas SIP. ExxonMobil's construction of the same project without properly determining whether it was a major modification was a violation of the Act and the Texas SIP.

The Administrator must now address these issues and object to the Proposed Permit because it fails to assure compliance with applicable requirements, it fails to provide a clear and complete accounting of the requirements that apply to the Baytown Olefins Plant, and it fails to address ExxonMobil's ongoing non-compliance with the Act and the Texas State

[1] This expansion project, as explained below, has—by itself—the potential to emit PSD and NNSR pollutants at rates that exceed applicable major modification thresholds as well as the major source thresholds.

Implementation Plan New Source Review requirements. The Administrator should also object because the Executive Director failed to sufficiently respond to EIP's comments identifying defects in the Draft Permit.

II. PETITIONERS

Environmental Integrity Project ("EIP") is a non-profit, non-partisan organization with offices in Austin, Texas and Washington, D.C. that seeks to improve implementation, enforcement, and compliance with federal environmental and public health protections.

Sierra Club, founded in 1892 by John Muir, is the oldest and largest grassroots environmental organization in the country, with over 600,000 members nationwide. Sierra Club is a non-profit corporation with offices, programs and numerous members in Texas. Sierra Club has the specific goal of improving outdoor air quality.

Air Alliance Houston is a non-profit organization whose mission is to reduce air pollution in the Houston region and to protect public health and environmental integrity through research, education, and advocacy. Air Alliance Houston participates in regulatory and legislative processes, testifies at hearings, and comments on proposals. Air Alliance Houston is heavily involved in community outreach and works to educate those living in neighborhoods directly affected by air pollution about local air pollution issues, as well as state and federal policy issues.

PROCEDURAL BACKGROUND

This Petition concerns the TCEQ's revision to Permit No. O1553 to incorporate by reference Permit No. 102982, which authorizes construction of a new ethylene production unit as a minor modification to the Baytown Olefins Plant, and an administrative revision to ExxonMobil's state-only Flexible/PAL Permit No. 3452/PAL6 to increase the existing

particulate matter ("PM") PAL.[2] Presently, the PM PAL in state-only PAL6 exceeds the amount of PM ExxonMobil is authorized to emit under its state-only flexible permit by more than 97 tons. Even though PALs, as a matter of law, may not exceed allowable emissions and even though increases to PALs must be authorized by a permit amendment, the Executive Director's "upward adjustment" to ExxonMobil's state-only PM PAL—establishing a limit higher than the applicable flexible permit allowable—was accomplished as an administrative reopening. *See* (Exhibit 1), Environmental Integrity Project, Air Alliance Houston, and Sierra Club's Reply to Responses to its Motion to Overturn the Executive Director's Reopening of Permit No. PAL6.

EIP timely-filed comments identifying deficiencies in ExxonMobil's Draft Minor Revision Title V Permit on August 6, 2015. (Exhibit 2) Public Comments Submitted on Behalf of the Environmental Integrity Project Regarding the Draft Minor Revision to Permit No. O1553 ("Comments"). These comments provide the basis for each of the issues raised in this petition.

The Executive Director issued notice of Proposed Title V Permit No. O1553 and his response to public comments on April 21, 2016. (Exhibit 3) Notice of Proposed Permit and Executive Director's Response to Public Comment, Minor Revision, Permit No. O1553 ("Response to Comments"). EPA's 45-day review period ended on June 10, 2016. EPA did not object to the Proposed Permit. This petition to object is based on issues raised with specificity during the public comment period and is timely filed within 60 days of the conclusion of EPA's review period.

III. LEGAL REQUIREMENTS

All major stationary sources of air pollution are required to apply for operating permits under Title V of the Clean Air Act. 42 U.S.C. § 7661a(a). Title V permits must include all

[2] A Plantiwide Applicability Limit is single-pollutant permit limit that reflects baseline actual emissions of that pollutant from all emission units at an existing major source. Modifications to sources covered by a federally-enforceable PAL permit, so long as source-wide emissions of all PAL pollutants remain below the PAL(s).

federally enforceable emission limits and operating requirements that apply to a source as well as monitoring requirements sufficient to assure compliance with these limits and requirements in one legally enforceable document. 42 U.S.C. §§ 7661a(a), 7661c(a); *see also* 40 C.F.R. § 70.6(a)(1). Non-compliance by a source with any provision in a Title V permit constitutes a violation of the Clean Air Act and provides ground for an enforcement action against the source. Title V permits are the primary method for enforcing and assuring compliance with State Implementation Plan requirements for major sources. *Operating Permit Program*, 57 Fed. Reg. 32,250, 32,258 (July 21, 1992). Because federal courts are often unwilling to enforce otherwise applicable requirements that have been omitted from or displaced by conditions in a Title V permit, state-permitting agencies and EPA must take care to ensure that Title V permits accurately and clearly list what each major source must do to comply with the law. *See, e.g., Sierra Club v. Otter Tail*, 615 F.3d 1008 (8th Cir. 2008 (holding that enforcement of New Source Performance Standard omitted from a source's Title V permit was barred by 42 U.S.C. § 7607(b)(2)).

Where a state permitting authority issues a Title V operating permit, EPA will object to the permit if it is not in compliance with applicable requirements under 40 C.F.R. Part 70 or fails to assure compliance Title I major source preconstruction permitting requirements. 40 C.F.R. § 70.8(c). If EPA does not object, "any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); 30 Tex. Admin. Code § 122.360. The Administrator "shall issue an objection . . . if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of the . . . [Clean Air Act]." 42 U.S.C. § 7661d(b)(2); *see also*

40 C.F.R. § 70.8(c)(1). The Administrator must grant or deny a petition to object within 60 days of its filing. 42 U.S.C. § 7661d(b)(2).

While the burden is on the petitioner to demonstrate to EPA that a Title V operating permit is deficient, once that burden is met, "EPA has no leeway to withhold an objection." *Sierra Club v. EPA*, 557 F.3d 401, 405 (6th Cir. 2009); *New York Public Interest Group v. Whitman*, 321 F.3d 316, 332-34, n12 (2nd Cir. 2003) ("Although there is no need in this case to resort to legislative history to divine Congress' intent, the conference report accompanying the final version of the bill that became Title V emphatically confirms Congress' intent that the EPA's duty to object to non-compliant permits is nondiscretionary").

IV. GROUNDS FOR OBJECTION

This petition concerns ExxonMobil's application for a minor revision to, among other things, incorporate by reference Permit Nos. PAL6 and 102982, and to incorporate an updated version of Flexible Permit No. 3452 into Title V Permit No. O1553. Statement of Basis ("SOB") at 2. EIP's comments identified several deficiencies arising from the incorporation of these permits as federally-enforceable conditions of ExxonMobil's Title V permit.

First, EIP's comments demonstrate that the Proposed Permit's incorporation of PAL6, which EPA previously determined is a state-only permit, as a federally-enforceable permit undermines the enforceability of major NSR preconstruction permitting requirements established by the Act and the Texas SIP.

Second, EIP demonstrated that the TCEQ and ExxonMobil's reliance on the state-only limits in PAL6 to determine that the expansion project authorized by Permit No. 102982 did not trigger major modification preconstruction permitting requirements under the Act and the Texas SIP was deficient as a matter of law. Because the TCEQ relied exclusively on ExxonMobil's

state-only PAL permit to determine that the expansion project, which resulted in new emissions that are not only higher than applicable major modification thresholds for several pollutants, but also exceed applicable major source thresholds for PSD and NNSR pollutants, was a minor modification, the Proposed Permit's incorporation of Permit No. 102982 undermines the enforceability of and violates NSR preconstruction permitting requirements in the Act and the Texas SIP.

Third, EIP demonstrated that, in the alternative, even if PAL6 is recognized as a federally-enforceable PAL permit, it does not contain a $PM_{2.5}$ PAL. Accordingly, the TCEQ erred as a matter of law by relying on PAL6 to determine that ExxonMobil's expansion project was not a major modification for $PM_{2.5}$. Because this is so, the Proposed Permit's incorporation of Permit No. 102982, which authorizes ExxonMobil's expansion project as a minor modification, both undermines the enforceability of and violates NSR preconstruction requirements in the Act and the Texas SIP.

A. The Proposed Permit's Incorporation of PAL6 as a Federally-Enforceable Permit Undermines the Enforceability of Major New Source Review Requirements and Violates Title V Requirements

1. ExxonMobil's PAL6 Permit is not a Federal Permit[3]

EPA has already determined that PAL6 is a state-only permit that may not be used to modify ExxonMobil's obligations under the Act or the Texas SIP. (Exhibit 4) Letter from John Blevins, Director, Compliance Assurance and Enforcement Division, EPA Region 6, to Evelyn R. Ponton, Environmental Coordinator, ExxonMobil Corporation, Re: Permit Number PAL6. Even if EPA had not already made this determination, EIP's comments demonstrate—as a matter of law—that PAL6 is a state-only requirement that cannot modify SIP requirements.

[3] Comments at 8.

ExxonMobil's PAL6 permit was issued in 2005 and predates Texas's initial PAL rules (which were disapproved by EPA). 75 Fed. Reg. 41,312 (July 15, 2010). At the time PAL6 was issued, the Texas SIP required operators to conduct case-by-case netting demonstrations to determine whether projects at the Baytown Olefins Plant were major modifications triggering PSD and/or NNSR preconstruction permitting requirements. Because the TCEQ did not have the authority to issue PAL permits—or other orders that displace netting requirements in the Texas SIP—PAL6 has no effect on ExxonMobil's obligation to comply with SIP netting requirements for projects at the Baytown Olefins Plant. 42 U.S.C. § 7410(i). Because PAL6 is not federally-enforceable, it must be designated as "state-only" in the Proposed Permit. 40 C.F.R. § 70.6; *Objection to Federal Part 70 Operating Permit, Valero Refining Texas, Permit No. O1253* (October 30, 2009) (objecting to incorporation of state-only flexible permit as federally enforceable permit).

2. *ExxonMobil's State-Only PAL6 Permit Undermines the Enforceability of SIP Requirements*[4]

The Clean Air Act provides that, with limited exceptions inapplicable to this case, states may not issue permits that unilaterally modify SIP requirements with respect to any stationary source. 42 U.S.C. § 7410(i). Consistent with the Clean Air Act, the Texas SIP requires operators without a federally-enforceable PAL permit to conduct a netting demonstration to determine whether anticipated or potential post-project emission increases are significant and trigger major NSR preconstruction permitting requirements. 30 Tex. Admin. Code §§ 116.150(c) and (d), 116.160(b) and (c). PAL6 purports to displace these requirements, as a matter of federal law: "Physical changes and changes in method of operation at this site are exempt from federal New Source Review for VOC, CO, NO_x, SO_2, H_2SO_4, and PM as long as

[4] Comments at 8.

site emissions do not exceed the PAL caps." State-only Permit No. 3452/PAL6, Special Condition 6. Because PAL6 purports to displace netting requirements in the Texas SIP, it is inconsistent with the Act and undermines the enforceability of those requirements. The Proposed Permit's incorporation of PAL6 as a federally-enforceable permit is therefore contrary to Title V requirements. 42 U.S.C. § 7661c(a).

3. *PAL6 is Incompatible with the Act and the Texas SIP, because it Establishes Major Modification Thresholds Based on Allowable Emissions Instead of Increases from Baseline Actual Emissions*[5]

The Clean Air Act requires operators to determine whether projects at existing major sources are "major modifications" subject to the Act's PSD and NNSR preconstruction permitting requirements by comparing post-project projected actual or potential emissions to baseline *actual* emissions. *Environmental Defense v. Duke Energy Corp.*, 549 U.S. 561, 580-81 (2007); *New York v. EPA*, 413 F.3d 3, 39-40 (D.C. Cir. 2005). Allowable emissions may not be used as a surrogate for baseline actual emissions in making major NSR applicability determinations. *New York*, 413 F.3d 40 ("[T]he plain language of the CAA indicates that Congress intended to apply NSR to changes that increase actual emissions instead of potential or allowable emissions[.]").

State-only PAL6 is deficient as a matter of law, because it ties the Act's major modification preconstruction requirements to increases in *allowable* emissions, or, in the case of PM, to a limit that is even higher than the relevant allowable.[6] While ExxonMobil's initial PAL6 application represented that allowables-based limits in PAL6 were lower than baseline actual

[5] Comments at 3-4.
[6] ExxonMobil's PAL6 PM cap is almost 100 tons higher than the amount the plant is authorized to emit. Comments at 3.

emissions, EIP's comments demonstrate that this representation is incorrect and turns on the application of an improper definition of "baseline actual emissions":

> While ExxonMobil's initial PAL application suggests that ExxonMobil opted to base these PALs on potential rather than actual emissions because baseline actual emissions were higher than potential emissions when new emission controls that were required by ExxonMobil's flexible permit were taken into account, Attachment 3, they are actually much lower because ExxonMobil's baseline actual emissions should have been adjusted downward to exclude emissions that exceeded these pollution control requirements. 40 C.F.R. § 51.166(b)(47)(ii)(c) ("The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period."); 30 Tex. Admin. Code § 116.12(3)(B).
>
> For example, the NO_x cap contribution of 796.66 tons per year for ExxonMobil's Boilers A-D and Cogeneration Trains 1-4 is 439.8 tons higher—almost 18 times the applicable major modification threshold—than baseline actual emissions calculated using ExxonMobil's actual heat input data and BACT limits listed in the initial PAL application.[7] ExxonMobil's cap contribution calculations for other emission units included in its NO_x PAL undoubtedly exceed baseline actual emissions, but ExxonMobil's does not include information about actual utilization of these other units during the baseline period in its PAL application.

Comments at 4.

Because state-only PAL6 establishes major modification thresholds that are allowables-based, or even exceed allowable emissions, and because EIP demonstrated that allowables-based emissions used to establish PAL6 limits are higher than the Plant's baseline actual emissions, PAL6 cannot be used to determine that projects at the Baytown Olefins Plant are not major modifications without violating the Act and the Texas SIP. Because this is so, incorporation of PAL6 as a federally-enforceable requirement into the Proposed Permit undermines the enforceability of and violates major NSR requirements in the Act and the Texas SIP.

[7] *See* Comments, Attachments 6 (Baseline Calculations Using ExxonMobil Actual Heat Input and BACT) and 7 (Calculation Summary and Comparison).

B. The Executive Director's Response to Comments Failed to Rebut EIP's Demonstration the Proposed Permit's Incorporation of PAL6 as a Federally-Enforceable Permit Undermines the Enforceability of Applicable Requirements[8]

The Executive Director begins his response to comments by claiming that EIP's concerns about PAL6 were already "addressed during the technical review of Permit 102982 and the issue is not part of the review of this minor revision for Title V Permit O1553." Response to Comments at Response 1. The Executive Director, however, fails to provide any support for his factual claim that issues raised in EIP's comments had been addressed during the technical review of Permit No. 102982 or any legal support for his conclusion that EIP's comments on PAL6 are beyond the scope of the proposed minor revision to ExxonMobil's Title V permit. To the extent that the response to public comments contains information that is relevant to EIP's comments on ExxonMobil's Draft Title V Permit, it supports rather than rebuts EIP's demonstration of deficiency.

1. The Executive Director Failed to Rebut EIP's Demonstration that PAL6 is a State-only Permit

The Executive Director's response to comments does not include a substantive response to EIP's demonstration that PAL6 must be listed as a state-only permit in the Proposed Permit. It does not include any information supporting a determination to the contrary or show that the Executive Director previously considered and rejected EIP's argument that PAL6 must be listed a state-only permit in ExxonMobil's Title V permit. The only relevant information provided in

[8] To determine whether a petitioner has sufficiently demonstrated that a Proposed Permit is deficient, EPA considers whether the petitioner provided sufficient evidence to support a finding of deficiency during the public comment period. In cases where a petitioner raises new arguments in a petition that the state permitting authority did not have an opportunity to consider, EPA may determine that the petitioner failed to raise the claim with reasonable specificity during the comment period. *See, e.g., In the Matter of Shell Chemical LP and Shell Oil Co*, Order on Petition Nos. VI-2014-04 and VI-2014-05 (September 24, 2015) ("Deer Park Order") at 8. EPA also requires petitioners to consider and respond to the state permitting agency's response to public comments. *Id.* at 3. Petitioners contend that EIP conclusively demonstrated that the Proposed Permit is deficient in its comments and that any new facts or arguments presented in this petition are included to address the Executive Director's Response to Comments and not to bolster claims raised during the comment period.

the response—that PAL6 was issued before the TCEQ finalized its first PAL rules, which were subsequently disapproved by EPA—supports EIP's demonstration that PAL6 is a state-only permit. Response to Comments at Response 1.

2. The Executive Director Failed to Rebut Petitioners' Demonstration that PAL6 Undermines the Enforceability of Requirements in the Texas SIP

The Executive Director's response to comments does not include a substantive response to EIP's demonstration that incorporation of state-only PAL6 into the Proposed Permit as a federally enforceable authorization undermines the enforceability of Texas SIP requirements for future projects at the Baytown Olefins Plant. While the response to comments does suggest that the Executive Director rejected the argument that PAL6 should not be used to determine major NSR applicability for ExxonMobil's ethylene expansion project, his reasoning does not address EIP's demonstrations in this matter: The Executive Director's response does not consider or reject EIPs' demonstration that PAL6 is a state-only permit that may not be used to displace netting requirements in the Texas SIP without violating 42 U.S.C. 7410(i). Nor does the Executive Director assert that the substantive deficiency alleged in EIP's comments—that PAL6 establishes major modification thresholds that are higher than baseline actual emissions—is without merit. Instead, the Executive Director's response contains an extended discussion of whether deficiencies alleged during his review for Permit No. 102982 were consistent with EPA's objections to the TCEQ's initial PAL rules. Response to Comments at Response 1. This discussion is beside the point, both in this case and in the context of the challenge to Permit No. 102982, because PAL6 was not actually issued under the TCEQ's disapproved PAL rules.

EIP's comments demonstrate that PAL6 is a state-only permit and that its unqualified incorporation into the Proposed Permit undermines the enforceability of major modification

applicability determination requirements in the Texas SIP. The Executive Director's response to comments does not rebut this demonstration.

3. *The Executive Director Failed to Rebut Petitioners' Demonstration that PAL6 Undermines the Enforceability of the Clean Air Act and Texas SIP's Requirement that Major NSR Applicability Determinations be Based on Increases from Baseline Actual Emissions*

The Executive Director's response to comments supports rather than disputes EIP's demonstration that limits in PAL6 reflect allowable rather than actual emissions:

> When Permit 3452 was issued in 2001, an emissions cap was established by applying then current best available control technology (BACT) to the existing furnaces. As a result the cap was less than the prior two-year actual emissions. When PAL6 was issued, several additional furnaces were added to the flexible cap, *and the PAL was set equal to the new flexible cap*.

Response to Comments at Response 1 (emphasis added).

While the Executive Director does not dispute EIP's demonstration that the limits in state-only PAL6 reflect allowable rather than baseline actual emissions, he suggests that allowable-based limits in PAL6 are actually lower than baseline actual emissions. The Executive Director's statement, however, demonstrates that the opposite is true. As EIP explained in its public comments, baseline actual emissions must be "adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month [baseline] period." 40 C.F.R. 51.166(b)(47)(ii)(c); 30 Tex. Admin. Code § 116.12(3)(B). The BACT limits established in 2001 were requirements that applied to the Baytown Olefins Plant at the time PAL6 was issued. Thus, the actual emissions that ExxonMobil used to compare with the BACT-based flexible permit caps should have been adjusted downward to reflect the application of BACT. EIP

anticipated the Executive Director's response and included excerpts from ExxonMobil's PAL application demonstrating that properly calculated baseline actual emissions would have been far lower than the allowables-based limits in PAL6. Comments at 4. EIP demonstrated that PAL6 establishes allowables-based major modification thresholds and that the thresholds are higher than the Plant's baseline actual emissions. The Executive Director failed to rebut this demonstration. The Proposed Permit's unqualified incorporation of PAL6 undermines the enforceability of the Clean Air Act and Texas SIP requirement that major NSR applicability determinations must be based on increases from baseline actual emissions.

C. EIP's Comments Demonstrate that the TCEQ and ExxonMobil's Reliance on State-Only PAL6 to Determine that the Company's Ethylene Expansion Project was a Minor Modification Violated the Act and the Texas SIP[9]

1. State-Only PAL6 does not Establish Major Modification Thresholds that Displace SIP Requirements

The Clean Air Act provides that any physical or operational change to an existing major source that has the potential to result in significant emissions increases and significant net emissions increases is a major modification subject to applicable requirements in a state's PSD and/or NNSR preconstruction permitting programs. 40 C.F.R. §§ 52.21(b)(23), (39), (47); 30 Tex. Admin. Code §§ 116.12(20); 116.111(a)(2)(H) and (I); 116.150(d); 116.160(c). The Texas SIP provides two mechanisms for determining whether a project at an existing major source is a major modification: Federally-enforceable PALs and the de minimis threshold test (otherwise known as "netting"). 30 Tex. Admin. Code §§ 116.150(d); 116.160(c); 116.190. A federally-enforceable PAL is "[a]n emission limitation expressed, in tons per year, for a pollutant at a major stationary source, that is enforceable and established in a plant-wide applicability limit permit under § 116.186 of this title[.]" 30 Tex. Admin. Code § 116.12(24). Each PAL in a

[9] Comments at 1-5.

federally-approved PAL permit must reflect source-wide baseline actual emissions of a single NSR pollutant. *Id.* at § 116.188. As Petitioners explain above, as EIP explained in its public comments, and as EPA made clear in its letter to ExxonMobil, the limits in PAL6 are not federally-enforceable. PAL6 predates and therefore could not have been issued under § 116.186 as the TCEQ's SIP-approved rules require. The limits in PAL6 reflect allowable rather than baseline actual emissions. As a matter of law, state-only PAL6 is not a proper basis for determining that projects at the Baytown Olefins Plant do not trigger the Act's PSD and/or NNSR preconstruction permitting requirements for any pollutant. 42 U.S.C. § 7410(i). Thus, the Texas SIP requires ExxonMobil to conduct a netting demonstration to determine whether construction projects at the Baytown Olefins Plant trigger major modification preconstruction permitting requirements.

This netting demonstration is required for modifications to existing units or construction of new units that have the potential to result in new emissions that exceed applicable significance thresholds. 30 Tex. Admin. Code §§ 116.150(c); 116.160(b). According to the Technical Review Document for the initial issuance of Permit No. 102982, which was linked in EIP's comments, the permit authorizes potential increases that exceed applicable significance thresholds for the following pollutants:

Pollutant	**Allowable Emissions (tpy)**	**Major Modification Threshold (tpy)**
PM	90.54	25
PM_{10}	78.58	15
$PM_{2.5}$	73.45	10 direct or 40 tpy NO_x or SO_2
VOC	224.14	25
NO_x	235.59	25
CO	931.16	100

Thus, ExxonMobil was required to conduct a netting demonstration to determine whether the project authorized by Permit No. 102982 was a major modification. Nonetheless, ExxonMobil failed to evaluate actual emissions increases resulting from the project and has not obtained a major NSR permit authorizing the project. ExxonMobil, therefore, never properly determined whether its expansion project triggered major NSR preconstruction permitting requirements. The Proposed Permit's unqualified incorporation of Permit No. 102982, which purports to authorize significant new emissions from ExxonMobil's expansion project as a minor modification, therefore violates and undermines the enforceability of PSD/NNSR applicability determination requirements in the Clean Air Act and the Texas SIP. Because, as a matter of law, ExxonMobil was required to demonstrate compliance with applicable PSD/NNSR preconstruction permitting requirements before constructing the ethylene expansion project, and because (1) ExxonMobil failed to properly determine whether these requirements were triggered by the project, and instead (2) relied on its state-only PAL authorization, the order authorizing construction of the expansion project as a minor modification should also be considered enforceable, if at all, as a state-only permit that does not change ExxonMobil's ongoing obligation to comply with federal requirements.

2. *Even if PAL6 is a Federally-Enforceable Permit, the Executive Director and ExxonMobil Failed to Properly Determine Whether the Ethylene Expansion Project was a Major Modification*[10]

Even if PAL6 is a federally enforceable permit, EIP's comments still demonstrate that the TCEQ's reliance on it to determine that ExxonMobil's ethylene expansion project was not a major modification for $PM_{2.5}$ was deficient as a matter of law. As EIP explained in its comments, PAL6 does not include a $PM_{2.5}$ PAL. Each PAL may cover emissions of only one

[10] Comments at 4-5.

pollutant. 40 C.F.R. §§ 51.166(w)(4) and (6); 30 Tex. Admin. Code §§ 116.12(24) and 116.186(a). PM and $PM_{2.5}$ are separately-regulated NSR pollutants and operators must determine major NSR applicability for each. *See, e.g.*, 77 Fed. Reg. 65,107, 65,111, *Implementation of the New Source Review Program for Particulate Matter Less Than 2.5 Micrometers* (October 25, 2012) ("PM, PM_{10}, and $PM_{2.5}$] are considered separately as regulated NSR pollutants subject to review under the PSD program, which means that proposed new and modified sources must treat each indicator of PM as a separate regulated pollutant for applicability determinations, and must then apply the PSD requirements, as appropriate, independently for each indicator of PM"). Accordingly, ExxonMobil's PM PAL is not a $PM_{2.5}$ PAL. Because this is so, ExxonMobil's ethylene production unit may be a major modification even if PAL6's PM limit is federally-enforceable.

The Executive Director argued that ExxonMobil's PM PAL is also a $PM_{2.5}$ PAL, because it was issued while EPA's Interim PM_{10} Surrogate Policy was in effect and, pursuant to the Policy, a PM PAL may be considered a $PM_{2.5}$ PAL. This argument is wrong as a matter of law, because (1) EPA's Interim PM_{10} Surrogate Policy never applied to PALs;[11] (2) even if the Policy once applied to PALs, it has been terminated and may not be relied upon for any purpose;[12] and (3) whatever EPA intended its Policy to mean, an informal policy cannot modify the express language of EPA and Texas's rules that "each PAL must include emissions of only one pollutant." 30 Tex. Admin. Code § 116.186(a); 40 C.F.R. § 51.166(w)(4)(e).

Because ExxonMobil and the TCEQ's reliance on PAL6 to determine that ExxonMobil's ethylene expansion project is not a major modification for $PM_{2.5}$ was deficient as a matter of law,

[11] *See, e.g.*, 40 C.F.R. § 52.21(i)(1)(xi) (July 1, 2011) (repealed) (listing review requirements affected by Interim PM10 Surrogate Policy without including PALs).
[12] 76 Fed. Reg. 28,646, 28,648 (May 18, 2011) ("With the end of the 1997 PM_{10} Surrogate Policy in SIP-approved states on May 16, 2011, and the repeal of the grandfather provision in this final action, the 1997 PM_{10} Surrogate Policy may not be relied on for any pending or future applications").

the Proposed Permit's unqualified incorporation of Permit No. 102982—which authorizes construction of the project as a minor modification—undermines the enforceability of and violates major NSR preconstruction permitting requirements in the Act and the Texas SIP.

D. The Executive Director's Response to Public Comments Failed to Rebut EIP's Demonstration that the Proposed Permit's Incorporation of Permit No. 102982 Violates and Undermines the Enforceability of Preconstruction Permitting Requirements in the Act and the Texas SIP

The Executive Director's response to comments fails to rebut EIP's demonstration that (1) the TCEQ and ExxonMobil's determination that the ethylene expansion project authorized by Permit No. 102982 was a minor modification was deficient as a matter of law and (2) that incorporation of Permit No. 102982 as a federally-enforceable authorization to construct that expansion violates and undermines the enforceability of major NSR preconstruction permitting requirements established by the Act and the Texas SIP.

First, the Executive Director relies on an excerpt from his technical review of ExxonMobil's application for Permit No. 102982, which explains that projects at sources regulated under a federally-enforceable PAL permit do not trigger major modification preconstruction requirements unless the proposed project increases cannot fit under limits established by the permit. Response to Comments at Response 1. This discussion has no bearing on the issue raised in EIP's comments, because it presumes without demonstrating that PAL6 is a federally-enforceable PAL permit. As Petitioners explained above and as EIP explained in its comments, this presumption is incorrect. EPA determined that PAL6 was not a federally-enforceable permit prior to ExxonMobil's submission of its application for Permit No. 102982 and EIP demonstrated that the permit does not reflect baseline actual emissions from the Plant, as the law requires. Thus, PAL6 did not modify ExxonMobil's obligation to use the netting method in the Texas SIP to determine major NSR applicability for its expansion project.

ExxonMobil has not done this, and thus Permit No. 102982, which authorizes construction of the expansion as a minor modification, may not be included in the Proposed Permit as a federally-enforceable construction authorization without undermining the enforceability of and violating NSR preconstruction permitting requirements in the Texas SIP and the Act.

The Executive Director's response to public comments also fails to address EIP's demonstration that PAL6 does not contain a $PM_{2.5}$ PAL. Instead, he copied the following language from the record for his review of ExxonMobil's application for Permit No. 102982:

> The PAL limits for PM were established by taking previously authorized PM limits from Permit 3452. ExxonMobil is required to operate within the existing PM PAL limit, which include the subsets $PM_{2.5}$ and PM_{10} as indicator pollutants for PM. In 2005, reliable $PM_{2.5}$ data was unavailable and the EPA allowed use of the PM_{10} surrogacy policy to complete the evaluation of PM. This surrogacy policy was developed because when EPA adopted the $PM_{2.5}$ standard in 1997, it recognized the technical challenges that permitting authorities faces regarding the implementation of $PM_{2.5}$ into new source review permitting programs. For nearly eight years after the EPA implemented its surrogacy policy, the EPA continued to acknowledge the outstanding difficulties related to implementing a $PM_{2.5}$ NSR program. The difficulties included the lack of the necessary and specific tools to calculate the emissions of $PM_{2.5}$. The TCEQ recognizes the EPA ended the use of its PM_{10} surrogacy policy in May 2011 and does not rely on the surrogacy policy to issue new source review permits. . . . PM is one of the criteria pollutants under evaluation for this project and Exxon Mobil represented that the PM_{10} and $PM_{2.5}$ emissions associated with the project will be within the established PAL6 PM limit.

Response to Comments at Response 1.

This response is beside the point. The question is whether the PM limit in PAL6 permit was also a $PM_{2.5}$ PAL. EIP demonstrated that the answer to this question must be "no," because PM and $PM_{2.5}$ are separately-regulated NSR pollutants and each PAL may only establish a major modification threshold for a single pollutant. The fact that EPA's PM_{10} Surrogate policy was used to establish the allowables-based PM limit included in ExxonMobil's flexible permit/state-

only PAL permit issued in 2005 has no bearing on the question of whether ExxonMobil and the TCEQ may rely on that PM limit to determine, after the surrogacy policy has ended, that $PM_{2.5}$ increases associated with a construction project do not trigger major modification preconstruction requirements. Thus, the Executive Director's response to comments fails to address Petitioners' objection and does not rebut EIP's demonstration that the Proposed Permit's incorporation of Permit No. 102982 as a federally-enforceable authorization to construct ExxonMobil's ethylene expansion project as a minor modification both violates and undermines the enforceability of major New Source Review requirements in the Act and the Texas SIP.

E. CONCLUSION

For the foregoing reasons, and as explained in EIP's timely-filed public comments, the Proposed Permit is deficient. The Executive Director's response to EIP's public comments was also insufficient. Accordingly, Petitioners respectfully request that the Administrator object to the Proposed Permit.

Sincerely,

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EXHIBITS

(Exhibit 1), Environmental Integrity Project, Air Alliance Houston, and Sierra Club's Reply to Responses to its Motion to Overturn the Executive Director's Reopening of Permit No. PAL6

(Exhibit 2) Public Comments Submitted on Behalf of the Environmental Integrity Project Regarding the Draft Minor Revision to Permit No. O1553

(Exhibit 3) Notice of Proposed Permit and Executive Director's Response to Public Comment, Minor Revision, Permit No. O1553

(Exhibit 4) Letter from John Blevins, Director, Compliance Assurance and Enforcement Division, EPA Region 6, to Evelyn R. Ponton, Environmental Coordinator, ExxonMobil Corporation, Re: Permit Number PAL6

CERTIFICATE OF SERVICE:

I hereby certify that on August 8, 2016 I provided copies of the foregoing Petition to persons or entities below via electronic filing, e-mail, U.S. certified mail, or hand delivery:

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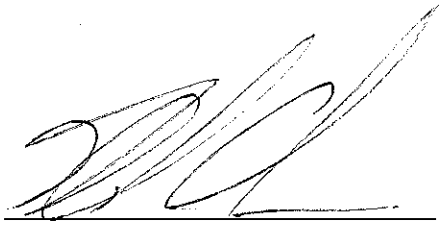

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