

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR**

IN THE MATTER OF	§	PETITION FOR OBJECTION
	§	
Clean Air Act Title V Permit No. O1498	§	
	§	
Issued to Premcor Refining Group Inc.	§	Permit No. O1498
	§	
Issued by the Texas Commission on	§	
Environmental Quality	§	
	§	
	§	

**PETITION TO OBJECT TO TITLE V PERMIT NO. O1498 ISSUED BY THE TEXAS
COMMISSION ON ENVIRONMENTAL QUALITY**

Pursuant to section 42 U.S.C. § 7661d(b)(2), the Environmental Integrity Project, Sierra Club, and the Port Arthur Community Action Network (“Petitioners”) hereby petition the Administrator of the U.S. Environmental Protection Agency (“Administrator” or “EPA”) to object to Proposed Federal Operating Permit No. O1498 issued by the Texas Commission on Environmental Quality (“TCEQ” or “Commission”) authorizing operation of the Valero Port Arthur Refinery (“Port Arthur Refinery”), located in Jefferson County, Texas.

I. PETITIONERS

The Environmental Integrity Project is a non-profit, non-partisan watchdog organization that advocates for effective enforcement of environmental laws. EIP has three goals: (1) to illustrate through objective facts and figures how the failure to enforce and implement environmental laws increases pollution and harms public health; (2) to hold federal and state agencies, as well as individual corporations accountable for failing to enforce or comply with environmental laws; and (3) to help communities obtain protections guaranteed by environmental laws. The Environmental Integrity Project has offices and programs in Austin, Texas and Washington, D.C.

The Sierra Club is a national nonprofit organization with 67 chapters and over 635,000 members dedicated to exploring, enjoying, and protecting the wild places of earth; to practicing and promoting the responsible use of earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Lone Star Chapter of the Sierra Club has members who live, work, and recreate in areas affected by air pollution from the Port Arthur Refinery.

The Port Arthur Community Action Network is a community group formed by Port Arthur residents to advocate for solutions that reduce or eliminate environmental and public health hazards and improve the quality of life in Port Arthur. PA-CAN members live in close proximity to the Port Arthur Refinery and are directly affected by the pollution it emits.

II. PROCEDURAL BACKGROUND

This petition addresses the TCEQ's renewal of Permit No. O1498 authorizing operation of the Port Arthur Refinery. The Port Arthur Refinery is a major source of criteria air pollutants and hazardous air pollutants located in Port Arthur, Texas.

Valero filed its application to renew Permit No. O1498 on July 5, 2011. The Executive Director concluded his technical review of Valero's application on November 10, 2015. The Executive Director proposed to approve Valero's application and issued Draft Permit No. O1498, notice of which was published on December 16, 2015. Petitioner groups timely-filed comments with the TCEQ identifying deficiencies in the Draft Permit. (Exhibit A), Public Comments on Draft Permit No. O1498 ("Public Comments").

On November 3, 2017, the TCEQ's Executive Director issued notice of Proposed Permit No. O1498 along with his response to public comments on the Draft Permit. (Exhibit B), Notice of Proposed Permit and the Executive Director's Response to Public Comment ("Response to Comments"); (Exhibit C), Proposed Permit No. O1498 ("Proposed Permit"); (Exhibit D),

Statement of Basis, Permit No. O1498. The Executive Director revised the Proposed Permit to address some, but not all of the deficiencies that Petitioners identified in their Public Comments.

EPA's 45-day review period for the Proposed Permit began on November 7, 2017 and ended on December 22, 2017. Because the Administrator did not object to the Proposed Permit during his 45-day review period, members of the public have 60-days from the close of the review period to petition the Administrator to object to the Proposed Permit. This petition for objection is timely filed.

III. LEGAL REQUIREMENTS

Title V permits are the primary method for enforcing and assuring compliance with the Clean Air Act's pollution control requirements for major sources of air pollution. *Operating Permit Program*, 57 Fed. Reg. 32,250, 32,258 (July 21, 1992). Prior to enactment of the Title V permitting program, regulators, operators, and members of the public had difficulty determining which requirements applied to each major source and whether sources were complying with applicable requirements. This was a problem because applicable requirements for each major source were spread across many different rules and orders, some of which did not make it clear how general requirements applied to specific sources.

The Title V permitting program was created to improve compliance with and to facilitate enforcement of Clean Air Act requirements by requiring each major source to obtain an operating permit that (1) lists all applicable federally-enforceable requirements, (2) contains enough information for readers to determine how applicable requirements apply to units at the permitted source, and (3) establishes monitoring requirements that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a) and (c); *Virginia v. Browner*, 80 F.3d 869, 873 (4th Cir. 1996) ("The permit is crucial to implementation of the Act: it contains, in a single, comprehensive set of documents, all CAA requirements relevant to the particular

source.”); *Sierra Club v. EPA*, 536 F.3d 673, 674-75 (D.C. Cir. 2008) (“But Title V did more than require the compilation in a single document of existing applicable emission limits It also mandated that each permit . . . shall set forth monitoring requirements to assure compliance with the permit terms and conditions”).

The Title V permitting program provides a process for stakeholders to resolve disputes about which requirements should apply to each major source of air pollution outside of the enforcement context. 57 Fed. Reg. 32,266 (“Under the [Title V] permit system, these disputes will no longer arise because any differences among the State, EPA, the permittee, and interested members of the public as to which of the Act’s requirements apply to the particular source will be resolved during the permit issuance and subsequent review process.”). Accordingly, federal courts do not generally second guess Title V permitting decisions made by state permitting agencies and will not enforce otherwise-applicable requirements that have been omitted from or displaced by conditions in a Title V permit. *See*, 42 U.S.C. § 7607(b)(2); *see also*, *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)). Because courts rely on Title V permits to determine which requirements may be enforced and which requirements may not be enforced against each major source, state-permitting agencies and EPA must exercise care to ensure that each Title V permit includes a clear, complete, and accurate account of the requirements that apply to the permitted source.

The Act requires the Administrator to object to a state-issued Title V permit if he determines that it fails to include and assure compliance with all applicable requirements. 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c). If the Administrator does not object to a Title V permit, “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).

IV. GROUNDS FOR OBJECTION

A. The Proposed Permit Fails to Incorporate and Assure Compliance with Permit By Rule (“PBR”) Requirements, Including Requirements in Valero’s Certified PBR Registrations

1. Specific Grounds for Objection, Including Citation to Permit Term

The Proposed Permit is deficient, because it omits information necessary for readers to determine: (1) how much pollution units authorized by PBR(s) and Standard Exemption(s) are authorized to emit; (2) which units are subject to PBR and Standard Exemption emission limits; and (3) which pollutants each emission units authorized by PBR(s) and/or Standard Exemption(s) are authorized to emit.

Petitioners’ demonstration of deficiency involves the following special conditions and citations in the Proposed Permit, as well as documents attached to Petitioners’ Public Comments that are not included or referenced in the Proposed Permit:

Proposed Permit, Special Condition No. 25 provides that Valero must “comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permit area, including permits, permits by rule, standard permits . . . referenced in the New Source Review Authorization References attachment,” and that these requirements “[a]re incorporated by reference into this permit as applicable requirements[.]”

The Proposed Permit's New Source Review Authorization References attachment lists 11 PBRs and six Standard Exemptions incorporated by reference into the Proposed Permit. Proposed Permit at 437-38.

The Proposed Permit's New Source Review Authorization References by Emissions Unit attachment identifies emission units subject to some, but not all, of the PBRs and Standard Exemptions incorporated by reference into the Proposed Permit. Proposed Permit at 439-455. Specifically, the attachment does not identify any emission unit subject to the following nine PBRs: 106.183, 106.261, 106.262, 106.263, 106.371, 106.412, 106.472, 106.473, and 106.478.

While PBRs establish generic emission limits that may apply to projects authorized by PBR, Texas's rule at 30 Texas Administrative Code § 106.6 allows operators to request source-specific PBR limits that are more stringent than the generic PBR limits found in Texas's rules. These source-specific PBR limits are found in Certified PBR Registrations issued by the TCEQ. Source-specific Certified PBR Registrations issued for the Port Arthur Refinery prior to the close of the Draft Permit's public comment period were included as Attachment 5 to Petitioners' Public Comments. Certified PBR Registrations issued after the close of the public comment period but prior to the issuance of the Proposed Permit are included with this petition as Exhibit E. Each of Valero's Certified PBR Registrations has been assigned a permit number by the TCEQ, but these permit numbers are not referenced by the Proposed Permit.

2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must include and assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a) and (c). "Applicable requirements" include generic emission limits for PBRs claimed to authorize projects at a Title V source as well as certified source-specific PBR limits. 30 Tex. Admin. Code § 122.10(2)(H); *see also* 30 Tex. Admin. Code §§ 106.4 (establishing generic emission limits for PBR projects) and 106.6 (allowing operators to

certify source-specific emission limits that are more stringent than otherwise applicable generic PBR limits).

As explained below, the Proposed Permit is deficient because it fails to incorporate Valero's Certified PBR Registrations as applicable requirements and it omits information necessary to identify and assure compliance with applicable PBR requirements.

3. Inadequacy of the Permit Term

a. The Proposed Permit Does Not Incorporate Source-Specific Requirements in Valero's Certified PBR Registrations

The Proposed Permit is incomplete because it fails to incorporate source-specific emission limits in Valero's Certified PBR Registrations. According to Special Condition No. 25, the Proposed Permit's New Source Review Authorization References attachment lists all New Source Review authorizations, including PBRs, that are incorporated into the Proposed Permit. This attachment does not list Valero's Certified PBR Registrations as applicable requirements. This omission renders the Proposed Permit incomplete and undermines the enforceability of emission limits in Valero's source-specific Certified PBR Registrations. 42 U.S.C. § 7661c(a), 40 C.F.R. § 70.6(a), and 30 Tex. Admin. Code § 122.142(b)(2)(B)(i) and (3).

b. The Proposed Permit Fails to Adequately Incorporate and Assure Compliance with Emission Limits in PBRs and Standard Exemptions Claimed by Valero

Incorporation by reference of PBR and Standard Exemption requirements into Title V permits is inconsistent with the Clean Air Act unless two conditions are met: (1) information incorporated by reference into a Title V permit is readily available to the public and regulators; and (2) Title V permits provide information that clearly and unambiguously explains how incorporated emission limits apply to emission units at the permitted source. *In the Matter of Citgo Refining and Chemicals, West Plant, Corpus Christi*, Order on Petition No. VI-2007-01 at 12, n5 (May 28, 2009); *In the Matter of Shell Chemical LP and Shell Oil Co., Deer Park Chemical Plant*

and Refinery (“Deer Park Order”), Order on Petition Nos. IV-2014-04 and IV-2014-05 at 10-11 (September 24, 2015). The Proposed Permit’s method of incorporating Valero’s PBR and Standard Exemption authorizations by reference fails to meet the second condition, because the Proposed Permit omits information necessary for readers to determine (1) which emission units at the refinery are subject to requirements in each of the PBRs; (2) which pollutants Valero may emit under the claimed PBRs and Standard Exemptions; and (3) how the emission limits in PBRs and Standard Exemptions claimed by Valero apply to units at the Port Arthur Refinery.

i. The Proposed Permit Fails to Identify any Emission Unit Authorized by Nine of the Twelve Incorporated PBRs

The Statement of Basis explains that “[f]acilities authorized by PBR must be constructed and operated with certain restrictions,” including emission limits listed in the claimed PBR and the TCEQ’s general PBR rule at 30 Tex. Admin. Code § 106.4. Statement of Basis at 121. In order for readers to determine which PBR requirements apply to emission units at the Port Arthur Refinery, the Proposed Permit must identify the facilities authorized by and subject to requirements in each of the PBRs incorporated by reference into the Proposed Permit. The Proposed Permit is deficient because it does not provide this information for nine of the twelve PBRs that it incorporates by reference (106.183, 106.261, 106.262, 106.263, 106.371, 106.412, 106.472, 106.473, and 106.478). *Objection to Title V Permit No. O2164*, Chevron Phillips Chemical Company, Philtex Plant at ¶ 7 (August 6, 2010) (draft permit fails to meet 40 C.F.R. § 70.6(a)(1) and (3) because it does not list any emission units authorized under specified PBRs). This renders the Proposed Permit incomplete and undermines the enforceability of applicable PBR requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(1) and (3).

ii. The Proposed Permit Fails to Explain Whether and How Generic Emission Limits in the TCEQ’s PBR Rules Apply to Emission Units at the Port Arthur Refinery

Each PBR is a separate rule in Part 30, Chapter 106, Subchapters B through X of the Texas Administrative Code. Each of these rules is a generic permit that may be claimed to authorize certain kinds of construction projects specified by the rules. Some of these rules specify emission limits that apply to facilities authorized by the PBR. Others, however, do not specify applicable emission limits. Where the applicable PBR does not list specific emission limits, authorized facilities are subject to the general emission limits listed at 30 Tex. Admin. Code § 106.4(a)(1). Texas’s rules provide that the general limits listed at § 106.4(a)(1) establish a cap on the amount of pollution that may be authorized by PBR for each facility. 30 Tex. Admin. Code § 106.4(a)(1) (“Total actual emissions authorized under permit by rule from the facility shall not exceed the following limits[.]”). The rules also clarify that cumulative emissions from multiple facilities may exceed the emission limits listed at § 106.4(a)(1), so long as at least one facility at a source has been subject to public notification and comment. *Id.* at § 106.4(a)(4). Finally, if generic limits in a claimed PBR or limits in the general PBR rule, as applicable, are higher than applicable PSD netting thresholds, Texas’s rules allow an operator to certify source-specific emission limits lower than the otherwise regulatory limits to avoid triggering PSD requirements. *Id.* at § 106.6.

The Proposed Permit includes the following kinds of information describing how PBR emission limits apply to emission units at the Port Arthur Refinery: First, the Proposed Permit provides that Valero must “comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits.” Proposed Permit at Special Condition No. 22. The Proposed Permit, however, does not identify any of these limits or indicate whether Valero has certified federally enforceable emission limits for any unit or units at the Port Arthur Refinery. Next, the Proposed Permit incorporates by reference PBRs listed by rule number in the New Source

Review Authorization References attachment, *id.* at Special Condition No. 25, and requires Valero to comply with emission limits in Texas's general PBR rule at § 106.4. *Id.* at Special Condition No. 26. Then, the Proposed Permit's New Source Review Authorization References attachment lists 12 PBRs Valero has claimed to authorize projects at the Port Arthur Refinery and the Proposed Permit's New Source Review Authorization References by Emission Unit attachment identifies units subject to requirements in three of the twelve incorporated PBRs. Proposed Permit at 437-455.

This information is not sufficient to explain how much any facility authorized by PBR at the Port Arthur Refinery is allowed to emit. This is so for the following reasons: First, it is impossible to determine for any piece of equipment authorized by PBR whether generic limits specified in the TCEQ's PBR rules or source-specific limits in a Certified PBR Registration apply. Second, as explained above, the Proposed Permit does not identify any facilities subject to emission limits in nine of the 12 PBRs it incorporates by reference. Finally, in cases where Valero has used a PBR or PBRs to authorize changes to multiple facilities as part of a single project, Valero will need to maintain emissions from each such facility below the 106.4 emission limits to avoid triggering PSD netting requirements. The Proposed Permit is deficient because it fails to identify units that must maintain emissions below the 106.4 limits to avoid triggering PSD netting requirements. For these reasons, the Proposed Permit fails to sufficiently explain how PBR emission limits apply to units at the Port Arthur Refinery and the Administrator must object to it. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1) and (3).

4. Issue Raised in Public Comments

Petitioners' raised this issue on pages 19-27 of their Public Comments. Public Comments, Attachment 5 compiled Valero's Certified PBR Registrations issued prior to the close of the public comment period. Exhibit E to this Petition includes Certified PBR Registrations issued after the

close of the public comment period but prior to issuance of the Proposed Permit. Petitioners may rely on these additional Certified PBR Registrations to demonstrate the Proposed Permit's deficiency, because they were not available for review during the public comment period. 42 U.S.C. § 7661d(b)(2).

5. Analysis of the State's Response

a. Incorporation of Certified PBR Registrations

The Executive Director's response to comments does not actually address Petitioners' demonstration that the Proposed Permit is incomplete because it fails to identify and incorporate Valero's Certified PBR Registrations. Instead, the Executive Director makes several irrelevant responses, each of which is addressed below:

“PBRs do not violate the SIP, EPA policy, or prior SIP decisions; nor is incorporation of PBRs into Premcor's FOP impermissible.” Response to Comments at Response 9.

Even if all of this is true, it does not provide a basis for the Proposed Permit's failure to incorporate Valero's Certified PBR Registrations.

[T]he ED disagrees with the assertion that PBR incorporation into FOPs is impermissible. Regarding specific problems the Commenters describe with using PBRs to amend facilities, these issues are beyond the scope of this FOP action because they are arguments concerning the PBR authorization and not the FOP authorization.

Id.

Petitioners do not, however, contend that the Proposed Permit is deficient because it incorporates Valero's Certified PBR Registrations by reference. Instead, Petitioners contend that the Proposed Permit is deficient because it fails to incorporate Valero's Certified PBR Registrations as applicable requirements. Public Comments at 25-26. Petitioners are not aware that they raised any issue related to the use of PBRs to amend facilities and Petitioners' claim that

the Proposed Permit is incomplete because it fails to incorporate Valero's Certified PBR Registrations is not beyond the scope of this Title V permit review.

The NSR Authorization References table in the Draft Permit incorporates the requirements of NSR Permits, including PBRs by reference. All "emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance" are specified in the PBR incorporated by reference or cited in the Draft Permit. When the emission limitation or standard is not specified in the referenced PBR, then the emissions authorized under permit by rule from the facility are specified in §106.4(a)(1). Additional requirements for PBRs are found in the Special Terms and Conditions under New Source Review Authorization Requirements. In the Draft Permit, these requirements are found in Special Terms and Conditions 25, 26, and 27, relating to PBRs. The ED does not agree that the emission limitations and standards for PBRs should be listed on the face of the FOP, as the EPA has supported the practice of incorporation by reference for the purpose of streamlining the content of the Part 70 permit. See White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 and White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996.

Response to Comments at Response 9.

This part of the Executive Director's response is both incorrect and incomplete. First, the NSR Authorization References attachment does not list Valero's Certified PBR Registrations as applicable requirements. Second, it is incorrect that source-specific emission limits established by Valero's Certified PBR Registrations are listed in Texas's PBR rules. Third, even if PBR requirements may be incorporated by reference into Title V permits, the Proposed Permit is incomplete because it fails to incorporate Valero's Certified PBR Registrations by reference.

The EPA has also supported the practice of not listing insignificant emission units for which "generic" requirements apply. See White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The New Source Review Authorization References table identified preconstruction authorizations at the site that are required to be listed in the Draft Permit. The NSR authorizations are applicable requirements and incorporated by reference.

Id.

Petitioners are uncertain why the Executive Director believes it relevant that certain units may be omitted from Title V permits. Petitioners' concern is that the Proposed Permit fails to incorporate source-specific emission limits in Valero's Certified PBR Registrations. Petitioners also note that source-specific requirements in Valero's Certified PBR Registrations are not generic requirements.

Regarding specific problems the Commenters describe[] with PBRs (i.e. public participation, interference with the NAAQS using PBRs to amend facilities), these issues are beyond the scope of this FOP action because they are arguments concerning PBR authorization and not the FOP authorization.

Id.

Petitioners do not make the kinds of arguments the Executive Director describes.

“Premcor is required to keep records that demonstrate compliance with any PBR held at the site as required by 30 TAC §106.8(c)(2)(A)-(B).” *Id.*

While this statement is also irrelevant to Petitioners' actual comments, Petitioners point out that because the Proposed Permit only incorporates by reference permits “referenced in the New Source Review Authorization References attachment,” Proposed Permit at Special Condition No. 25, and only requires Valero to demonstrate compliance with “any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment,” *id.* at Special Condition No. 27, it is not clear that the Proposed Permit actually requires Valero to demonstrate compliance with its Certified PBR Registrations.

b. PBR Incorporation Generally

The Executive Director's response to Petitioners' demonstration that the Proposed Permit's particular method of incorporating PBR requirements by reference omits information necessary to determine how requirements in Texas's PBR rules apply to units at the Port Arthur Refinery contradicts itself and fails to rebut Petitioners' demonstration.

First, the Executive Director explains that

[a]ll emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance are specified in the PBR incorporated by reference or cited in the Draft Permit. When the emission limitation or standard is not specified in the referenced PBR, then the emissions authorized under PBR from the facility are specified in 30 TAC § 106.4(a)(1).

Response to Comments at Response 8 (internal quotation marks omitted).

But the Executive Director goes on to contradict himself on the very next page, explaining that “[p]ermit holders may also certify emissions in a PBR registration to establish federally enforceable emission limits below the emission limits of 30 TAC § 106.4[.]” *Id.* Because the Proposed Permit fails to indicate whether Valero has certified source-specific PBR emission limits lower than the § 106.4(a)(1) limits for any of the PBRs incorporated by reference into the Proposed Permit, the reader cannot determine whether the limits for each PBR unit at the Port Arthur Refinery are specified by Texas’s PBR rules or by one or more source-specific certified PBR registration.

The Executive Director also fails to rebut Petitioners’ demonstration that the Proposed Permit is incomplete because it fails to identify any unit or units subject to requirements in nine of the 12 PBRs that Valero has claimed. According to the Executive Director:

It has been longstanding TCEQ policy to not list specific emission units in the FOP where the sole applicable requirement is the underlying NSR authorization as stated under the Reading State of Texas’s Federal Operating Permit section of the Statement of Basis document.

Id.

EPA has already addressed and rejected the TCEQ’s policy in the Deer Park Order:

The EPA does not agree with the TCEQ’s interpretation that *White Paper Number 1* and *White Paper Number 2* support the practice of not listing in the title V permit those emission units to which generic requirements apply. As both White Papers state, such an approach is only appropriate where the emission units subject to generic requirements can be unambiguously defined without a specific listing and

such requirements are enforceable. *See, e.g., White Paper Number 1* at 14; *White Paper Number 2* at 31. Thus, not listing emission units for PBRs that apply site-wide may be appropriate in some cases. However, for other PBRs that apply to multiple and different types of emission units and pollutants, the Proposed Permits should specify to which units and pollutants those PBRs apply. Further, PBRs are applicable requirements for title V purposes. The TCEQ's interpretation of how *White Paper Number 1* and *White Paper Number 2* would apply to insignificant emission units does not inform how PBR requirements must be addressed in a title V permit. *See, e.g., 30 TAC 122.10(2)(H)*. The TCEQ should provide a list of emission units for which only general requirements are applicable, and if an emission unit is considered insignificant, it should be identified in the Statement of Basis as such. The TCEQ must revise the permits accordingly to address the ambiguity surrounding PBRs.

Deer Park Order at 15.

The Proposed Permit is deficient because it fails to provide information necessary to determine how incorporated PBR emission limits apply to units at the Port Arthur Refinery and the Executive Director's response fails to explain how its policy position is consistent with Clean Air Act requirements or how the Proposed Permit's failure to list facilities subject to requirements in nine of the 12 PBRs claimed by Valero assures compliance with those PBRs.

The Executive Director's response also fails address Petitioners' concern that the Proposed Permit fails to indicate whether any units authorized by non-certified PBRs must achieve limits lower than specified in the TCEQ's Chapter 106 rules to avoid triggering PSD netting requirements.

B. The Proposed Permit Fails to Include Monitoring, Testing, and Recordkeeping Provisions that Assure Compliance with Applicable Requirements

1. Specific Grounds for Objection, Including Citation to Permit Term

The Proposed Permit is deficient because (1) it fails to establish monitoring, testing, and recordkeeping conditions that assure compliance with emission limits in Valero's NSR permits—including PBRs, Standard Exemptions, and Standard Permits—that it incorporates by reference and (2) the permit record does not contain a reasoned explanation supporting the Executive

Director's determination that monitoring, testing, and recordkeeping conditions in the Proposed Permit assure compliance with these requirements.¹

Proposed Permit, Special Condition No. 25 provides that NSR permits, including PBRs, Standard Exemptions, and Standard Permits, listed in the Proposed Permit's New Source Review Authorization References attachment are incorporated by reference into the Proposed Permit as applicable requirements.

The Proposed Permit's New Source Review Authorization References attachment incorporates one joint PSD, NNSR, and Texas State permit, identified by the following three permit numbers: PSDTX49, N65, and 6825A, two additional Texas State Permits, Nos. 80812, 86757, one Texas Standard Permit, No. 91911, twelve PBRs, and eight Standard Exemptions. Proposed Permit at 437-38.

The Proposed Permit includes the following special condition that establishes recordkeeping requirements for PBRs and Standard Permits listed in the New Source Review Authorization References attachment:

The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

¹ EPA recognized and objected to this very deficiency when Permit No. O1498 was first issued. *In the Matter of Premcor Refining Group* ("Premcor Order"), Order on Petition No. VI-2007-02 at 26-29 (May 28, 2009). Though more than eight years have passed since EPA issued this Order, the TCEQ has not yet corrected the problem.

Proposed Permit, Special Condition No. 27.

The Statement of Basis provides the following statement regarding the sufficiency of monitoring in the Proposed Permit:

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Statement of Basis at 123-24.

None of the Periodic Monitoring or CAM summaries in the Proposed Permit address requirements in Valero's NSR permits, including PBRs, Standard Permits, and Standard Exemptions, and the Statement of Basis does not provide a reasoned justification for the Executive Director's determination that existing provisions in Valero's NSR permits assure compliance with applicable permit emission limits and operating requirements.

2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore* ("Wheelabrator Order"), Permit No. 24-510-01886 at 10 (April 14, 2010). Emission limits in NSR permits, including PBRs, Standard Permits, and Standard Exemptions, incorporated by reference into the Proposed Permit

are applicable requirements. 40 C.F.R. § 70.2; Proposed Permit, Special Condition No. 25. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.5(a)(5); *In the Matter of United States Steel, Granite City Works* (“Granite City I Order”), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

As explained below, the Proposed Permit is deficient because (1) it fails to specify monitoring, testing, and recordkeeping requirements that assure compliance with emission limits and operating requirements in NSR permits, PBRs, Standard Permits, and Standard Exemptions incorporated by reference into the Proposed Permit; and (2) the permit record does not contain a reasoned justification for the Executive Director’s determination that monitoring, testing, and recordkeeping requirements in the Proposed Permit assure compliance with emission limits established by Valero’s NSR permits, PBRs, Standard Permits, and Standard Exemptions.

3. Inadequacy of the Permit Term

a. Permits by Rule and Standard Exemptions

The Proposed Permit incorporates by reference the following PBRs and Standard Exemptions as applicable requirements: 106.183, 106.261, 106.263, 106.512, 61, 68, and 124. Proposed Permit at 437-38.

Facilities authorized by these PBRs and Standard Exemptions must comply with general PBR requirements listed at 30 Tex. Admin. Code § 106.4, the general Standard Exemption requirements in effect at the time each exemption was claimed, as well as any requirements listed in the specific claimed PBRs and Standard Exemptions. Proposed Permit, Special Condition Nos. 25 and 26. General requirements for PBRs and Standard Exemptions include emission limits as well as a prohibition on the use of PBRs and Standard Exemptions to authorize construction of a new major source or a major modification to an existing source. 30 Tex. Admin. Code §§ 106.4(a)(1), (2), and (3) (current) and 116.6 (July 20, 1992). Because the CO, H₂SO₄, and TRS

emission limits established by § 106.4(a)(1) exceed the applicable PSD netting triggers and because PBRs and Standard Exemptions may be used to authorize cumulative increases of other pollutants—including NO_x, VOC, SO₂, PM, PM₁₀, and PM_{2.5}—at multiple facilities at levels that exceed applicable netting thresholds, projects authorized by PBR may trigger PSD netting requirements listed at 30 Tex. Admin. Code § 116.160(b).² To ensure that this does not happen, the Proposed Permit must establish monitoring and testing requirements that allow Valero, regulators, and members of the public to determine whether emissions from PBR and/or Standard Exemption facilities exceed applicable significance thresholds.

In addition to these general PBR and Standard Exemption applicable requirements, the following emission limits and standards established by the specific PBRs and Standard Exemptions claimed by Valero are also applicable requirements incorporated by the Proposed Permit:

Valero has claimed PBR 106.183, which covers boilers, heaters, and other combustion devices. This PBR establishes limits on fuel sulfur content, § 106.183(2) and (3), and limits the amount of NO_x that authorized facilities may emit to 0.1 lb/MMBtu. *Id.* at § 106.183(4).

Valero has claimed PBRs at 106.261 and 262, which may be used to authorize a broad range of different projects. These PBRs establish hourly and annual emission limits for various contaminants, *id.* at §§ 106.261(a)(2) and (3), 106.262(a)(2), and prohibit visible emissions exceeding five percent. *Id.* at §§ 106.261(a)(5), 106.262(a)(5).

PBR 106.263, which applies to routine maintenance, startup, and shutdown of emission units and temporary units establishes daily emission limits, *id.* at § 106.263(d)(1), requires a case-by-case permit for activities that exceed these limits, *id.* at § 106.263(d)(2), incorporates by

² While 30 Tex. Admin. Code § 106.4(a)(1) does not establish specific limits for H₂SO₄, H₂S, or TRS, it contains a 25 ton per year limit for unlisted contaminants. *Id.* at § 106.4(a)(1)(E).

reference emission limits and conditions established by various other PBRs for specific source categories, *id.* at § 106.263(e)(1)-(5), requires a case-by-case permit for activities that exceed these limits, *id.* at § 106.263(e)(6), and incorporates emission limits listed in § 106.4(a)(1)-(3) in any rolling 12-month period. *Id.* at § 106.263(f).

PBR 106.512, which applies to stationary engines and turbines, requires operators to register emissions from engines and turbines rated 240 horsepower or greater, *id.* at § 106.512(1), establishes emission limits and operating requirements for engines and turbines 500 horsepower or greater, *id.* at § 106.512(2) and (3), and limits the kinds and pollutant content of fuel used to power facilities authorized by the PBR. *Id.* at § 106.512(5).

Standard Exemption 61, which authorizes water and wastewater treatment units, establishes an hourly one pound limit on HCl emissions resulting from combustion of chlorine or chlorine-containing compounds. S.E. 61(a)(14). The Standard Exemption also limits emissions of chlorine or SO₂ from the treatment of water or decontamination of equipment at any water treatment plant to 10 tons per year. S.E. 61(a)(1).

Standard Exemption 68 authorizes equipment used to reclaim or destroy chemicals removed from contaminated ground water, contaminated water condensate in tank and pipeline systems, or contaminated soil for purposes of remedial action. Hydrocarbon emissions from equipment treating groundwater or soil contaminated with petroleum compounds may not exceed one pound per hour, and benzene emissions must meet the conditions of Standard Exemption 118(c) and (d). S.E. 68(b). Emissions from equipment treating soil or groundwater contaminated with chemicals other than petroleum or contaminated with a mix of petroleum and non-petroleum contaminants must meet limits in Standard Exemption 118 and limit emissions of any chemical not listed in 118 to one pound per hour. S.E. 68(c).

Standard Exemption 124 authorizes facilities and equipment not otherwise addressed by a specific Standard Exemption. S.E. 124. Facilities authorized under this Standard Exemption may not emit any hazardous air pollutants, must not emit more than three pounds per hour, 50 pounds per day, and 5 tons per year of any non-HAP contaminant. S.E. 124(1) and (2). Standard Exemption 124 also prohibits visible fugitive emissions and the emission of compounds with an odor threshold of less than 1 ppm. S.E. 124(4) and (6).

Though the Proposed Permit and Texas's rules require Valero to maintain records demonstrating compliance with applicable PBR and Standard Exemption requirements, *see, e.g.*, 30 Tex. Admin. Code §§ 106.8(c) and 106.263(g); Proposed Permit, Special Condition No. 27, the Proposed Permit is deficient because neither it nor the applicable rules specify the monitoring methods that Valero must use to assure compliance with applicable PBR and Standard Exemption requirements. *Wheelabrator Order* at 10. Instead, the Proposed Permit outsources the TCEQ's obligation to specify monitoring methods that assure compliance with each applicable requirement to Valero. Proposed Permit at Special Condition No. 27 (establishing a non-exhaustive list of data Valero may consider, at its discretion, to determine compliance with PBR and Standard Exemption requirements). This outsourcing renders the Proposed Permit deficient for three reasons: First, the Proposed Permit is deficient because it fails to specify monitoring conditions that assure compliance with each applicable requirement. Second, the Proposed Permit is deficient because the permit record does not explain how the Proposed Permit assures compliance with PBR and Standard Exemption requirements. Finally, the Proposed Permit is deficient because the Executive Director's failure to specify monitoring methods for applicable PBR and Standard Exemption requirements or to identify the monitoring methods Valero has selected prevented the public from evaluating whether Title V monitoring requirements have been met. *See In the Matter of United*

States Steel—Granite City Works (“Granite City II Order”), Order on Petition No. V-2011-2 at 9-12 (December 3, 2012) (granting petition for objection because the “permit fails to specify the monitoring methodology and also fails to provide a mechanism for review of the methodology by IEPA, the public, and EPA after the permit is issued.”). For example, Petitioners would likely review and challenge monitoring relying upon undefined engineering calculations to determine compliance without more information about how those calculations were to be made and evidence that operational conditions presumed by the calculations are consistent with actual conditions at the Port Arthur Refinery.

b. Standard Permit Monitoring

The Proposed Permit incorporates Standard Permit No. 91911 by reference. Proposed Permit at 437. Permit No. 91911 establishes emission limits and operating requirements that apply to emission units authorized by Valero’s Major NSR Permit. *See* Public Comments, Attachment 2 (Registration Letter for Permit No. 91911). While Proposed Permit, Special Condition No. 27 requires Valero to maintain records demonstrating compliance with Standard Permit requirements, this condition fails to assure compliance with applicable requirements, because, as explained above, it fails to specify monitoring methods that assure compliance with Standard Permit limits. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a); *Wheelabrator Order* at 10.

c. Permit No. 6825A/PSDTX49/N65 Monitoring

The Proposed Permit incorporates Valero’s major NSR permit, Permit No. 6825A/PSDTX49/N65 in its entirety (“Major Permit”). Proposed Permit at Special Condition No. 25 and New Source Review Authorization References attachment. The Proposed Permit is deficient because it fails to establish monitoring and testing requirements that assure compliance with emission limits and performance standards in Valero’s Major Permit and because the permit

record fails to provide a reasoned justification for the sufficiency of monitoring and testing requirements in the Proposed Permit.

i. Flares

Valero's Major Permit requires all flares at the Port Arthur Refinery to achieve a 98% VOC destruction efficiency, Special Condition No. 7, and establishes hourly and annual VOC caps that limit the amount of VOC that Valero's flares may emit. Proposed Permit at 469. Flare monitoring requirements in Valero's Major Permit, however, do not assure compliance with these requirements.

The amount of VOC pollution Valero's flares emit is a function of 1) the volume of gas flared, 2) the VOC content of the gas flared, and 3) the destruction efficiency of the flare. *Emissions Estimation Protocol for Petroleum Refineries*, U.S. EPA at 6-1 – 6-2. The Proposed Permit is deficient because it does not require Valero to monitor the VOC content of flared gas and because its monitoring provisions fail to ensure that Valero's flares will continuously achieve the presumed destruction efficiency.

To assure compliance with the 98% VOC destruction efficiency requirement, Major Permit, Special Condition No. 6 requires Valero to comply with the general provisions for flares codified at 40 C.F.R. §§ 60.18 and 63.11. These rules require flares to maintain a minimum heat value at the header of the flare, rather than the combustion zone. So long as Valero complies with minimum heat value requirements at the header of the flare as required by the referenced rules, the permit allows Valero to conclude that it is complying with the Major Permit's flare destruction efficiency requirement and permit limits. This method of determining compliance based upon the heat value at the header of the flare does not assure compliance with the 98% VOC destruction efficiency requirement, because extensive data provided by industry demonstrates that flares using this compliance method only achieved, on average, a destruction efficiency of 93%. *Petroleum*

Refinery Sector Rule: Flare Impact Estimates, U.S. EPA, EPA-HQ-OAR-2010-0682-0209 at 9 (January 16, 2014).

ii. Stack Testing

Permit No. O1498 was initially issued on January 8, 2007. EPA objected to the initial permit because it did not address the following deficiency identified in EIP's comments and petition:

The permit empowers the TNRCC [now TCEQ] Executive Director, Regional Director or the Manager of the TNRCC Enforcement Division, Air Section, Engineering Services Team to allow deviations from specified stack sampling procedures and to waive testing for any pollutant. Any off-permit authorizations of deviations or exemptions from the permit requirement would constitute an illegal modification of the PSD permit without required public participation. Further, such conditions would render the permit requirement practically unenforceable and should be eliminated from the Title V Permit.

Premcor Order at 19 (citing EIP's petition).

When granting EIP's petition, EPA stated that the "TCEQ will need to either provide a citation to proper authority for granting the deviation or exemption, or remove or modify the reference to the deviation or exemption as appropriate." *Id.* To date, the TCEQ has not complied with these instructions.

In its response letter to the EPA, the TCEQ explained that Valero's Major Permit requires Texas to obtain EPA approval before authorizing non-minor deviations from required *New Source Performance Standards* ("NSPS") and claimed that the TCEQ was delegated the authority to waive testing when appropriate by EPA in 1982. Executive Director's Response to EPA Order Reopening Permit No. O1498 ("Premcor Response") at 24 (October 21, 2010). The TCEQ's response, however, did not address the issues raised in EIP's initial petition: (1) that off-permit deviations or exemptions from stack test requirements would constitute an illegal modification of the PSD permit without required public participation; and (2) the permit condition undermines the

enforceability of permit limits. The objectionable language is still incorporated into the Proposed Permit and Texas has not identified the legal basis for its discretion to allow off-permit waivers or exemptions from stack test procedure requirements in PSD permits.³

iii. Emission Factors (Major Permit at Special Condition Nos. 52 and 57)

The Major Permit directs Valero to use various emission factors to calculate emissions from various units at the Port Arthur Refinery for the purpose of determining compliance with applicable multi-unit emission caps. *See* Major Permit at Special Condition Nos. 52(A), (C), (D), (E), (G) and 57(E)(5). EPA has clarified that, with few exceptions, emission factors should not be used “to develop source-specific permit limits or to determine compliance with permit requirements. *In the Matter of Tesoro Refining and Marketing Co, Martinez, California Facility*, Order on Petition No. IX-2004-6 at 32 (March 15, 2005); *Granite City I Order* at 14. The Proposed Permit’s reliance of emission factors fails to assure compliance with applicable requirements in Valero’s Major Permit, because: (1) the Major Permit fails to specify the relevant emission factors; and (2) the permit record does not demonstrate that the relevant emission factors are indicative of emissions at the Port Arthur Refinery. *See Granite City I Order* at 14. Major Permit, Special Condition No. 52 is also deficient because it only requires Valero to determine compliance with short-term emission limits (lbs/hr) if a demonstration is required by the TCEQ. Short-term emission limits, no less than long-term emission limits, are applicable requirements that protect air quality and public health.

Major Permit, Special Condition No. 52(A), (C), and (E) directs Valero to use various TCEQ guidance documents to calculate emissions from piping fugitives, storage tanks, and VOC loading operations. Neither the Proposed Permit nor the Statement of Basis identify the calculation

³ The relevant language is now located in Valero’s Major Permit at Special Condition No. 40.

methods contained in these guidance documents or explain why these methods are reliable indicators of actual emissions from the Port Arthur Refinery. Petitioners conducted a thorough search of the TCEQ's website for copies of these guidance documents and were able to find the referenced documents there. Because the Proposed Permit and Statement of Basis fail to identify the applicable emission factors and emission calculation methodologies and to demonstrate the methodologies assure compliance with applicable short-term and long-term emission limits and caps in Valero's Major Permit, the Proposed Permit is incomplete and fails to assure compliance with applicable requirements.

Major Permit, Special Condition No. 52(D) and (G) directs Valero to use unspecified emission factors included in Valero's permit applications or other "permit activity" to calculate emissions from its heaters, boilers, and tail gas incinerators that are not equipped with a Continuous Emissions Monitoring System ("CEMS") and have not been stack tested. This kind of double incorporation by reference—the Proposed Permit incorporates Valero's Major Permit by reference, which in turn incorporates emission factors from other documents by reference—places an unreasonable burden on members of the public and regulators attempting to evaluate the sufficiency of a Title V permit or to determine whether Valero is complying with applicable requirements. Accordingly, the Proposed Permit's incorporation by reference of application and "permit activity" information does not meet Clean Air Act requirements. The Proposed Permit is also deficient because the permit record fails to explain how the incorporated emission factors assure compliance with applicable emission limits and caps.

Major Permit, Special Condition No. 52(D) is particularly objectionable because it fails to even incorporate by reference a specific emission factor. While Special Condition No. 52(G) at least identifies the specific application that contains the relevant emission factor, Special Condition

No. 52(D) directs Valero to calculate emissions using “the emission factors represented in the most recent permit activity for each source and the recorded firing rate for the period.” This special condition straight-forwardly allows Valero to change the applicable compliance method by simply submitting an application for a permit alteration or PBR without any public review and without any assurance that the represented emission factor accurately reflects actual emissions and operating conditions at the Port Arthur Refinery. As EPA explained, permit terms like this are objectionable because they make it “impossible to know whether the periodic monitoring chosen by the source assures compliance with the permit terms and conditions . . . because that monitoring has not been determined yet.” *Granite City II Order* at 12. If Valero may use emission factors to determine compliance with applicable Major Permit emission caps and limits, the Proposed Permit must at least identify the relevant emission factors and the permit record must demonstrate that those emission factors accurately determine actual emissions from the permitted units.

Major Permit, Special Condition No. 57 authorizes flare emissions for planned maintenance, startup, and shutdown (“MSS”) activities associated with Valero’s low sulfur gasoline desulfurization unit as well as MSS emissions from various heaters, and provides that these emissions are subject to maximum allowable emission rates listed elsewhere in the permit. The permit, however, fails to assure compliance with these emission limits, because it fails to identify the relevant calculation methods and because the permit record fails to demonstrate that these methods accurately reflect actual emissions from units at the Port Arthur Refinery. Instead, the permit incorporates “methods” in various permit applications Valero has submitted. As explained above, this double incorporation by reference is objectionable because Texas may not incorporate major NSR requirements by reference into Title V permits and because the practice unreasonably burdens public participation in the Title V permitting process.

4. Issue Raised in Public Comments

Petitioners raised these issues on pages 3-19 of their Public Comments.

5. Analysis of the State's Response

a. PBRs, Standard Exemptions, and Standard Permits

Petitioners contend that the Proposed Permit is deficient because it fails to specify monitoring and testing requirements that assure compliance with PBR, Standard Exemption, and Standard Permit emission limits. The Executive Director disagrees because “the Draft Permit contains: (1) monitoring (which may consist of recordkeeping) sufficient to yield reliable data from the relevant time period that is representative of compliance with the permit; and (2) monitoring sufficient to assure compliance with the terms and conditions of the permit.” Response to Comments at Response 2 [EIP 01/2016-II.A.1.a-b]. This unsupported statement is untrue and does not rebut Petitioners’ demonstration that the Proposed Permit is deficient.

The Proposed Permit does not contain any specific applicable monitoring or testing requirements that assure compliance with PBR, Standard Exemption, and Standard Permit limits. Instead, Proposed Permit, Special Condition No. 27 provides a non-exhaustive list of records Valero may (or may not) use at its discretion to determine compliance with applicable limits without requiring Valero to conduct any particular kind of monitoring or testing for any applicable limit. Because this list is non-exhaustive—meaning that Valero is not required to rely on any of the specified records and may, at its discretion, rely on unlisted records—it does not meaningfully identify the minimum monitoring, testing and/or recordkeeping practices that Valero must observe to assure compliance with any applicable PBR, Standard Exemption, or Standard Permit emission limit.

b. Permit No. 6825A/PSDTX49/N65

i. Flares

The Executive Director's response to Petitioners' demonstration that monitoring requirements in Valero's Major Permit are insufficient to assure compliance with that permit's flare emission limits focusses exclusively on the current applicability of various monitoring requirements in EPA's 40 C.F.R. Part 63, Subpart CC regulations:

The applicability determinations included in the Draft Permit for flares which are subject to 40 CFR Part 63, Subpart CC are based on requirements that were effective as of June 20, 2013, since these requirements were effective at the time that the Draft Permit was approved for public notice. The applicability determinations include 40 CFR § 63.643(a)(1) concerning miscellaneous process vents as a related standard for these flares, which also incorporates 40 CFR § 63.11(b) as an applicable requirement by reference. 40 CFR § 63.643(a)(1) was revised to specify that flares must comply with 40 CFR § 63.11(b) or 40 CFR § 63.670, each of which include requirements to monitor the presence of a pilot flame and visible emissions. *See* 80 Fed. Reg. 75178 (December 1, 2015). Flare vent gas composition monitoring is required under 40 CFR § 63.670(j), which will be an applicable requirement as of the January 30, 2019 effective date. As stated in 40 CFR § 63.643(a)(1), it is appropriate to include 40 CFR § 63.11(b) as an applicable related standard for the flares since compliance with 40 CFR § 63.670 is not required until January 30, 2019. The Proposed Permit has been modified to include 40 CFR Part 63, Subpart CC applicability for all flares authorized by FOP O1498.

Response to Comments at Response 4 [EIP 01/2016-II.A.1.c.ii].

There are two problems with this response:

First, the Executive Director's discussion of when various requirements in EPA's Part 63 flare monitoring provisions become enforceable has no bearing on the issue actually raised by Petitioners: that the Proposed Permit fails to assure compliance with emission limits in Valero's *Major NSR Permit*. While the Executive Director is correct that § 63.670 has a future compliance date of January 30, 2019, that fact does not relieve the Executive Director of his obligation to ensure that each Texas Title V permit contains monitoring requirements that assure compliance with all applicable requirements, including NSR permit limits. EPA's rulemaking does not grant the Executive Director discretion to allow Valero to continue operating its flares without adequate monitoring until January of next year.

Second, the Executive Director's claim that he need not revise the Proposed Permit to identify § 63.670 as an applicable requirement because compliance with that rule is not required until January 30, 2019 is incorrect. "Applicable requirements" include 40 C.F.R. Part 63 requirements "that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future-effective compliance dates." 40 C.F.R. § 70.2. Thus, the Executive Director's revision of the Draft Permit to update its incorporation of Subpart CC requirements gives rise to a new basis for objection: the revised Proposed Permit omits flare monitoring requirements at 40 C.F.R. § 63.670, which are applicable requirements. The Executive Director's revisions to the Draft Permit also improperly omit currently effective fenceline monitoring requirements established by 40 C.F.R. § 63.658. These omissions provides an additional basis for the Administrator to object to the Proposed Permit. *See Granite City I Order* at 4-5.⁴

The Executive Director has not rebutted Petitioners' demonstration that existing monitoring provisions in the Proposed Permit are fail to assure compliance with Valero's Major Permit's flare emission limits. Accordingly, the Executive Director's response is incomplete and the Administrator must object to the Proposed Permit.

ii. Stack Testing

It has been nearly nine years since EPA objected to Valero's Title V permit and the Executive Director has yet to provide the legal basis for the discretion afforded by Major Permit, Special Condition No. 40 to waive stack testing requirements for any pollutant regulated by that permit. The Executive Director's Response to Comments fails to comply with EPA's direction to identify the legal basis for his claim of discretion or change the permit term. Instead, the Executive

⁴ Because the Executive Director revised the Draft Permit to clarify Valero's Part 63, Subpart CC obligations after the close of the public comment period, Petitioners may now raise new deficiencies based on the Executive Director's revisions. 42 U.S.C. § 7661d(b)(2).

Director offers several irrelevant and/or misleading excuses for the Proposed Permit's incorporation of the deficient Major Permit special condition:

First, the Executive Director suggests that exemptions from PSD permit terms do not actually "modify" an operator's obligations under the permit, so long as the exemption does not amount to a major modification:

The ability of the TCEQ to grant a minor change from the specified stack sampling procedures is not a modification of the Prevention of Significant Deterioration (PSD) permit. A major modification is any physical change in, or change in the method of operation of a major stationary source that causes a significant project emissions increase and a significant net emissions increase for any federally regulated new source review pollutant.

Response to Comments at Response 5 [EIP 01/2016-II.A.1.c.iii].

This, of course, is a non-sequitur. Neither EPA nor Petitioners ever suggested that waiving stack testing requirements amounted to a "major modification" as defined by the TCEQ's PSD regulations. Rather, Petitioners and EPA contend that the unilateral and unqualified authority to waive stack testing for any pollutant regulated by the Major Permit without using Texas's SIP-approved permitting procedures is not granted by any of the TCEQ's federally-approved rules and undermines the enforceability of emission limits established to protect public health and air quality. The Executive Director's appeal to the TCEQ's regulatory definition of "major modification" does not address Petitioners' demonstration or EPA's objection order.

Next, the Executive Director states:

Changes to a specified sampling methodology may be desired for a variety of reasons due to actual physical characteristics of the sampling environment, sampling equipment necessary, or safety of personnel. This is authorized by 30 TAC § 116.115(b)(2)(C), Sampling Requirements and 30 TAC § 116.115(b)(2)(D), Equivalency of Methods, which are incorporated into NSR Permit 6825A/PSDTX49/N65 authorizes specific TCEQ personnel the ability to approve, with justification, minor changes to specified sampling methodologies preventing unnecessary delays in completing performance testing and improving the reliability of the testing results.

Response to Comments at Response 5 [EIP 01/2016—II.A.1.c.iii].

This response is also a non-sequitur. Petitioners do not challenge the Proposed Permit because it grants the Executive Director discretion to make minor changes consistent with 30 Tex. Admin. Code § 116.115(b)(2)(C) and (b)(2)(D) necessary to prevent delay, protect personnel, and improve the results of testing results. Rather, Petitioners contend that the Proposed Permit is deficient because it grants the Executive Director unqualified discretion to waive testing requirements altogether for any pollutant subject to testing requirements established by Valero's Major Permit. Nothing in 30 Tex. Admin. Code § 116.115 provides the Executive Director unqualified authority to waive stack testing altogether for any pollutant regulated by a PSD permit.

The Executive Director concludes his response with an extended discussion of the TCEQ's authority to modify NSPS and NESHAP testing requirements, which is only relevant to the extent that it *incorrectly* suggests that the Executive Director must obtain EPA approval before making significant changes to stack testing requirements in Valero's Major Permit. Petitioners' demonstration concerns the Executive Director's discretion to waive NSR permit stack testing requirements rather than NSPS or NESHAP stack testing requirements, and, as EPA explained in the *Premcor Order*, Valero's Major Permit does not require the Executive Director to obtain EPA approval before waving stack testing requirements required to demonstrate compliance with PSD and NNSR requirements established by that permit. *Premcor Order* at 19 ("TCEQ's response does not reflect that Condition 35B(5) [now Special Condition No. 40] appears to allow TCEQ to make deviation and waiver determinations without EPA approval.").

The Executive Director's Response to Comments does not rebut Petitioners' demonstration that the Proposed Permit is deficient, nor does it resolve EPA's 2009 objection on the same grounds. The Proposed Permit is deficient and the Administrator must object to it.

iii. Emission Factors

The Executive Director offers the following response to Petitioners' demonstration that the Proposed Permit is deficient because it does not require Valero to demonstrate compliance with short-term emission limits established by the Major Permit, unless requested by the TCEQ:

The ED notes that, short term emission limits and caps differ from annual emission limits and caps. Short term emissions are set based on the maximum potential emissions that could occur under a reasonable worst case, using the maximum throughput capacity that could occur over the course of any one hour. Annual limits are based on the average emissions expected to occur over the course of a year, taking into account variations in emissions based on actual process throughputs or operating rates and variable conditions. For this reason, annual limits are subject to more stringent requirements, such as periodic calculations for demonstrating compliance, than short term limits. The ED also notes that SC 52 requires the permit holder maintain all records necessary to demonstrate compliance with the short term emission limits, and that recordkeeping is an EPA-approved means of determining compliance. The ED has determined that this recordkeeping requirement is sufficient to demonstrate compliance with the short term emission limits.

Response to Comments at Response 7 [EIP 01/2016—II.A.1.c.v-vi].

The Executive Director's argument—that the Proposed Permit needn't require Valero to determine and demonstrate compliance with short term emission limits, because short term limits reflect "reasonable worst case" operating scenarios—does not rebut Petitioners' demonstration. While short-term emission limits in Valero's Major Permit may not reflect optimal control performance, they do establish requirements necessary to assure compliance with BACT and to prevent impermissible air quality impacts. Even short-term exposure to elevated levels of many pollutants regulated by Valero's Major Permit, including VOCs and PM, can result in serious health problems. Thus, the Proposed Permit must require Valero to assess and demonstrate compliance with short-term limits as the Clean Air Act requires. 42 U.S.C. § 7661c(a) and (c). It is not enough to require Valero to maintain records that might support a determination of compliance in the event that the TCEQ sees fit to ask for them. The Proposed Permit must require

Valero to use these records to determine compliance with short-term limits and to report non-compliance with the limits when discovered.

The Executive Director offers the following response to Petitioners' demonstration that the Proposed Permit is deficient because (1) it fails to specify relevant emission factors and calculation methodologies contained in various guidance documents that Valero must use to assure compliance with Major Permit emission limits; and (2) the permit record for this project does not contain a reasoned justification for the sufficiency of the guidance methods and emission factors:

Although the guidance documents referenced in SC 52(A), (C), and (D) are not currently available on the TCEQ website, they can be obtained by request through APD staff or submitting an email request to airperm@tceq.texas.gov. The methodologies specified for use in demonstrating compliance with the emission caps are the same methodologies that were used in calculating the individual emission rates from which the caps were determined.

Response to Comments at Response 7 [EIP 01/2016—II.A.1.c.v-vi].

While Petitioners appreciate that TCEQ staff is willing to provide relevant guidance to members of the public on request, this information should be included in the Statement of Basis rather than the Response to Comments to ensure that affected members of the public who did not comment on the Draft Permit will know how to find the relevant materials. Moreover, the Executive Director's response fails to explain how the TCEQ guidance calculation methodologies and emission factors assure compliance with Major Permit emission limits. The fact that the TCEQ relied on its own guidance to establish emission limits in Valero's Major Permit does not demonstrate the guidance calculation methods and emission factors are sufficient to ensure that equipment at the Port Arthur Refinery is well maintained or operated properly, or that the emission factors will accurately determine actual emissions from Valero's equipment across all operating scenarios authorized by the Major Permit. This demonstration should have been included in the

permit record. *Granite City I Order* at 14. It was not and the Proposed Permit is therefore incomplete.

Valero's Major Permit states that Valero should use "the emission factors represented in the most recent permit activity" to determine compliance with Major Permit emission limits for combustion units that are not equipped with a CEMS and that have not been stack tested. Major Permit at Special Condition 52(D)(3) and (G)(3); *See also* Special Condition 57. Petitioners explained that this special condition is deficient, because it does not identify the applicable emission factors, does not explain which application contains the relevant emission factors, and because the permit record does not demonstrate that these unspecified emission factors reliably indicate actual emissions from combustion units at the Port Arthur Refinery. The Executive Director offered the following response:

The ED would like to point out that emission limits in the permit were calculated by multiplying an emission factor times a measure of activity. For combustion sources such as heaters, boilers, and tail gas incinerators the measure of activity is the quantity of fuel burned. The referenced permit conditions require the permit holder to use the same emission factors to determine compliance as were used to develop the limit. Thus, as long as the quantity of fuel burned in these sources is within the limits that were used when the emission limits were set, the emissions will be within the allowable limits.

Response to Comments at Response 7 [EIP 01/2016—II.A.1.c.v-vi].

This response does not rebut Petitioners' demonstration that the Proposed Permit is deficient because it fails to specify which documents contain the relevant emission factors. *See Granite City I Order* at 43 ("In order for incorporation by reference to be used in a way that fosters public participation and results in a title V permit that assures compliance with the Act, it is important that: (1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of a document is being referenced; and (3) citations, cross

references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation.”) The Proposed Permit’s vague references to “emission factors represented” in recent “permit activity” is not sufficient to identify the applicable factors in a way that is reasonably easy to understand and not subject to misinterpretation. Equipment at the Port Arthur Refinery is subject to requirements in many different NSR permits, some of which have been revised multiple times based on representations in various applications, and, as the Executive Director explains above, the same application may contain different emission factors for the same equipment that apply over different averaging periods.

The Executive Director’s response that the relevant application emission factors assure compliance with applicable emission limits because the same emission factors were used to establish the emission limits does not demonstrate that the relevant emission factors accurately determine actual emissions from equipment at the Port Arthur Refinery across the full range of activity authorized by the Major Permit. With few exceptions, “EPA does not recommend the use of emission factors to develop source-specific permit limits or to determine compliance with permit requirements.” *In the Matter of Tesoro Refining and Marketing Co, California Facility*, Order on Petition No. IX-2004-6 at 32 (March 15, 2005). The Executive Director was required to “justify in the record why these emission factors” are representative of Valero’s operations “and provide sufficient evidence to demonstrate that the emissions will not vary by a degree that would cause an exceedance of the standards[.]” *Granite City I Order* at 14. He did not make this demonstration or point to any specific permitting documents that contain such a demonstration. Therefore, the Administrator must object to the Proposed Permit.

Additionally, as the Executive Director's response makes clear, the Proposed Permit relies on fuel consumption limits as the primary basis for determining compliance with Major Permit emission limits for combustion sources. Because this is so, the Proposed Permit must establish enforceable limits on the amount of fuel that may be consumed by Valero's combustion sources. The Major Permit's failure to establish such limitations is an additional deficiency that warrants objection.

V. CONCLUSION

For the foregoing reasons, and as explained in Petitioners' timely-filed public comments, the Proposed Permit is deficient. Accordingly, the Administrator must object to it. The Administrator is also obligated to object, because the Executive Director failed to provide a substantive response to many of the significant comments raised by Petitioners.

Sincerely,

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