

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF)	PETITION NO. VI-2021-8
)	
VALERO REFINING-TEXAS, L.P.)	ORDER RESPONDING TO
VALERO HOUSTON REFINERY)	PETITION REQUESTING
HARRIS COUNTY, TEXAS)	OBJECTION TO THE ISSUANCE OF
PERMIT NO. O1381)	TITLE V OPERATING PERMIT
)	
ISSUED BY THE TEXAS COMMISSION ON)	
ENVIRONMENTAL QUALITY)	

**ORDER GRANTING IN PART AND DENYING IN PART A PETITION FOR
OBJECTION TO PERMIT**

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition on June 29, 2021 (the Petition) from Texas Environmental Justice Advocacy Services, Sierra Club, Caring for Pasadena Communities, Environmental Integrity Project, and Earthjustice (the Petitioners), pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2). The Petition requests that the EPA Administrator object to operating permit No. O1381 (the Permit) issued by the Texas Commission on Environmental Quality (TCEQ) for the Valero Houston Refinery (Valero or the facility) in Harris County, Texas. The operating permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and Title 30, Chapter 122 of the Texas Administrative Code (TAC). *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also referred to as a title V permit or part 70 permit.

Based on a review of the Petition and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and as explained in Section IV of this Order, the EPA grants in part and denies in part the Petition requesting that the EPA Administrator object to the Permit. Specifically, the EPA grants Claims A, B.3, C.1, D, and E, grants in part and denies in part Claims B.1, B.2, and C.2, and denies Claims F and G.

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to the EPA an operating permit program to meet the requirements of title V of the CAA and the EPA’s implementing regulations at 40 C.F.R. part 70. The state of Texas submitted a title V

program governing the issuance of operating permits on September 17, 1993. The EPA granted full approval of Texas's title V operating permit program in 1996; 66 Fed. Reg. 63318 (December 6, 2001). This program, which became effective on November 30, 2001, is codified in 30 TAC Chapter 122.

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan. 42 U.S.C. §§ 7661a(a), 7661b, 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements, but does require permits to contain adequate monitoring, recordkeeping, reporting, and other requirements to assure compliance with applicable requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992); *see* 42 U.S.C. § 7661c(c). One purpose of the title V program is to “enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements.” 57 Fed. Reg. at 32251. Thus, the title V operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source's emission units and for providing adequate monitoring, recordkeeping, and reporting to assure compliance with such requirements.

B. Review of Issues in a Petition

State and local permitting authorities issue title V permits pursuant to their EPA-approved title V programs. Under CAA § 505(a) and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to the EPA for review. 42 U.S.C. § 7661d(a). Upon receipt of a proposed permit, the EPA has 45 days to object to final issuance of the proposed permit if the EPA determines that the proposed permit is not in compliance with applicable requirements under the Act. 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c). If the EPA does not object to a permit on its own initiative, any person may, within 60 days of the expiration of the EPA's 45-day review period, petition the Administrator to object to the permit. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under part 70. 40 C.F.R. § 70.12(a)(2). Any arguments or claims the petitioner wishes the EPA to consider in support of each issue raised must generally be contained within the body of the petition.¹ *Id.*

The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting authority (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such

¹ If reference is made to an attached document, the body of the petition must provide a specific citation to the referenced information, along with a description of how that information supports the claim. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. *Id.*

objections within such period or unless the grounds for such objection arose after such period). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see also* 40 C.F.R. § 70.12(a)(2)(v).

In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).² Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.³ The petitioner’s demonstration burden is a critical component of CAA § 505(b)(2). As courts have recognized, CAA § 505(b)(2) contains both a “discretionary component,” under which the Administrator determines whether a petition demonstrates that a permit is not in compliance with the requirements of the Act, and a nondiscretionary duty on the Administrator’s part to object where such a demonstration is made. *Sierra Club v. Johnson*, 541 F.3d at 1265–66 (“[I]t is undeniable [that CAA § 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements.”); *NYPIRG*, 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA § 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the Act. *Citizens Against Ruining the Environment*, 535 F.3d at 677 (stating that § 505(b)(2) “clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object if such a demonstration is made” (emphasis added)).⁴ When courts have reviewed the EPA’s interpretation of the ambiguous term “demonstrates” and its determination as to whether the demonstration has been made, they have applied a deferential standard of review. *See, e.g., MacClarence*, 596 F.3d at 1130–31.⁵ Certain aspects of the petitioner’s demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to the EPA’s proposed petitions rule. *See* 81 Fed. Reg. 57822, 57829–31 (August 24, 2016); *see also In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana*, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4–7 (June 19, 2013) (*Nucor II Order*).

The EPA considers a number of criteria in determining whether a petitioner has demonstrated noncompliance with the Act. *See generally Nucor II Order* at 7. For example, one such criterion is whether a petitioner has provided the relevant analyses and citations to support its claims. For each claim, the petitioner must identify (1) the specific grounds for an objection, citing to a specific permit term or condition where applicable; (2) the applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under part 70, that is not met; and (3) an explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under part 70. 40 C.F.R. § 70.12(a)(2)(i)–(iii). If a petitioner does not identify these elements, the EPA is left to work out the basis for the petitioner’s objection, contrary to Congress’s express allocation of the

² *See also* *New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).

³ *WildEarth Guardians v. EPA*, 728 F.3d 1075, 1081–82 (10th Cir. 2013); *MacClarence v. EPA*, 596 F.3d 1123, 1130–33 (9th Cir. 2010); *Sierra Club v. EPA*, 557 F.3d 401, 405–07 (6th Cir. 2009); *Sierra Club v. Johnson*, 541 F.3d 1257, 1266–67 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677–78 (7th Cir. 2008); *cf. NYPIRG*, 321 F.3d at 333 n.11.

⁴ *See also Sierra Club v. Johnson*, 541 F.3d at 1265 (“Congress’s use of the word ‘shall’ . . . plainly mandates an objection whenever a petitioner demonstrates noncompliance.” (emphasis added)).

⁵ *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

burden of demonstration to the petitioner in CAA § 505(b)(2). *See MacClarence*, 596 F.3d at 1131 (“[T]he Administrator’s requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and persuasive.”).⁶ Relatedly, the EPA has pointed out in numerous previous orders that general assertions or allegations did not meet the demonstration standard. *See, e.g., In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition Number VI-2011-05 at 9 (January 15, 2013).⁷ Also, the failure to address a key element of a particular issue presents further grounds for the EPA to determine that a petitioner has not demonstrated a flaw in the permit. *See, e.g., In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014) (*Homer City Order*).⁸

Another factor the EPA examines is whether the petitioner has addressed the state or local permitting authority’s decision and reasoning. Petitioners are required to address the permitting authority’s final decision and final reasoning (including the state’s response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi); *see MacClarence*, 596 F.3d at 1132–33.⁹ Specifically, the petition must identify where the permitting authority responded to the public comment and explain how the permitting authority’s response is inadequate to address (or does not address) the issue raised in the public comment. *Id.*

The information that the EPA considers in making a determination whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. 40 C.F.R. § 70.13. The administrative record for a particular proposed permit includes the draft and proposed permits; any permit applications that relate to the draft or proposed permits; the statement required by § 70.7(a)(5) (sometimes referred to as the ‘statement of basis’); any comments the permitting authority received during the public participation process on the draft permit; the permitting authority’s written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; and all materials available to the permitting authority that are relevant to the permitting

⁶ *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (September 21, 2011) (denying a title V petition claim where petitioners did not cite any specific applicable requirement that lacked required monitoring); *In the Matter of Portland Generating Station*, Order on Petition at 7 (June 20, 2007) (*Portland Generating Station Order*).

⁷ *See also Portland Generating Station Order* at 7 (“[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement].”); *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 8 (April 20, 2007); *Georgia Power Plants Order* at 9–13; *In the Matter of Chevron Products Co., Richmond, Calif. Facility*, Order on Petition No. IX-2004–10 at 12, 24 (March 15, 2005).

⁸ *See also In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (February 7, 2014); *Georgia Power Plants Order* at 10.

⁹ *See also, e.g., Finger Lakes Zero Waste Coalition v. EPA*, 734 Fed. App’x *11, *15 (2d Cir. 2018) (summary order); *In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 20–21 (December 14, 2012) (denying a title V petition issue where petitioners did not respond to the state’s explanation in response to comments or explain why the state erred or why the permit was deficient); *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue where petitioners did not acknowledge or reply to the state’s response to comments or provide a particularized rationale for why the state erred or the permit was deficient); *In the Matter of Georgia Power Company*, Order on Petitions at 9–13 (January 8, 2007) (*Georgia Power Plants Order*) (denying a title V petition issue where petitioners did not address a potential defense that the state had pointed out in the response to comments).

decision and that the permitting authority made available to the public according to § 70.7(h)(2). *Id.* If a final permit and a statement of basis for the final permit are available during the agency's review of a petition on a proposed permit, those documents may also be considered when making a determination whether to grant or deny the petition. *Id.*

If the EPA grants a title V petition, a permitting authority may address the EPA's objection by, among other things, providing the EPA with a revised permit. *See, e.g.*, 40 C.F.R. § 70.7(g)(4); *see generally* 81 Fed. Reg. 57822, 57842 (August 24, 2016) (describing post-petition procedures); *Nucor II Order* at 14–15 (same). In some cases, the permitting authority's response to an EPA objection may not involve a revision to the permit terms and conditions themselves, but may instead involve revisions to the permit record. For example, when the EPA has issued a title V objection on the ground that the permit record does not adequately support the permitting decision, it may be acceptable for the permitting authority to respond only by providing an additional rationale to support its permitting decision.

When the permitting authority revises a permit or permit record in order to resolve an EPA objection, it must go through the appropriate procedures for that revision. The permitting authority should determine whether its response is a minor modification or a significant modification to the title V permit, as described in 40 C.F.R. § 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the modification is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 C.F.R. § 70.7(h) or the state's corresponding regulations.

In any case, whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, and regardless of the procedures used to make such revision, the permitting authority's response is generally treated as a new proposed permit for purposes of CAA § 505(b) and 40 C.F.R. § 70.8(c) and (d). *See Nucor II Order* at 14. As such, it would be subject to the EPA's 45-day review per CAA § 505(b)(1) and 40 C.F.R. § 70.8(c), and an opportunity for the public to petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) if the EPA does not object during its 45-day review period.

When a permitting authority responds to an EPA objection, it may choose to do so by modifying the permit terms or conditions or the permit record with respect to the specific deficiencies that the EPA identified; permitting authorities need not address elements of the permit or the permit record that are unrelated to the EPA's objection. As described in various title V petition orders, the scope of the EPA's review (and accordingly, the appropriate scope of a petition) on such a response would be limited to the specific permit terms or conditions or elements of the permit record modified in that permit action. *See In The Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 38–40 (September 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (December 19, 2007).

C. New Source Review

The major New Source Review (NSR) program is comprised of two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA

establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major modifications of existing major stationary sources for pollutants for which an area is designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS) and for other pollutants regulated under the CAA. 42 U.S.C. §§ 7470–7479. Part D of title I of the Act establishes the major nonattainment NSR (NNSR) program, which applies to new major stationary sources and major modifications of existing major stationary sources for those NAAQS pollutants for which an area is designated as nonattainment. 42 U.S.C. §§ 7501–7515. The EPA has two largely identical sets of regulations implementing the PSD program. One set, found at 40 C.F.R. § 51.166, contains the requirements that state PSD programs must meet to be approved as part of a state implementation plan (SIP). The other set of regulations, found at 40 C.F.R. § 52.21, contains the EPA’s federal PSD program, which applies in areas without a SIP-approved PSD program. The EPA’s regulations specifying requirements for state NNSR programs are contained in 40 C.F.R. § 51.165.

While parts C and D of title I of the Act address the major NSR program for major sources, section 110(a)(2)(C) addresses the permitting program for new and modified minor sources and for minor modifications to major sources. The EPA commonly refers to the latter program as the “minor NSR” program. States must also develop minor NSR programs to, along with the major source programs, attain and maintain the NAAQS. The federal requirements for state minor NSR programs are outlined in 40 C.F.R. §§ 51.160 through 51.164. These federal requirements for minor NSR programs are less prescriptive than those for major sources, and, as a result, there is a larger variation of requirements in EPA-approved state minor NSR programs than in major source programs.

Where the EPA has approved a state’s title I permitting program (whether PSD, NNSR, or minor NSR), duly issued preconstruction permits establish the NSR-related “applicable requirements” for the purposes of title V. As with “applicable requirements” established through other CAA authorities, the terms and conditions of those permits should be incorporated into a source’s title V permit without a further round of substantive review as part of the title V process. *See generally In the Matter of Big River Steel, LLC*, Order on Petition No. VI-2013-10 at 8–20 (October 31, 2017) (*Big River Steel Order*); 56 Fed. Reg. 21712, 21738–39 (May 10, 1991).¹⁰ Accordingly, the EPA will generally not consider the merits of a permitting authority’s NSR permitting decisions in a petition to object to a source’s title V permit. *See Big River Steel Order* at 8–9, 14–20.¹¹ Rather, any such challenges should be raised through the appropriate title I permitting procedures or enforcement authorities.

¹⁰ However, as the EPA noted in the *Big River Steel Order*, there may be circumstances that “warrant a different approach.” *Big River Steel Order* at 11 n.20.

¹¹ The EPA does view monitoring, recordkeeping, and reporting to be part of the title V permitting process and will therefore continue to review whether a title V permit contains monitoring, recordkeeping, and reporting provisions sufficient to assure compliance with the terms and conditions established in the preconstruction permit. *See, e.g., In the Matter of South Louisiana Methanol, LP*, Order on Petition Nos. VI-2016-24 and VI-2017-14 at 10–11 (May 29, 2018) (*South Louisiana Methanol Order*); *Big River Steel Order* at 17, 17 n.30, 19 n.32, 20. Moreover, as the EPA has explained, “[A] decision by the EPA not to object to a title V permit that includes the terms and conditions of a title I permit does not indicate that the EPA has concluded that those terms and conditions comply with the applicable SIP or the CAA. However, until the terms and conditions of the title I permit are revised, reopened, suspended, revoked, reissued, terminated, augmented, or invalidated through some other mechanism, such as a state court appeal, the ‘applicable requirement’ remains the terms and conditions of the issued preconstruction permit and they should be included in the source’s title V permit.” *Big River Steel Order* at 19.

The EPA has approved Texas's PSD, NNSR, and minor NSR programs as part of its SIP. *See* 40 C.F.R. § 52.2270(c) (identifying EPA-approved regulations in the Texas SIP). Texas's major and minor NSR provisions, as incorporated into Texas's EPA-approved SIP, are contained in portions of 30 TAC Chapters 116 and 106.

III. BACKGROUND

A. The Valero Houston Refinery

The Valero Houston Refinery is owned and operated by Valero Refining-Texas, L.P. and located in Harris County, Texas. The refinery processes crude oil into petroleum refinery products such as blended gasoline, diesel, kerosene, etc. The crude oil processed at the refinery is received from off-site via marine facilities, pipeline, and/or transport vessels.

The facility is a major source of volatile organic compounds (VOC), sulfur dioxide (SO₂), particulate matter (PM), nitrogen oxides (NO_x), hazardous air pollutants, and carbon monoxide and is subject to title V of the CAA. Emission units within the facility are also subject to the PSD program, other preconstruction permitting requirements, and various New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP).

The EPA conducted an analysis using EPA's EJScreen¹² to assess key demographic and environmental indicators within a five-kilometer radius of the Valero Refinery. This analysis showed a total population of approximately 98,000 residents within a five-kilometer radius of the facility, of which approximately 94 percent are people of color and 53 percent are low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 12 environmental indicators. 11 of the 12 Environmental Justice Indices in this five-kilometer area exceed the 80th percentile in the State of Texas, with six of the 12 Environmental Justice Indices exceeding the 90th percentile.

B. Permitting History

Valero Refining-Texas, L.P. first obtained a title V permit for the Valero Houston Refinery in 2005, which was subsequently renewed. On April 13, 2016, Valero submitted an application for a renewal title V permit. TCEQ published notice of a Draft Permit on February 22, 2019, subject to a public comment period that ran until March 26, 2019. On March 16, 2021, TCEQ submitted the Proposed Permit, along with its responses to public comments (RTC), to the EPA for its 45-day review. The EPA's 45-day review period ended on April 30, 2021, during which time the EPA did not object to the Proposed Permit. TCEQ issued the final title V renewal permit for the Valero Houston Refinery on May 12, 2021 (Final Permit). Since the submittal of the Petition, the title V permit has been subsequently revised; the current version of the title V permit was issued on February 9, 2022.

¹² EJScreen is an environmental justice mapping and screening tool that provides the EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. *See* <https://www.epa.gov/ejscreen/what-ejscreen>.

C. Timeliness of Petition

Pursuant to the CAA, if the EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). The EPA's 45-day review period expired on April 30, 2021. Thus, any petition seeking the EPA's objection to the Proposed Permit was due on or before June 29, 2021. The Petition was received June 29, 2021, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

Environmental Justice

Within Section I of the Grounds for Objection section of the Petition, the Petitioners discuss characteristics of the communities surrounding the Valero Houston refinery, describing them as communities of color with a large, dense, and low-income population that is overburdened by hazardous and other air pollution, including from multiple refineries and petrochemical facilities.” Petition at 7. The Petitioners describe the demographics of the surrounding area noting that the area “is above the 80th percentile for 11 different environmental justice indexes.” Petition at 10. The Petitioners provide data identifying the amount of hazardous air pollutants (HAPs) emitted by the facility, as detailed in Valero's response to EPA's Information Collection Request for the recent petroleum refinery sector NESHAP risk and technology review, and also from the National Emissions Inventory (NEI). From the NEI data, the Petitioners also provide the quantity of VOCs and PM_{2.5} released in 2014 and 2017. The Petitioners note that Valero is not the only emitter of air toxics and criteria pollutants in the Houston area as it is one of the nation's largest hubs of petroleum refining and petrochemical manufacturing.

The Petitioners highlight the serious health impacts faced by the communities in the Houston Ship Channel and cite several studies in support. Petition at 9.¹³ The Petitioners also discuss the disproportionate cumulative impacts from air pollution in the most-exposed and most-affected east Houston neighborhoods also asserting that after Hurricane Harvey, the facility is “one of the ‘plants that released the most storm-related pollution in the Houston area.’” Petition at 10 (quoting EIP, *Preparing for the Next Storm, Learning from the Man-Made Environmental Disasters that Followed Hurricane Harvey* (August 16, 2018), <https://www.environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-Final.pdf>).

¹³ The studies cited to by the Petitioners include K. Walker *et al.*, University of Texas Health Science at Houston, School of Public Health, An investigation of the association between hazardous air pollutants and lymphohematopoietic cancer risk among residents of Harris County, Texas, <https://www.semanticscholar.org/paper/Preliminary-epidemiologic-investigation-of-the-the-Walker-Coker/3b6775f96037b7dd2104a11296784f52d4cddf33?p2df>; Tex. Dep't of State Health Servs. (DSHS), Supplemental Analyses, Assessment of the Occurrence of Cancer, East Harris County, Texas 1995-2012 (December 28, 2015), <https://www.dshs.state.tx.us/epitox/CancerClusters.shtm>; D. Payne Sturges, M. Marty, *et al.*, Healthy Air, Health Brains: Advancing Air Pollution Policy to Protect Children's Health (March 13, 2019), <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2018.304902>.

The Petitioners claim that in these circumstances, “there is a compelling need for EPA to devote increased, focused attention to ensure that all Title V requirements have been complied with—especially ensuring that monitoring and emission calculation requirements are adequate to assure compliance with the limits for Valero’s refinery, and ensuring that limits are not unlawfully inflated for periods of startup, shutdown, and maintenance.” Petition at 11–12. The Petitioners cite to previous EPA statements that “focused attention to the adequacy of monitoring and other compliance assurance provisions is warranted” due to potential environmental justice concerns. Petition at 12 (quoting *In the Matter of United States Steel Corp. – Granite City Works*, Order on Petition No. V-2011-2 at 4–6 (December 3, 2012) (*US Steel II Order*). Additionally, the Petitioners note that in 2016 EPA issued the Texas Environmental Collaborative Action Plan, which recognized the need to ‘work with proper authorities to investigate and address problematic permitted facilities,’ identifying surrounding communities as requiring particular attention due to environmental justice concerns. Petition at 12 (citing EPA Region 6, Texas Environmental Justice Collaborative Action Plan (August 3, 2016) at 4). The Petitioners state that “environmental justice concerns are further heightened here because Harris County, in which Valero’s refinery is located, is currently designated serious nonattainment for the 2008 ozone [NAAQS] and marginal nonattainment for the 2015 ozone NAAQS.” Petition at 12.

The Petitioners address aspects of TCEQ’s RTC including TCEQ’s statement that ‘[t]itle V permitting processes are not subject to making determinations of potential impacts to human health from air emissions.’ Petition at 13 (citing RTC at 108). The Petitioners assert that Executive Order 12898 does not create an obligation for EPA (or TCEQ) to make a specific determination of potential impacts to human health from air emissions, however, it does inform EPA’s review of the adequacy of CAA requirements. Petition at 13. The Petitioners acknowledge that determining the sufficiency of monitoring is a case-specific inquiry. *Id.* The Petitioners contend that, “[a]s part of that case-by-case determination, environmental justice factors, including the demographics of the surrounding community, are factors that must be considered in assessing whether a particular facility’s monitoring and emission calculation methods are adequate to ensure compliance with the relevant applicable requirements.” Petition at 14. The Petitioners further assert that “it is especially important to ensure that members of the surrounding community can determine whether a facility that is releasing pollution that threatens their health is actually meeting its limits.” Petition at 14.

In response to TCEQ’s assertion that it “determined that the emissions authorized by this permit are protective of both human health and welfare” the Petitioners claim that “[e]ven in areas that meet the NAAQS...emissions of air pollution from a particular source can severely impact the health of surrounding fenceline communities.” Petition at 14. The Petitioners cite to prior EPA statements regarding air pollution during startup, shutdown, and malfunction events that have “real-world consequences that adversely affect public health” and note that EPA has recognized that ambient air monitors will not detect every NAAQS violation. *Id.* (citing 80 Fed. Reg. 33,840, 33,850, and 33,939). The Petitioners again emphasize the HAPs emitted by the facility and their harmful effects. *Id.*

The EPA appreciates and takes seriously the Petitioners’ concerns regarding the potential impacts of emissions from the Valero Refinery on communities living near the facility, and the Petitioners’ desire that the facility’s title V permits contain sufficient monitoring to assure

compliance with all applicable requirements. The EPA is committed to advancing environmental justice and incorporating equity considerations into all aspects of our work. As the EPA has previously explained:

Executive Order 12898, signed by President Clinton on February 11, 1994, focuses federal attention on the environmental and human health conditions of minority populations and low-income populations with the goal of achieving environmental protection for all communities. Executive Order (EO) 12898 also is intended to promote non-discrimination in federal programs substantially affecting human health and the environment, and to provide minority and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment. It generally directs federal agencies to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. Attention to environmental justice in the implementation of federal environmental programs is a priority for EPA. See generally, Office of Environmental Justice Plan EJ 2014 (September 2011) (outlining EPA's efforts to promote environmental justice and identifying environmental justice and permitting as a focus area).

Environmental justice issues can be raised and considered in the context of a variety of actions carried out under the Act. Title V generally does not impose new, substantive emission control requirements, but provides for a public and governmental review process and requires title V permits to assure compliance with all underlying applicable requirements. *See, e.g., In the Matter of Marcal Paper Mills*, Petition No. II-2006-01 (Order on Petition) (November 30, 2006), at 12. Title V can help promote environmental justice through its underlying public participation requirements and through the requirements for monitoring, compliance certification, reporting and other measures intended to assure compliance with applicable requirements.

EPA has thoroughly reviewed and evaluated the title V objections submitted by the Petitioner, discussed below. EPA acknowledges that the immediate area around the [] facility is home to a high density of low-income and minority populations and a concentration of industrial activity, and thus raises potential environmental justice concerns. Focused attention to the adequacy of monitoring and other compliance assurance provisions is warranted in this context. As explained below, where the Petitioner has demonstrated that the permit fails to assure compliance with applicable requirements, EPA is granting the petition.

US Steel II Order at 5–6.¹⁴

¹⁴ More recently, Executive Orders 13990 and 14008, signed by President Biden on January 20, 2021, and January 27, 2011, respectively, affirm the federal government's commitment to environmental justice.

Likewise, here, the EPA acknowledges that the area surrounding the Valero Refinery is home to a high density of low-income and minority populations and a concentration of industrial activity, and that the Petitions raise potential environmental justice concerns. The EPA has evaluated the Petition, giving focused attention to the adequacy of monitoring (as well as other concerns raised by the Petitioners). As explained in the following sections, the EPA is granting the Petitions where the Petitioners have demonstrated that the Permit fails to assure compliance with applicable requirements.

Claim A: The Petitioners Claim That “TCEQ Failed to Provide Notice to the Public Through a Mailing List.”

Claim A is found on pages 16–18 (Section II) of the Petition.

Petitioners’ Claim: The Petitioners assert that “TCEQ has failed to fulfill the requirement of 40 C.F.R. § 70.7(h)(1) that it create a mailing list and use that list to provide adequate notice to the affected Petitioners as concerned members of the public about the opportunity to comment on the draft of Valero’s Title V permit.” Petition at 16. The Petitioners state that they requested in writing in their comments on a previous permitting action to be added to a mailing list for that permit action and future permit actions for the facility. The Petitioners assert that TCEQ did not create a mailing list or send notice of the draft title V permit to the Petitioners. The Petitioners note that TCEQ failed to reach out to community residents to notify them of the draft title V permit despite community residents expressing concerns about the air pollution from this facility for quite some time as shown in prior comments. The Petitioners describe a specific surrounding neighborhood that is directly impacted by the facility as predominantly Hispanic. Seventy percent of the residents in this neighborhood speak Spanish at home. The Petitioners emphasize that “[g]iven this obvious language barrier for the majority of the residents of the impacted area, it is even more important that affected community groups—including Petitioners t.e.j.a.s and Caring for Pasadena Communities—receive early notice so that they can translate and disseminate information to residents who may not otherwise have access to information on the draft permit.” *Id.* at 17. The Petitioners cite to the EPA’s policy guidance on Limited English Proficiency (LEP) for recipients of EPA financial assistance stating that TCEQ has an obligation to reduce language barriers that can preclude meaningful access by LEP persons to important government services. *Id.*

The Petitioners state that without the advance notice, the Petitioners lost time to review and prepare comments on the draft title V permit and to seek additional information from TCEQ to be able to meaningful comment. *Id.* The Petitioners explain that public notice defects are objectionable without the need to show any harm because notice is a core requirement in title V protections for public participation. *Id.* (citing *N.Y. Pub. Interest Research Gr. V. Williams*, 321 F.3d 316, 332–33 (2d Cir. 2003); *Sierra Club v. Johnson*, 436 F.3d 1269, 1279–80 (11th Cir. 2006)). The Petitioners further explain that the Clean Air Act and the title V regulations do not provide the EPA discretion to ignore violations of title V permit program requirements and the EPA has a nondiscretionary duty to object to permits that violate the Clean Air Act. “Thus, the failure to create and utilize a mailing list is a violation that cannot simply be ignored.” *Id.*

The Petitioners further assert that TCEQ failed to offer any response to the Petitioners' comments raising this issue in violation of title V requirements. *Id.* (citing 40 C.F.R. § 70.7(h)(6)).

EPA's Response: For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.

The EPA's regulations at 40 C.F.R. § 70.7(a)(1) provide that a permit may be issued only if, among other things, the permitting authority "has complied with the requirements for public participation under paragraph (h) of this section." The title V public participation requirements set forth in 40 C.F.R. § 70.7(h) direct the state to provide notice "to persons on a mailing list developed by the permitting authority using generally accepted methods ... that enable interested parties to subscribe to the mailing list." 40 C.F.R. § 70.7(h)(1). *See also* 30 TAC § 122.320(b)(9). The Petitioners stated that they requested to be added to the mailing list for permit actions for the Valero facility and that they did not receive notification through that process.

In response to the Petitioners assertion, TCEQ stated that "[t]he public notice and public participation requirements for the Draft Permit were conducted as required by 30 TAC §§ 122.201(a), 122.320, 122.243(a)(3)." RTC at 32. However, TCEQ's response did not rebut the Petitioners' assertion that they requested to be included on a mailing list and did not receive notification. If TCEQ did develop a mailing list for this action, it did not provide any reasoning for why the Petitioners were not included on that list or provided notification through that process.

The EPA observes that TCEQ's public notice for this permit action does explain that the public can ask to be put on a mailing list for this action by sending a request to the Office of the Chief Clerk, which is presumably what the Petitioners did when submitting their comments on NSR Permit 2501A to TCEQ. TCEQ has provided no information as to why the Petitioners' method of requesting to be added to the mailing list would not be sufficient.

Based on these facts, the EPA is unable to determine if TCEQ complied with title V requirements to develop a mailing list and provide notification to persons on that mailing list.

Direction to TCEQ: In responding to this Order, TCEQ should provide documentation showing how it complied with the requirements of 40 C.F.R. § 70.7(h)(1). If TCEQ is unable to show that it complied with title V requirements to develop a mailing list and provide notification, it should develop a mailing list, ensuring that the Petitioners are included, and re-notice the Permit following all applicable public notice procedures. If, as the EPA anticipates, TCEQ re-notices the Permit in reaction to this objection, this may be done in conjunction with any re-notice of the Permit as necessary to respond to other grants discussed in the following sections.

Claim B: The Petitioners Claim That "The Proposed Permit Fails to Incorporate, Describe, and Assure Compliance with Permits by Rule."

Claim B is found on pages 18–34 (Section III.A through III.E) of the Petition.

Petitioners' Claim: Within Claim B, the Petitioners assert:

TCEQ's practice of allowing major sources, like Valero's Houston refinery, to authorize significant quantities of emissions and construction using permits by rule ("PBRs") has resulted in serious, statewide problems tracking the amount of pollution major sources are actually authorized to emit. It has also made it easier for major sources to circumvent major NSR preconstruction permitting requirements by allowing operators to artificially split projects up into multiple, purportedly unrelated permit applications to mask significant net emissions increases and by allowing operators to revise major preconstruction permit requirements using PBRs instead of the appropriate NSR permit amendment process.

Petition at 18.

The Petitioners provide background on previous EPA Region 6 correspondence with TCEQ regarding the use of PBRs and EPA objections to title V permits for failures to establish clear and enforceable limits for units that are authorized or partially authorized by PBR. Petition at 18.¹⁵ The Petitioners assert that instead of TCEQ "correcting its PBR program to address these objections and to ensure that major sources in Texas nonattainment areas are subject to clear and enforceable emission limits that are protective of public health, TCEQ continues to issue Title V permits, like the proposed Title V Permit here, that establish inscrutable and unenforceable emission limits." *Id.* at 19.

The Petitioners detail their comments on the draft title V permit's incorporation of applicable PBR requirements and why it was deficient as follows:

- (1) [The Draft Permit] failed to incorporate source-specific requirements established by Valero's PBR registrations under 30 [TAC] § 106.6; (2) it failed to adequately explain how generic PBR emission limits applied to equipment at the refinery; and (3) the draft Title V permit failed to identify specific monitoring, testing, and recordkeeping conditions sufficient to assure compliance with applicable PBR requirements. These failures rendered the draft Title V permit deficient, because 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), (c).

Id.

The Petitioners claim that TCEQ should have revised the title V permit's New Source Review Authorization References attachment (NSR References Attachment) to list the source-specific PBR registrations. For instances where Valero has claimed multiple PBRs to authorize a

¹⁵ Citing Letter from Al Armendariz, Regional Administrator, EPA Region 6, to Mark Vickery, Executive Director, TCEQ (June 10, 2010); *In the Matter of Motiva Enterprises LLC, Port Arthur Refinery*, Order on Petition No. VI-2016-23 (May 31, 2018) (*Motiva Order*); *In the Matter of ExxonMobil Corporation, Baytown Refinery*, Order on Petition No. VI-2016-14 (April 2, 2018).

particular unit or claimed the same PBR multiple times or used one or more PBR registrations to modify requirements in an existing NSR permit, the title V permit should include an attachment that lists the controlling limits for each such unit, unit group, or process. Lastly, the Petitioners contend that TCEQ should have revised the permit to establish specific monitoring, testing, and/or recordkeeping requirements sufficient to assure compliance with each of these limits. *Id.*

The Petitioners assert that TCEQ did not make these changes and instead added language to a title V permit condition referencing the “PBR Supplemental Tables in the application,” added several PBR registration numbers to the Permit’s New Source Authorization References by Emission Unit table, and deleted some previously referenced PBRs from the proposed title V permit and added some others. *Id.* at 20 (citing RTC, Modifications Made from the Draft to Proposed Permit Attachment). The Petitioners assert that these changes do not correct the deficiencies demonstrated by the Petitioners’ public comments. *Id.*

Claim B includes multiple distinguishable subclaims that each address TCEQ’s use of PBRs. The EPA’s response to Claim B addresses each of the Petitioners’ allegations according to the following numbering system (not supplied in the Petition)¹⁶:

- Claim B.1 addresses incorporation of source-specific requirements from PBR registrations (Section III.A., pages 20–21 of the Petition);
- Claim B.2 addresses information necessary to determine how claimed PBRs apply (Section III.B., pages 22–26 of the Petition); and
- Claim B.3 addresses monitoring, testing, and recordkeeping methods for PBRs (Section III.C., pages 26–32 of the Petition).

In addition to these three sub-claims, the Petitioners also claim generally that TCEQ’s RTC is inadequate to address the problems with the Permit’s incorporation of applicable PBR requirements.¹⁷ In this claim, the Petitioners note that TCEQ identified three changes made in response to Petitioners’ comments, which include: listing all PBRs applicable to the site, revising the Permit to reference the PBR Supplemental Tables, and revising the statement of basis to include a reference the PBR Supplemental Tables and Special Condition 23. Petition at 33 (citing RTC at 35). The Petitioners assert that these revisions do not resolve their objections for the following reasons:

- (1) Special Condition No. 23 fails to actually incorporate PBR registrations listed in the PBR Supplemental Tables, because those registrations are not also listed in the permit’s New Source Review Authorization References Attachment; (2) successful incorporation of one or more PBR Supplemental Tables would still not be enough, because EPA and Texas’s Title V regulations require Title V permits to at least directly list incorporated applicable preconstruction authorizations; and (3) the proposed permit fails to sufficiently identify relevant PBR Supplemental Tables

¹⁶ The Petitioners also claim in Section III.D of the Petition (page 32) that their specific objections were raised with reasonable specificity during the comment period. The EPA agrees that Claims III.A, III.B, and III.C were raised with reasonable specificity during the public comment period. Because the fact that the Petitioners raised these claims with reasonable specificity does not alone demonstrate flaws in the Proposed Permit, the EPA sees no reason to address the assertions in III.D as a separate claim.

¹⁷ This claim is found in Section III.E., pages 32–34 of the Petition.

to allow a reader to determine how many such tables exist, when they are submitted, or how to find them.

Id.

The Petitioners assert that TCEQ failed to make any changes to the Permit in response to their comments that the Permit fails to establish specific monitoring, testing, and recordkeeping requirements that assure compliance with PBR emission limits and operating limits. Instead, the Petitioners explain that TCEQ cites to Special Condition 25. *Id.* (citing RTC at 36). The Petitioners disagree with TCEQ's assessment that the Permit can assure compliance with the PBRs through maintaining records that are representative of Valero's compliance with PBR limits, even if the permit does not specify which kinds of records are representative of Valero's compliance with each applicable limit. *Id.* The Petitioners cite to TCEQ's title V regulations that require that each title V permit include detailed citations identifying "the monitoring, recordkeeping, reporting, and testing requirements associated with ...[applicable] emission limitations and standards[.]" *Id.* (citing 30 TAC § 122.142(b)(2)(B)(ii)).

The EPA is not specifically responding to the Petitioners' claim regarding the adequacy of TCEQ's changes to the Permit as a stand-alone sub-claim because EPA evaluated the adequacy of TCEQ's RTC and the adequacy of the changes to the Permit in the context of each individual sub-claim discussed in the following sections.

Claim B.1: The Petitioners Claim That "The Proposed Title V Permit Fails to Incorporate and Assure Compliance with Source-Specific Requirements in Valero's PBR Registrations."

Claim B.1 is found on pages 20–21(Section III.A) of the Petition.

Petitioners' Claim: The Petitioners first explain that TCEQ's PBR rules allow operators to register PBR authorizations to establish limits that differ from those in the PBR rules. Petition at 20 (citing 30 TAC § 106.6). The Petitioners provided initial comments on the draft title V permit that identified PBR registrations that had not been incorporated into the Draft Permit. *Id.* (citing Petition Exhibit 4, Permit by Rule Registration List). The Petitioners contend that in response to their comments, TCEQ failed to add the PBR registration numbers directly into the Permit and instead revised Special Condition 23 to add the statement "PBR Supplemental Tables in the application" to the list of the kinds of permits that establish applicable requirements. *Id.* The Petitioners assert however that the revised permit condition only incorporates the permits listed in its NSR References Attachment, and that the NSR References Attachment, which is found in the Proposed Permit at 207–08, does not list any PBR registration numbers as applicable requirements. Therefore, the Petitioners state that the PBR registration numbers listed in the PBR Supplemental Tables are not incorporated into the title V permit. *Id.*

The Petitioners further assert that even if the PBR registrations had been successfully incorporated, the Permit would still be deficient. Specifically, the Petitioners state that this is "because the Title V permit itself must identify the specific permits it incorporates and may not simply incorporate by reference one or more application documents that, in turn, incorporate by

reference the applicable permit numbers.” *Id.* at 21. The Petitioners acknowledge that the EPA has allowed TCEQ to incorporate by reference (IBR) PBR requirements into permits; however, the EPA has never approved incorporating by reference application representations that incorporate PBR requirements by reference. *Id.* “This practice violates both 40 C.F.R. § 70.6(a) and 30 [TAC] § 122.142(b)(2)(B), which require Title V *permits*, rather than *applications*, to specify the applicable regulatory requirements.” *Id.* The Petitioners also assert that the ambiguous reference to an unspecified number of tables in an unidentified application is also inconsistent with the EPA’s determination that referenced documents need to be specifically identified, descriptive information for the document needs to be included, and citations, cross references, and incorporations by reference must be detailed enough so that the manner in which any referenced material applies to the facility is clear. *Id.* (citing *In the Matter of United States Steel Corp., Granite City Works*, Response to Petition No. V-2009-03 at 43 (January 31, 2011) (*US Steel I Order*)). The Petitioners note that Valero has submitted many different applications to TCEQ related to the Permit and assert that the Permit is deficient because it fails to indicate which of these applications contain an applicable PBR Supplemental Table. *Id.*

EPA’s Response: For the following reasons, the EPA grants in part and denies in part the Petitioners’ request for an objection on this claim.

Special Condition 23 states (new language italicized):

Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (*including the permits by rule identified in the PBR Supplemental Tables in the application*), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment.

Final Permit at 14.

The Petitioners first assert that TCEQ failed to incorporate registered PBRs into the Permit because TCEQ did not add the PBR registration numbers directly into the Permit; instead, TCEQ only revised Special Condition 23. The Petitioners further state that the NSR References Attachment does not list any PBR registration numbers as applicable requirements. The EPA does not agree with this assertion and finds that the Petitioners failed to evaluate key information in the Proposed Permit. The Petitioners correctly note that the Draft Permit that was presented for public review and comment did not include PBR registration numbers in the NSR References Attachment.¹⁸ However, TCEQ revised the NSR References Attachment in the Proposed and Final Permits by including source-specific PBR registration numbers in the Emission Unit table.

¹⁸ The New Source Review Authorization References attachment consists of two tables. The first is the New Source Review Authorization References Table, which includes the PBR rules that are applicable to the source. *See* Final Permit at 207–08. The second table is the New Source Review Authorization References by Emission Unit table (Emission Unit table), which includes both PBR rules and source-specific registered PBRs associated with each emission unit. *See* Final Permit at 209–30.

See Final Permit at 209–30. The Petitioners appear to suggest that because the PBRs are listed in the Emission Unit table and not listed in the New Source Review Authorization References table of the NSR References Attachment that they are not included as applicable requirements. However, the Petitioners have not acknowledged the revised NSR References Attachment with the PBR registration numbers included in the Emission Unit table nor demonstrated why including the registered PBRs in the Emission Unit table of the attachment is not sufficient. Therefore, to the extent that the Petitioners are asserting that no registered PBRs have been incorporated into the Permit, the EPA denies that portion of the claim.

While the Permit does incorporate some source-specific PBR registrations, the Petitioners have demonstrated that there are PBR registration numbers that were included in their comments on the Draft Permit and which have not been incorporated into the Permit. These registration numbers include 41495, 54513, 106017, 145105, 162211, 164545, 35206, 37102, 40306, 42119, 42999, 44387, 50138, 50600, 54513, and 54616. TCEQ failed to address these PBR registrations in its RTC and, therefore, EPA is unable to determine if these PBRs are applicable and should be included in the Permit. For these PBR registration numbers, the EPA grants this portion of the claim.

The Petitioners next assert that even if the PBR registrations had been successfully incorporated, the Permit is still deficient because the Permit itself must identify the specific permits (*i.e.*, PBR registrations) it incorporates and may not simply incorporate by reference an application document that in turn incorporates the applicable permit numbers (*i.e.*, PBR registration numbers). Because the EPA has found that some of the PBR registration numbers were included on the face of the Permit and not incorporated through the application document, it need not address this portion of the Petitioners' claim.

The last portion of the Petitioners' claim asserts that the Permit is deficient because Permit Condition No. 23 includes an ambiguous reference to an unspecified number of tables in an unidentified application. As noted previously, the EPA found that TCEQ did include some of the PBR registrations numbers on the face of the Permit. However, to the extent that TCEQ is relying on the PBR Supplemental Tables to incorporate additional requirements such as monitoring, the table must be properly incorporated into the Permit. The Petitioners have demonstrated that the revised language of Special Condition 23 is insufficient to properly incorporate the PBR Supplemental Tables into the Permit.

The CAA requirement to include all applicable requirements in a title V permit can be satisfied using IBR in certain circumstances. *See, e.g.*, White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, 40 (March 5, 1996) (*White Paper Number 2*) (explaining how IBR can satisfy the requirements of CAA § 504). As noted by the Petitioners, the EPA has determined that:

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 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.

US Steel I Order at 43

Here, the language in Special Condition No. 23 that references the PBR Supplemental Tables in the application(s) fails to provide sufficient information to identify the specific application(s) being referenced and to determine the location of the PBR Supplemental Tables within such application(s).

Direction to TCEQ: In responding to this Order, TCEQ should amend the title V permit to include information in Special Condition No. 23 that identifies the location of the PBR Supplemental Tables being incorporated into the Permit. This information should include the date of the application and the associated project number. Additionally, TCEQ should evaluate those registered PBRs that were identified by the Petitioners and not included in the Permit and revise the Permit accordingly. The EPA notes that TCEQ is working with Valero on a renewal and amendment to permit 2501A (project 339790), and that the application for this project includes the consolidation of a large number of PBRs, standard permits, and standard exemptions. TCEQ should verify that all appropriate PBRs that are not included in this pending consolidation are included in the title V permit.

Claim B.2: The Petitioners Claim That “The Proposed Title V [Permit] Is Deficient Because It Fails to Include Information Necessary to Determine How Claimed PBRs Apply to Valero’s Refinery.”

Claim B.2 is found on pages 22–26 (Section III.B) of the Petition.

Petitioners’ Claim: The Petitioners first note that in addition to the PBRs that include limits other than the generic limits established in 30 TAC § 106.6, Valero has claimed many unregistered PBRs. Petition at 22. The Petitioners assert that two conditions must be met to properly incorporate by reference the PBRs into the title V permit: (1) the information incorporated is readily available to the public and regulators, and (2) the title V permits provide information that clearly and unambiguously explains how incorporated emission limits apply to emission units at the permitted source. *Id.* (citing *In the Matter of Citgo Refining and Chemicals, West Plant, Corpus Christi*, Order on Petition No. VI-2007-01 at 12 n.5 (May 28, 2009) (*CITGO Order*); *In the Matter of Shell Chemical LP and Shell Oil Co., Deer Park Chemical Plant and Refinery*, Order on Petition Nos. IV-2014-04 and IV-2014-05 at 10–11 (September 24, 2015) (*Shell Deer Park Order*). The Petitioners assert that the Permit fails to meet the second condition stating:

[T]he Proposed Title V Permit omits information necessary for readers to determine (1) how the emission limits in PBRs claimed by Valero apply to units at the [facility]; and (2) which emission units at the refinery are subject to requirements in each of the claimed PBRs.

Id.

The Petitioners explain as background that Texas regulations require that any construction of a new or modified facility must be authorized by a permit or permit amendment. *Id.* (citing 30 TAC § 116.110(a)). The Petitioners note that an operator can apply for a Chapter 116 case-by-case permit (Chapter 116 Permit) or may claim a PBR so long as the proposed construction complies with PBR requirements. The Petitioners further explain that Chapter 116 Permits are assigned a unique permit number and include source-specific emission limits and special conditions. *Id.* However, PBRs establish generic emission limits and operating requirements that apply to all facilities authorized by that PBR and these limits and requirements are found in Texas’s PBR rules. *Id.* The Petitioners observe that the Permit identifies incorporated Chapter 116 Permits by their unique permit numbers and issuance dates and identifies applicable PBRs by the rule number and the date that each rule was promulgated, not the date the PBR was claimed. *Id.* The Petitioners assert that “[t]his way of listing applicable requirements is misleading because it suggests that each claimed PBR, like the Chapter 116 NSR permits identified in the Proposed Title V Permit, is a single authorization. *Id.* at 22–23. This suggestion is misleading because Valero has claimed some PBRs multiple times to authorize multiple projects involving one or more emission units at the [facility].” *Id.* at 23. The Petitioners assert that unless the Permit provides information identifying each emission unit (or units) covered by each claimed PBR for each submission, it is impossible to tell how much each emission unit is authorized to emit under the claimed PBRs. *Id.*

For support, the Petitioners identify 11 units that are authorized under PBR 30 TAC § 106.261 (11/1/2003) and assert that it is impossible to tell if the units were authorized as part of the same submission or as different projects. *Id.* The Petitioners state “[i]f construction or modification of each unit was separately authorized—meaning the PBR has been claimed 11 times—each unit may emit up to the 30 [TAC] § 106.4(a)(1) limits, while the units’ combined emissions must remain below those same limits if construction of or modifications to all of those units were authorized as part of the same/submission project.” *Id.* The Petitioners assert that the difference between these scenarios is that if all units are authorized as part of the same submission, their combined VOC emissions must remain below 25 tons per year. If individually authorized, the combined VOC emissions allowed would be 275 tons per year (25 tons per year multiplied by 11 emission units/unit groups). *Id.* The Petitioners then provide other examples of multiple emission units authorized by other PBRs. *Id.* at 24–26. Because of this ambiguity, the Petitioners assert the Permit fails to specify and assure compliance with applicable emission limits. *Id.* at 24.

Lastly, the Petitioners assert that the Permit is deficient because it fails to identify any units, unit groups, or processes subject to PBR 30 TAC §106.263 and Standard Exemption 79, which are listed as applicable requirements in the NSR References Attachment. Therefore, the Petitioners contend that the title V permit is unclear as to how PBRs apply to emission units at the facility and thereby undermines the enforceability of PBR requirements. *Id.* at 26. (citing *Objection to Title V Permit No. O2164, Chevron Phillips Chemical Company, Philtex Plant* at ¶ 7(August 6, 2010)¹⁹; *In the Matter of Shell Chemical LP and Shell Oil Co*, Order on Petition Nos. VI-2014-04 and VI-2014-05 at 11–15 (September 24, 2015) (*Shell Deer Park Order*)).

¹⁹ The EPA notes that this August 6, 2010, objection was issued under authority delegated by the EPA Administrator to Region 6 to object during the EPA’s 45-day review period.

EPA's Response: For the following reasons, the EPA grants in part and denies in part the Petitioners' request for an objection on this claim.

The Petitioners assert that the Permit fails to provide information that clearly and unambiguously explains how incorporated emission limits apply to emission units at the permitted source. However, the Petitioners failed to note or evaluate the explanation provided by TCEQ in the Statement of Basis associated with the Permit.

The Statement of Basis clarifies how emission limits under 30 TAC § 106.4(a)(1) applies to emission units. Specifically, within the Statement of Basis for the 2021 Revised Permit, TCEQ explained, in relevant part:

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility²⁰ as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

Statement of Basis at 66. TCEQ included this language in response to similar claims granted by EPA in previous Orders.²¹

The Petitioners failed to address this key information in the record, which is a criterion in determining if the Petitioners have demonstrated a flaw in the Permit.²² Because the Petitioners did not evaluate the permitting authority's explanation found in the statement of basis, the EPA is denying this portion of the claim.

With regards to the Petitioners' claim that the Permit is deficient because it fails to identify any units associated with PBRs 106.263 and Standard Exemption 79, the EPA grants this part of the claim. Both 106.263 and Standard Exemption 79 are listed in the NSR Authorization References Attachment as being applicable to the source, however, the specific emission units to which they apply is not included.

Direction to TCEQ: In response to this Order, TCEQ should revise the Permit to explain to which units PBR 106.263 and Standard Exemption 79 apply. The EPA notes that PBR 106.263 is identified in the PBR Supplemental Tables as an insignificant unit, however, it is unclear if it is only being claimed for insignificant units or, given its inclusion in the New Source Authorization

²⁰ The EPA notes that TCEQ's regulations define "facility" as an individual emission unit. See 30 TAC § 116.10(4); 79 Fed. Reg. 40666, 40668 n.3 (July 14, 2014).

²¹ See *In the Matter of Motiva Enterprises, LLC, Port Arthur Refinery*, Order on Petition No. VI-2016-23 (May 31, 2018) (Motiva Order); *In the Matter of Pasadena Refining System, Pasadena Refinery*, Order on Petition No. VI-2016-20 (May 1, 2018) (Pasadena Order). See also Executive Director's Response to EPA Objections Regarding Permits by Rule (June 13, 2018 letter from TCEQ to EPA Region 6); Executive Director's Response to EPA Objections Regarding Permits by Rule (July 19, 2019 letter from TCEQ to EPA Region 6).

²² See, e.g., *Homer City Order* at 48. See also *supra* note 8.

References Attachment in the Permit, if it is also being claimed for other emission units. To the extent that Standard Exemption 79 or other PBRs apply to insignificant units, TCEQ should also make that clarification in the record and/or Permit.

Claim B.3: The Petitioners Claim That “The Proposed Title V Permit Fails to Specify Monitoring, Testing, and Recordkeeping Methods that Assure Compliance with Applicable PBR Requirements.”

Claim B.3 is found on pages 26–32 (Section III.C) of the Petition.

Petitioners’ Claim: The Petitioners assert that the Permit is deficient because it fails to specify monitoring methods that assure compliance with emission limits and operating requirements established by PBRs claimed by Valero and the permit record does not contain a reasoned justification for TCEQ’s determination that monitoring methods included in the Permit assure compliance. Petition at 31. The Petitioners summarize various PBRs that are applicable to the facility, including their specific emission limits and operating requirements, and explain that the PBR rules themselves do not specify monitoring, testing, or recordkeeping methods that assure compliance with the applicable PBR emission limits and operating requirements. *Id.* The Petitioners note that Special Condition 24 of the Permit incorporates by reference 30 TAC Chapter 106, subchapter A and that Special Condition 25 includes recordkeeping requirements for emission units authorized by PBR. *Id.* The Petitioners assert that these Special Conditions and the incorporated PBR rules, which address all PBRs, fail to specify any particular monitoring or testing requirements that assure compliance with applicable limits and operating requirements and instead “provide a non-exhaustive menu of options that Valero may pick and choose from, at its discretion, to demonstrate compliance with PBR emission limits and operating requirements.” *Id.* at 31.

In evaluating TCEQ’s justification for the monitoring, the Petitioners provided language found in the statement of basis regarding the sufficiency of monitoring in the Permit. *Id.* at 30. Specifically, this language provides that except for emission units listed in the periodic monitoring or CAM summaries in the Permit, TCEQ has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. *Id.* The Petitioners assert that none of the periodic monitoring or CAM summaries in the Permit address requirements in PBRs claimed by Valero and that TCEQ did not provide a reasoned justification for the determination that existing provisions in the PBRs claimed by Valero assure compliance with applicable emission limits and operating requirements. *Id.* at 30–31.

In support of their assertions, the Petitioners explain that each title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements, which include emission limits and operating requirements in PBRs incorporated in the Permit. *Id.* at 31 (citing 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, L.P.*, Permit No. 24-510-01886 at 10 (April 14, 2010)). Additionally, the rationale for selected monitoring requirements must be clear and documented in the permit record. *Id.* (citing 40 C.F.R. § 70.7(a)(5); *US Steel I Order* at 7–8).

EPA's Response: For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 24 states:

The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

Final Permit at 14.

Special Condition 25 states:

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).

Final Permit at 14.

The Petitioners have demonstrated that the title V permit does not include monitoring sufficient to assure compliance with all applicable requirements relevant to units authorized by PBRs. *See* 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c). As the EPA has explained in previous orders, it is TCEQ's responsibility, as the title V permitting authority, to ensure that the title V permit "set[s]

forth” monitoring sufficient to assure compliance with all applicable requirements. 42 U.S.C. § 7661c(c), 7661c(a); 40 C.F.R. § 70.6(a), (a)(3), (c); 30 TAC § 122.142(c).²³

As the Petitioners observe, Valero has claimed numerous PBRs (including PBRs 106.122, 106.261, 106.262, 106.263, 106.264, 106.371, 106.412, 106.472, 106.473, 106.492, 106.511, 106.533, and standard exemptions 5, 51, 53, 102, 111, and 118) that establish applicable requirements, including operational and emission limitations. *See* Final Permit at 207–08, NSR Authorization References Attachment. The Permit also incorporates by reference the general requirements in 30 TAC Chapter 106 Subchapter A, including, as applicable, the emission limits in 30 TAC § 106.4. Generally speaking, the PBRs incorporated into the Permit do not specify monitoring to assure compliance with these requirements. Moreover, the only potentially relevant permit terms—Special Conditions 24 and 25—are insufficient to bridge this gap. Special Condition 24 incorporates the general requirements for PBRs found in 30 TAC Chapter 106, Subchapter A. These requirements do not specify any monitoring methods for demonstrating compliance with the emission limits and standards set forth in the PBRs. Likewise, Special Condition 25 does not specify any particular monitoring requirements and instead allows Valero to select the monitoring, recordkeeping, or reporting it will use to assure compliance.

Consistent with TCEQ’s commitment to the EPA as a result of recent title V petition orders,²⁴ TCEQ required Valero to submit PBR Supplemental Tables in the permit application that lists all PBRs applicable to the site and includes the associated monitoring requirements for each PBR. However, as discussed in response to Claim B.1, TCEQ failed to properly incorporate these PBR Supplemental Tables into the Permit. In order to satisfy the CAA mandate that title V permits “set forth” monitoring sufficient to assure compliance with all applicable requirements, the Permit itself must either include, or clearly incorporate by reference, specific monitoring requirements that are sufficient to assure compliance with all applicable requirements associated with units authorized by PBRs. Because the PBR Supplemental Tables are not properly incorporated into the Permit and therefore does not yet satisfy this requirement, the EPA grants this claim.

Direction to TCEQ: TCEQ must revise the Permit to specify monitoring, recordkeeping, and reporting sufficient to assure compliance with all applicable requirements associated with PBRs. One way for TCEQ to resolve this objection would be to include or identify within the PBR Supplemental Tables the monitoring, recordkeeping, and reporting from the application forms

²³ 42 U.S.C. § 7661c(a) (“Each permit issued under [title V of the CAA] shall *include* . . . such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan.”), 7661c(c) (“Each permit issued under [title V of the CAA] shall *set forth* . . . monitoring and reporting requirements to assure compliance with the permit terms and conditions.”); 40 C.F.R. § 70.6(a) (“Each permit issued under this part shall *include* . . .”), 70.6(a)(3)(i) (“Each permit shall *contain* the following requirements with respect to monitoring:”); 70.6(c) (“All part 70 permits shall *contain* the following with respect to compliance: . . . testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.”); 30 TAC § 122.142(c) (“Each permit shall *contain* periodic monitoring requirements that are sufficient to yield reliable data from the relevant time period that are representative of the emission unit's compliance with the applicable requirement, and testing, monitoring, reporting, or recordkeeping sufficient to assure compliance with the applicable requirement.”) (all emphasis added).

²⁴ Letter from Tonya Baer, Deputy Director of Air, TCEQ, to David Garcia, Director, Air and Radiation Division, Region 6, U.S. EPA, Permits by Rule Programmatic Changes at 2–3 (May 11, 2020).

for registered PBRs (in addition to the claimed but not registered PBRs).²⁵ The EPA recognizes that TCEQ has updated its title V application forms on May 6, 2022, to include form OP-PBR SUP, which requires applicants to specify the monitoring, recordkeeping, and reporting for each registered and claimed PBR applicable to the source. TCEQ could resolve EPA’s grant of this claim by requiring Valero to include all necessary monitoring, recordkeeping, and reporting in OP-PBR SUP and then properly incorporating the form (and not merely the application containing the form) into the title V permit.²⁶

Claim C: The Petitioners Claim That “The Proposed Permit Fails to Assure Compliance with NSPS and NESHAP Requirements.”

The Petitioners assert that the Proposed Permit fails to assure compliance with NSPS and NESHAP standards in two separate ways, which are presented as two subclaims of Claim C in the following sections.

Claim C.1: The Petitioners Claim That “The Permit Fails to Ensure Compliance with NSPS and NESHAP Requirements for a Flare Management Plan.”

Claim C.1 is found on pages 34–36 (Section IV.A) of the Petition.

Petitioners’ Claim: The Petitioners claim that the NSPS and NESHAP requirements for a flare management plan are applicable requirements as defined by 40 C.F.R. § 70.2 and that the Permit’s failure to ensure compliance with these applicable requirements violates 40 C.F.R. §§ 70.1(b), 70.6(a)(1), and 70.7(a)(1)(iv) and 42 U.S.C. § 7661c(a). Petition at 34.

The Petitioners explain that the facility has two refinery flares that are subject to NSPS and NESHAP requirements regarding flare management plans. Specifically, 40 C.F.R. § 60.103a at subsections (a)–(b) and 40 C.F.R. § 63.370(o) require operators to develop, implement, and comply with a flare management plan. The compliance deadlines for these requirements were November 11, 2015, and January 30, 2019, respectively. *Id.* (citing 40 C.F.R. § 60.103a(b)(1)–(2) and § 63.670(o)(2)).

The Petitioners assert that to ensure compliance with the NSPS and NESHAP flare management plan requirements, the Permit must list the requirements from 40 C.F.R. §§ 60.103a and 63.670 as applicable requirements and a non-redacted version of the most recent flare management plan should be attached and incorporated into the Permit. *Id.* (citing 42 U.S.C. § 7661c(a), requiring title V permits to include enforceable emission limitations and standards and ‘such other conditions as are necessary to assure compliance with applicable requirements of this chapter’). The Petitioners acknowledge that the Permit includes the citations for 40 C.F.R. §§ 60.103a(a) and 63.670(o), along with other subsections of §§ 60.103a and 63.670, in the Permit’s Applicable Requirements Summary but contend that “nowhere does the permit provide that these subsections require a flare management plan.” *Id.* at 35.

²⁵ As addressed in EPA’s response to Claim B.1, if TCEQ is including this information in the PBR Supplemental Tables, the tables must be properly incorporated into the Permit.

²⁶ TCEQ, Title V Application Form OP-PBR SUP, (May 6, 2022), available at: https://www.tceq.texas.gov/assets/public/permitting/air/Forms/Title_V/Potential_Requirements/20875.pdf

The Petitioners address TCEQ's RTC, which explains that the requirements from the NSPS and NESHAP to prepare and submit a flare management plan were included in the draft title V permit. In rebuttal, the Petitioners assert that to ensure compliance with the management plan requirements, the Permit should provide that Valero must develop such a plan and add this to the permit. Otherwise, the public is forced to look up, read, and attempt to interpret various regulatory subsections to determine what is required for a source to comply with its CAA obligations, which is contrary to the purpose of title V. *Id.*

Lastly, the Petitioners assert that TCEQ did not respond to the Petitioners' significant comments raising the objection that the Permit must but fails to incorporate and attach the most recent, non-redacted version of Valero's flare management plan. Therefore, the Petitioners are unable to "explain how [TCEQ's] response to the comment is inadequate to address the issue raised in the public comment." *Id.* (citing 40 C.F.R. § 70.12(a)(2)(vi)).

EPA's Response: For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.

Title V permits must include conditions reflecting all "applicable requirements" as well as monitoring, recordkeeping, and reporting conditions necessary to assure compliance with all applicable requirements and permit terms. CAA § 504(a), (c); 40 C.F.R. § 70.6(a)(1), (c)(1). These required elements of a title V permit can either be included on the face of the title V permit, or, in certain circumstances, may be incorporated by reference into the title V permit. The Petitioners have asserted that the flare management plan is an applicable requirement requiring its inclusion in the title V permit.

The EPA has addressed the inclusion of plans in title V permits in multiple previous orders. To summarize the EPA's position, only plans (or portions of plans) that are necessary to impose an applicable requirement or assure compliance with an applicable requirement need be included (or incorporated) in a title V permit or included with a permit application and made available for public review. *See* CAA § 504(a), (c); 40 C.F.R. §§ 70.5(c), 70.6(a)(1), 70.6(c)(1); *In the Matter of Drummond Co., Inc. ABC Coke Plant*, Order on Petition No. IV-2017-7 at 13–15 (June 30, 2021); *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9 at 11–14 (June 22, 2012) (*Kentucky Syngas Order*); *Cash Creek II Order* at 11–12; *In the Matter of EVRAZ Rocky Mountain Steel*, Order on Petition No. VIII-2011-01 at 7–8 (May 31, 2012) (*Rocky Mountain Steel Order*); *In the Matter of Alliant Energy, WPL Edgewater Generating Station*, Order on Petition No. V-2009-02 at 12–14 (August 17, 2010) (*Edgewater Order*); *In the Matter of WE Energies Oak Creek Power Plant*, Order on Petition, Permit No. 241007690-P10 at 24–25 (June 12, 2009) (*Oak Creek Order*).

Central to the EPA's evaluation of this type of claim is the petitioner's demonstration burden. Accordingly, the EPA has denied claims where "the Petitioners have not demonstrated that the ... plan's content is needed to impose an applicable requirement or as a compliance assurance measure." *Kentucky Syngas Order* at 11. More specifically, the EPA has denied claims: where petitioners did not include any specific discussion of the nature and purpose of the plan; where petitioners did not identify any legal requirement directing a source to prepare and implement a

plan; and where petitioners did not identify how a state’s explanation of a plan was unreasonable. *See Kentucky Syngas Order* at 11–14; *Cash Creek II Order* at 11–12. On the other hand, the EPA has granted other claims where petitioners claimed and demonstrated that certain plans “define[d] permit terms” and that the permit relied on other plans “to assure compliance with applicable requirements.” *Oak Creek Order* at 24, 25. In either case, the underlying question—whether the provisions of a plan must be included in a facility’s title V permit—is a fact-specific inquiry, and the petitioner has the burden to demonstrate under the facts specific to the plan that it must be included in the permit.

The current claim is analogous to the *Oak Creek Order*. It is clear that NSPS subpart Ja and NESHAP subpart CC are applicable requirements. These regulations require Valero to develop and implement a flare management plan. As noted by the Petitioners, in order to determine compliance with the requirements of the NSPS subpart Ja and NESHAP subpart CC, one must be able to ascertain if Valero is in compliance with the flare management plan. It is not enough to cite to the requirements of the NSPS subpart Ja and NESHAP subpart CC to develop a flare management plan because these standards also require the facility to include operational requirements in the flare management plan. For instance, one of the elements of the plan required by NSPS subpart Ja are procedures to minimize or eliminate discharge to the flare during the planned startup and shutdown of the refinery process units. 40 C.F.R. § 60.103a(5); *cf. Oak Creek Order* at 25 (finding that the startup/shutdown plan contained operational requirements and limitations applicable during startup and shutdown operations that exceed the opacity limit, therefore the plan must be included in the permit). For these reasons, the EPA has determined that the requirement to develop and implement the flare management plan is an applicable requirement and therefore needs to be included as part of the title V permit.

Direction to TCEQ: In responding to this Order, TCEQ must amend the Permit to include the terms of the flare management plan or plans required by NSPS subpart Ja and NESHAP subpart CC. These plans may be included directly in the Permit or incorporated by reference as appropriate. TCEQ must also ensure that the plan does not redact emission limitations or standards, including operational requirements and limitations that assure compliance with applicable requirements.

Claim C.2: The Petitioners Claim That “EPA Should Require TCEQ to Revise the Permit to Incorporate All Specific Requirements for NESHAP Subparts CC and UUU.”

Claim C.2 is found on pages 36–44 (Section I.V) of the Petition.

Petitioners’ Claim: The Petitioners claim generally that the Permit fails to include terms and conditions necessary to assure compliance with CAA requirements because it does not incorporate specific limits and standards under NESHAP subparts CC and UUU. Petition at 36. The Petitioners contend that “for some emission units, the Permit cites the applicable regulatory provision under Subpart CC and UUU but fails to describe an actual limit or standard, leaving it unclear precisely how the regulation applies to the unit.” Petition at 36. The Petitioners assert that without this information, the Permit does not satisfy CAA requirements. *Id.* (citing 40 C.F.R. §§70.1(b), 70.6(a)(1), 70.7(a)(1)(iv) and 42 U.S.C. § 7661c(a)). The Petitioners further argue that

the Permit undermines the public information and compliance goals of title V by making it difficult or impossible for the public to determine which standards apply to which emission units and if Valero is in compliance with the federal regulations related to fence-line monitoring, flare management, equipment leaks, and other processes and emission points.

The Petitioners cite seven specific regulatory provisions that they assert are not cited in the Permit, including 40 C.F.R. §§ 63.643, 63.644, 63.645, 63.647, 63.650, 63.652, and 63.653. *Id.* at 36–37. The Petitioners describe specific requirements of these provisions that they claim should be in the title V permit. Additionally, the Petitioners claim that the Permit fails to list and describe the “general duty” requirements from subparts CC and UUU that are found in 40 C.F.R. § 63.642(n) for subpart CC and 40 C.F.R. § 63.1570(c) for subpart UUU. These provisions require Valero to “[a]t all times, ... operate and maintain [the refinery], including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.” *Id.* at 37. The Petitioners acknowledge that the Permit does cite to § 63.1570(c), however, the Petitioners contend that “it does so in the context of other standards under Subpart UUU and never identifies the general duty as a separate requirement.” *Id.*

The Petitioners next claim that for several limits and standards under subparts CC and UUU, the Permit either cites the applicable regulation while failing to describe the actual limit or standard contained therein or describes the limit or standard in conclusory fashion. *Id.* Specifically, the Petitioners assert that for nine provisions required under subparts CC and UUU, the Permit fails to specifically include, fails to explain, or underexplains the requirements therein. *Id.* The Petitioners assert that previous EPA title V orders and guidance have stated that lack of clarity with respect to applicable regulations at a facility undermines the purpose of title V and that a key objection of title V is to “clarify how sources must comply with applicable requirements.” *Id.* (citing *White Paper No. 2* at 38). The Petitioners contend further that title V permits must be “clear and meaningful to *all affected parties*,” and therefore, the EPA has required that “*at a minimum, a permit must explicitly state all emission limitations and operational requirements for all applicable units at a facility.*” *Id.* at 36–37 (citing *Shell Deer Park Order* at 9; *In the Matter of Tesoro Refining and Marketing*, Order on Petition No. IX-2004-6 at 8 (March 15, 2005) (emphasis added by Petitioners)).

The Petitioners provide additional detail for those provisions that they asserts are unexplained or underexplained and why the Permit fails to sufficiently incorporate each provision. These include the following provisions from subpart CC, 40 C.F.R. §§ 63.648, 63.651, 63.658, 63.660, 63.670, 63.671 and subpart UUU, 40 C.F.R. §§ 63.1564, 63.1565, 63.1568. *Id.* at 38–39. The Petitioners contend that these regulations are crucial for the safe operation of petroleum refineries and provide specific examples of NESHAP requirements with which Valero must comply. The Petitioners contend that EPA must object due to the lack of incorporation of these requirements and express their concerns about how Valero is interpreting the requirements. *Id.* at 39.

The Petitioners address TCEQ’s RTC, which states that the applicable requirements summary is only intended to describe “high level requirements” under each applicable provision and that the Permit was revised to include specific requirements for sections 63.648, 63.660, 63.670, 63.671,

63.1564, 63.1565, and 63.1568. The Petitioners assert that this response is insufficient for the following three reasons. *Id.* at 40.

The Petitioners first assert that TCEQ’s response—that the permit need only list high level requirements—contravenes the purpose of title V, which was to “substantially strengthen enforcement of the Clean Air Act’ by ‘clarify[ing] and mak[ing] more readily enforceable a source’s pollution control requirements.’” *Id.* (quoting S. Rep. No. 101-228 at 347, 348 (1990), *as reprinted in* A Legislative History of the Clean Air Act Amendments of 1990 at 8687, 8688 (1993) (emphasis added by the Petitioners)). The Petitioners cite the EPA’s explanation when promulgating title V that a title V permit should “enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements.” *Id.* (citing *Operating Permit Program, Final Rule*, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992)). The Petitioners assert that the EPA has expressly disapproved of TCEQ’s use of incorporation by reference as a means of including emission limitations within a title V permit. *Id.* at 41 (citing *CITGO Order* at 11; *Tesoro Order* at 8). The Petitioners quote the *Tesoro Order*, stating “[i]n the words of EPA, ‘given the complexity of ... NESHAP and ... refiner[ies], it is impossible to determine how the regulation applies to the facility by referring to the section-level citations.’” *Id.* (quoting *Tesoro Order* at 8 (emphasis added by Petitioners)).

The Petitioners next assert that the Permit does not even meet TCEQ’s standard of including “high level” requirements. The Petitioners contend that the Permit does not list the high-level requirements under subparts CC and UUU and for the lower level requirements, it does not describe any of the requirements. *Id.*

The Petitioners’ final rebuttal to TCEQ’s response is that the “specific” requirements that TCEQ included in the Permit are general and circular. The Petitioners provide examples of citations that the Petitioners assert do not describe specific standards or fails to describe relevant emission standards and operating limits found in the NESHAPs. The Petitioners contend that the “EPA has stated on multiple occasions that ‘all’ emission limitations and operational requirements must be explicitly stated in a permit.” *Id.* (citing *Shell Deer Park Order* at 9; *Tesoro Order* at 8). The Petitioners conclude that TCEQ’s revisions do not fully incorporate the applicable limits and standards under subparts CC and UUU, and, therefore, the Permit fails to ensure compliance with these applicable requirements. *Id.* at 42.

The Petitioners assert that TCEQ did not respond to the Petitioners’ significant comments that the Draft Permit failed to list and describe applicable general duty requirements from CC and UUU, and, therefore, they are unable to explain how TCEQ’s response is inadequate to address the issue raised in public comments. *Id.* (citing 40 C.F.R. § 70.12(a)(2)(vi)).

The Petitioners provide a list of revisions that they assert should be made to the Permit including describing the subpart CC provisions and the subpart CC and UUU general duty requirements that the Petitioners assert are missing from the Permit and, for those provisions that are cited, ensuring specific inclusion of all applicable requirements for those provisions. *Petition* at 42–44.

EPA’s Response: For the following reasons, the EPA grants in part and denies in part the Petitioners’ request for an objection on this claim.

Under title V of the CAA, the EPA's part 70 regulations, and TCEQ's EPA-approved title V program rules, every title V permit must include all applicable requirements that apply to a source, as well as any permit terms necessary to assure compliance with these requirements. *E.g.*, 42 U.S.C. § 7661c(a). The CAA requirement to include all applicable requirements (including NSPS and NESHAP regulations) in a title V permit can be satisfied using IBR in certain circumstances. *See, e.g.*, White Paper Number 2 at 40 (explaining how IBR can satisfy the requirements of CAA § 504). The title V permit should contain references that are detailed enough that the manner in which the referenced material applies to the facility is clear and is not reasonably subject to misinterpretation. *See Tesoro Order* at 8; *see also* White Paper Number 2 at 34–38.

The Petitioners have demonstrated that the Permit is deficient to the extent that the applicable NSPS or NESHAP citations 40 C.F.R. §§ 63.643, 644, 645, 650, 652, 653 are not included. The EPA is also granting for the general duty requirement found at 63.642(n). The Petitioners have demonstrated that these provisions are not included in the Permit and that TCEQ failed to provide an explanation in response to Petitioners' comments for why they are not applicable. Further, TCEQ's response states that "the applicable requirements summary (ARS) table for flare units 30FL1 and 30FL6 has been revised to include applicable standards ... under 40 CFR Part 63, Subpart CC such as §§ 63.642(d)-(n)...." RTC at 53. However, the Permit does not appear to contain this citation.

The EPA is also granting with regards to 40 C.F.R. § 63.647 because the Permit does not include this provision as an applicable requirement. The EPA notes that TCEQ did address this provision in its RTC, stating that "[r]egarding §63.647 (Wastewater) – Group 1 wastewater streams are subject to NESHAP FF (Benzene Waste Operations – BWON) ..." RTC at 53. The EPA can appreciate that 40 C.F.R. § 63.647 requires compliance with 40 C.F.R. part 61 subpart FF, however, the conditions of 40 C.F.R. § 63.647 are still applicable requirements that need to be included in the Permit. The EPA also notes that 40 C.F.R. § 63.647 includes a general duty provision and TCEQ has not provided an explanation of its applicability to the facility. *See* 40 C.F.R. § 63.647(d).

For the general requirement found at 40 C.F.R. § 63.1570(c), the Petitioners have not demonstrated that additional citation is required. As noted by the Petitioners, the Permit does include this citation. This provision is required and cited for each unit for which subpart UUU applies. It may be that the Petitioners' claim is that this provision must be cited as a separate stand-alone requirement. However, the Petitioners have not demonstrated that there are additional units for which this standard applies that are not included, nor have they demonstrated why a stand-alone citation would be required. Therefore, the EPA is denying the portion of the claim that is specific to 40 C.F.R. § 63.1570(c).

The Petitioners have not demonstrated that the remaining NESHAP and NSPS citations, 40 C.F.R. §§ 63.648, 63.651, 63.658, 63.660, 63.670, 63.671, 63.1564, 63.1565, and 63.1568, require additional information in order to determine how the NSPS or NESHAP applies to the facility. As noted previously, to properly incorporate NSPS and NESHAP provisions into the Permit, the Permit should contain references that are detailed enough that the manner in which

the referenced material applies to the facility is clear and is not reasonably subject to misinterpretation. *See In the Matter of ExxonMobil Corp., Baytown Chemical Plant*, Order on Petition No. VI-2020-9 at 16–17 (March 18, 2022); *see also In the Matter of ETC Texas Pipeline, LTD, Waha Gas Plant*, Order on Petition No. VI-2020-3 at 17–18 (January 28, 2022). Here the Petitioners have not demonstrated that the level of citation included in the Permit does not include references detailed enough to clearly determine how the NSPSs or NESHAPs apply to the facility. For instance, one of the Petitioners’ specific claims is that the Permit cites to 40 C.F.R. § 63.648, which requires compliance with 40 C.F.R. part 60 subpart VV, but the Permit does not state what requirements of subpart VV must be complied with. Specifically, the Petitioners state the Permit should specify that Method 21 of part 60 must be adhered to. Petition at 42. However, the Permit does cite to 40 C.F.R. § 60.485(b) under “Monitoring and Testing requirements,” which is the specific provision within subpart VV that requires the use of Method 21. *See* Final Permit at 149, Permit Applicable Requirements Summary. The Petitioners have not demonstrated why a narrative description of this citation is necessary to determine the requirements the source must meet. The same holds true for 40 C.F.R. §§ 63.651, 63.658, 63.660, 63.670, and 63.671.

The Petitioners also assert that additional information is needed for those NESHAPs that require compliance with conditions found in tables associated with the NESHAP. For example, the Petitioners contend that the citation for 40 C.F.R. §63.1564 is included in the Permit but that the Permit does not include substantive emission limits from Table 5 that limit PM emissions from catalytic cracking units to 1.0 g/kg of coke burn-off. Petition at 43. However, the Permit includes the citation to both 40 C.F.R. § 63.1564 and to Table 5.1. *See* Final Permit at 73, Applicable Requirements Summary. In addition, the Permit includes a textual description of the emission limitations found in the table. In addition to 40 C.F.R. § 63.1564, the Petitioners have also not demonstrated that additional information is needed in the Permit to explain how the Tables associated with 40 C.F.R. §§ 63.1565 and 63.1568 apply to the facility.

Because the Petitioners have not demonstrated that the Permit requires additional information to determine how these NESHAPs apply to the facility, the EPA is denying this portion of the Claim.

As explained previously, the EPA grants to the extent that specific NSPS and NESHAP provisions are not included in the Permit and denies the remainder of the claim.

Direction to TCEQ: In response to this Petition, TCEQ must evaluate those NSPS and NESHAP provisions that are not included in the Permit, including 40 C.F.R. §§ 63.642(n), 63.643, 63.644, 63.645, 63.647, 63.650, 63.652, and 63.653, and determine if they are applicable to the Facility. If they are applicable, TCEQ should revise the Permit to include these citations.

The EPA notes that in reviewing the permit record, the permittee requested the inclusion of 40 C.F.R. §§ 63.642(n), 63.643, and 63.644 into the Permit. *See* Permit 1381 Project File Folder (May 12, 2021) at 6–10 (Project File).²⁷ In addition, the permittee notes that 40 C.F.R. § 63.650

²⁷ This document is accessible via “TCEQ Records Online” at <https://www.tceq.texas.gov/agency/data> under Primary ID 1381 and Content ID 5768895.

is not applicable to the Facility. TCEQ should confirm if this information is correct and revise the permit as appropriate.

Claim D: The Petitioners Claim That “The Proposed Permit’s Monitoring, Reporting, and Emission Calculation Requirements Cannot Ensure Compliance for Key Units and Limits at the Refinery.”

The Petitioners assert generally that the Permit cannot ensure compliance with limits for the fluid catalytic cracking unit (FCCU), flares, dissolved air flotation (DAF) unit, boilers, fugitive emissions, atmospheric tower heater, tanks, and cooling towers. The Petitioners reiterate that environmental justice concerns “mandate increased, focused attention to ensure that all Title V requirements—especially monitoring, recordkeeping, reporting, and compliance certification requirements—have been complied with for these units.” Petition at 44. The Petitioners’ specific claims are outlined in Subclaims D.1 through D.8.

Claim D.1: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with the Hourly and Annual PM Limits for the Refinery’s FCCU.”

Claim D.1 is found on pages 44–53 (Section V.A) of the Petition

Petitioners’ Claim: The Petitioners claim that the Permit cannot ensure compliance with the PM_{2.5}, PM₁₀, and filterable PM limits that are found in Permit 2501A’s Maximum Allowable Emission Rates Table (MAERT limits) and that this contravenes 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. § 7661c(a) and 7661c(c). The Petitioners note that TCEQ identified the monitoring for these limits in its RTC stating, “Emissions are calculated based on the stack test emission factors (lb PM/1,000 lb coke-burn) and actual coke-burn data (lb/hr).” Petition at 45 (citing RTC at 72). The Petitioners provide multiple reasons for why this method of calculating emissions cannot ensure compliance with the FCCU PM limits.

To begin, the Petitioners contend that this method cannot ensure compliance because it is not listed in either Permit 2501A or the title V permit and any monitoring or calculation methods must be clear on the face of the title V permit or Permit 2501A. *Id.*

Next the Petitioners assert that even if this method was listed in the Permit, it could not ensure compliance because neither the title V permit nor Permit 2501A require new stack tests or stack tests at regular intervals to determine the lb PM/1,000 lb coke-burn emission factor. *Id.* The Petitioners cite to Special Conditions of Permit 2501A, the first of which has a limit of 1 lb PM/1,000 lbs of coke-burn off that is front-half (filterable) PM only and notes that compliance with the MAERT limit will be demonstrated by adding front half and back half amounts of PM. *Id.* at 46 (citing Permit 2501A Special Condition 14). The next Special Condition requires stack testing on a schedule “as required by the TCEQ Executive Director” to measure filterable PM and total suspended particulate. The Petitioners highlight that this Special Condition also states that the last “acceptable” stack test was conducted in December 2008 and that this was confirmed in TCEQ’s RTC. *Id.* (citing Permit 2501A Special Condition 55). Special Condition 55 limits the FCCU’s ability to operate at certain coke burn rates by allowing the FCCU to

operate at a burn rate not exceeding 10 percent of the burn rate from the previous stack test if the short-term emission rate in the test did not exceed 80 percent of the MAERT and requiring a new stack test if the FCCU is operating at greater than 10 percent. *Id.* (citing Special Condition 55.C–G).

The Petitioners assert that an emission factor from a stack test that was conducted over 12 years ago cannot ensure compliance with the FCCU’s current hourly and annual limits. Petition at 46. The Petitioners contend that the lb PM/1,000 lb coke-burn emission rate depends on many factors that could not have remained constant since the last stack test and are variable based on the conditions of the FCCU’s controls, additives used to achieve NO_x and SO₂ reductions, manner in which the regenerator is operating, the temperatures of regeneration, and other factors. *Id.* The Petitioners further assert that the coke burn rate limitation is also inadequate to ensure compliance because a coke burn rate from the last stack test that resulted in short-term emission rates less than 80 percent of the MAERT does not mean that a later coke burn rate as much as 10 percent higher than what was tested will also result in emissions not exceeding the short-term MAERT rate. Additionally, nothing in the permit record correlates the coke burn rate to specific hourly or annual PM_{2.5} or PM₁₀ emissions. *Id.* at 47.

The Petitioners assert that this monitoring method also does not ensure compliance with the condensable portions of the PM limits because the Permit does not actually require condensable PM be measured or considered, and even if the Permit did require testing for condensable PM, it is not required on any set schedule. *Id.* The Petitioners note that Permit 2501A, Special Condition 55 references “total suspended particulate” but that the condition is unclear if that includes condensable PM or if it instead refers to filterable PM of all sizes. *Id.*

The Petitioners evaluate other citations included in the Permit that are applicable to the FCCU and conclude that these conditions also cannot ensure compliance with the MAERT PM limits. *Id.* As described by the Petitioners, these provisions relate to pollutants other than PM or are general provisions and do not specify monitoring or reporting requirements for PM from the FCCU. *Id.* The Petitioners also evaluate the PM-related provisions in the Permit including PM-related NSPS and NESHAP provisions for the FCCU and assert that these too cannot ensure compliance with the MAERT PM limits based on TCEQ’s concession that the “EPA’s limits are not PM emission rates (EPA’s limit is a lb of filterable PM/1,000 lb coke-burn, whereas the MAERT limit is a total PM (filterable + condensable) lb/hr limit).” *Id.* at 49 (quoting RTC at 72). Additionally, the Petitioners assert that there is nothing in the Permit or the permit record that ties the NSPS or NESHAP monitoring, testing, or reporting requirements—or correlates the NSPS or NESHAP limits—to specific, actual PM_{2.5} or PM₁₀ emission rates or the MAERT PM limits. *Id.* The Petitioners further assert that the NSPS and NESHAP testing and monitoring cannot ensure compliance with the condensable portion of the MAERT PM limits because it is only for filterable PM and the monitoring and testing is too infrequent to ensure compliance with the hourly and annual MAERT PM limits. *Id.*

The Petitioners provide a list of revisions that they assert TCEQ should make to the Permit including: requiring PM CEMS, annual stack testing, establishing a filterable/condensable ratio, establishing hourly filterable and condensable operating limits, and requiring Valero to meet those filterable and condensable operating limits as shown by hourly PM_{2.5} and PM₁₀ CEMS

results. *Id.* at 50–51. They also assert that the Special Condition that allows the FCCU to operate at a burn rate not exceeding 10 percent of the burn rate from the previous stack test must be removed. *Id.* at 51.

The Petitioners address TCEQ’s RTC and assert that the response is inadequate to address the Petitioners’ claim. *Id.* at 52. Specifically, the Petitioners note TCEQ’s statement that Permit 2501A, Special Condition 55.B “requires performing stack testing that includes the condensable portion measurement.” *Id.* at 53 (quoting RTC at 72). The Petitioners assume that this is in reference to “total suspended particulate” in Special Condition 55.B but assert that it is nevertheless unclear if that includes condensable PM or not. The Petitioners further assert that, even if it does include condensable PM, the testing for condensable PM is not required on any set schedule or potentially at all. The Petitioners also note that, in its RTC, TCEQ stated that while the permit limit allows for a significant portion of the total PM₁₀ from the FCCU to be condensable PM, the December 2008 stack testing indicates that the condensable portion was less than half of the filterable portion. The Petitioners argue that “the fact that the last stack test for condensable PM was conducted over a dozen years ago just proves that the proposed Title V permit cannot ensure compliance with the condensable portion of the MAERT PM limits for the FCCU.” *Id.* The Petitioners further assert that even less than half of the filterable portion of PM would still be tons of condensable PM and that the percentage of condensable PM could have easily changed since the last stack test and could be significantly higher now. Lastly, in response to TCEQ’s statement that monitoring requirements with applicable PM and PM opacity limits under NSPS J are listed in the in the Draft Permit, the Petitioners note that TCEQ does not assert that these requirements ensure compliance with the MAERT PM limits and, as Petitioners discussed previously, the NSPS requirements cannot ensure compliance with the MAERT PM limits. *Id.*

EPA’s Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 14 states:

Emissions from the FCC Unit Stack shall not exceed one (1) pound of particulate matter per 1,000 pounds of coke burn-off (front-half only according to 40 CFR Part 60, Method 5B or 5F, as appropriate), measured as a one-hour average over three performance test runs. Compliance with the MAERT limits will be demonstrated by adding front half and back half amounts of particulate matter.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 3.

Special Condition 55 states (in part):

The holder of this permit shall perform stack sampling and other testing as required by the TCEQ Executive Director or his representative to establish the actual pattern and quantities of air contaminants being emitted from the FCC Unit Stack.

B. Air constituents emitted from the FCC Unit Stack (EPN 42CB2201) to be tested for include (but are not limited to) filterable particulate, total suspended particulate, oxygen, CO, SO₂, and NO_x.

C. The last acceptable stack test was conducted on December 19, 2008. Sampling shall also occur at such other times as may be required by the Executive Director of TCEQ.

D. The FCCU catalyst regenerator shall operate at maximum coke burn rate during stack emission testing. Primary operating parameters that enable determination of coke burn rate shall be monitored and recorded during the stack test. These parameters shall be determined at the pretest meeting and shall be stated in the sampling report. If the FCCU is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing.

F. During subsequent operations, the permit holder may operate at a coke burn rate greater than the coke burn rate recording during the test period provided the new coke burn rate does not exceed 10% of the coke burn rate recording during the test period and the short term emission recorded during the stack test did not exceed 80% of the short term emission rate authorized in the MAERT. Unless requested by the regional office, the permit holder may operate at this coke burn rate without additional stack test.

G. During subsequent operations, the permit holder may operate at a coke burn rate greater than 10% of that coke burn rate recorded during the test period provided the short term emission rate during the stack test did exceed 80% of the short term emission rate authorized in the MAERT. Stack sampling shall be performed at the new operating conditions within 120 days according to the stack sampling requirements specified in Special Condition 55.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 28.

TCEQ Response to Comments

In response to public comments regarding this issue, TCEQ stated:

In regard to PM (including condensable) monitoring requirements in NSR Permit 2501A, [TCEQ] notes that Special Condition 55.B of NSR Permit 2501A requires performing stack testing that includes the condensable portion measurement. While the permit limits allow for a significant portion of the total PM₁₀ from the FCCU to be condensable PM (approximately 57% of the short-term limit and 41% of the annual limit), actual test data from December 2008 stack testing indicates that the condensable portion was less than half of the filterable portion.

... Emissions are calculated based on the stack test emission factors (lb PM/1,000 lb coke-burn) and actual coke-burn data (lb/hr). Note that NSPS J and MACT UUU (included as requirements for FCCU) require coke-burn calculations.

RTC at 73.

Title V Requirements for Monitoring Sufficient to Assure Compliance

The CAA requires that “[e]ach permit issued under [title V] shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(c). EPA’s part 70 monitoring rules (40 C.F.R. § 70.6(a)(3)(i)(A)-(B), (c)(1)) are designed to address this statutory requirement. As a general matter, permitting authorities must take three steps to satisfy the monitoring requirements in EPA’s part 70 regulations. First, under 40 C.F.R. § 70.6(a)(3)(i)(A), permitting authorities must ensure that monitoring requirements contained in applicable requirements are properly incorporated into the title V permit. Second, if the applicable requirements contain no periodic monitoring, permitting authorities must add periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit. 40 C.F.R. § 70.6(a)(3)(i)(B). Third, if there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance. 40 C.F.R. § 70.6(c)(1); *see, e.g., In the Matter of Mettiki Coal, LLC*, Order on Petition No. III-2013-1 (September 28, 2014) at 6–7; *CITGO Order* at 6–7. The Act and the EPA’s title V regulations require permitting authorities to issue permits specifying the monitoring methodology needed to assure compliance with the applicable requirements in the title V permit. *In the Matter of Wheelabrator Baltimore, L.P.*, Order on Petition, Permit No. 24-510-01886 (April 14, 2010) at 10.

EPA Analysis

To start, the EPA notes that the sufficiency of monitoring is a context-specific and fact-specific inquiry, conducted on a case-by case basis. TCEQ, in its RTC, identified that the emissions for the FCCU are “calculated based on the stack test emission factors (lb PM/1,000 lb coke-burn) and actual coke-burn data (lb/hr). Note that NSPS J and MACT UUU (included as requirements for FCCU) require coke-burn calculations.” RTC at 73. As the Petitioners observe, the relevant monitoring is based on an emission factor established using a single stack test conducted in 2008 with no requirement to conduct additional stack tests except in limited cases when operating at greater than 10percent of the coke-burn rate.

The Petitioners first assert that the monitoring identified by TCEQ fails to demonstrate compliance with the FCCU MAERT limits because the emissions calculation method is not listed in the Permit or NSR Permit 2501A. The Petitioners have demonstrated that the Permit does not “set forth” the monitoring for demonstrating compliance with the PM_{2.5} and PM₁₀ MAERT limits for the FCCU. *See* 42 U.S.C. § 7661c(c). The Permit neither identifies the emission factor nor the equations that are to be used to demonstrate compliance with the Permit limits. *See US Steel II Order* at 9–12. While TCEQ does identify the monitoring that is being used in its RTC, that does not satisfy the requirement for the Permit itself (not merely a mention

in the record) to “set forth” monitoring requirements to assure compliance with permit terms and conditions. The EPA notes that TCEQ references NSPS and NESHAP provisions that may also contain monitoring; however, the Permit does not clearly connect those provisions to compliance with the limits found in the MAERT for NSR Permit 2501A.

The Petitioners next assert that the monitoring is inadequate because the Permit does not require any new stack tests or stack tests at any interval sufficient to ensure compliance and to determine an appropriate emission factor. The Petitioners, in their public comments, squarely put forth the issue of too infrequent monitoring for TCEQ’s consideration and response. *See* Petition Ex. 1, March 2019 Comments of Petitioners at 67. However, TCEQ’s response provides no explanation for why the stack test frequency required in the Permit is adequate to ensure compliance. Additionally, the permit record fails to justify the use of emission factors derived from a stack test that is over a decade old to predict the unit’s current emissions. Without a reasoned response from TCEQ, the EPA is unable to determine that the monitoring is adequate to satisfy part 70 monitoring requirements.

The Petitioners assert that the method identified by TCEQ does not require that condensable PM be measured or considered. The Petitioners cite to the NSR Permit 2501A Special Condition 55.B, which requires testing for “total suspended particulate,” and find that it is unclear if that includes condensable PM or filterable PM of all sizes. The EPA agrees that the condition is unclear if “total suspended particulate” includes testing for condensable PM.

Direction to TCEQ: In response to this Order, in order to rely on emission factors for assuring compliance, TCEQ must evaluate whether the monitoring based on an emission factor from a 2008 stack test is sufficient to assure compliance with the PM_{2.5} and PM₁₀ limits found in the MAERT of NSR Permit 2501A. If TCEQ concludes that no further stack testing is needed, TCEQ must explain on the record how it has determined that the emission characteristics of the FCCU have not changed since 2008 and is not expected to change over the term of the Permit in order to conclude that periodic stack testing is not required. Alternatively, if TCEQ believes that the emissions characteristics are reasonably likely to change over time, TCEQ must amend the permit to require periodic stack testing. Further, TCEQ must amend the Permit to require the use of the emission factors from the most recent stack test and ensure the calculations used to determine compliance are made part of the permit. Lastly, the Permit must be revised to clarify that testing for condensable PM should be included in the stack test requirements.

Claim D.2: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with the Hourly and Annual Limits for the Refinery’s Flares.”

Claim D.2 is found on pages 53–68 (Section V.B) of the Petition.

Petitioners’ Claim: The Petitioners claim generally that the title V permit does not include adequate monitoring, reporting, recordkeeping, or emission calculations to ensure compliance with emission limits for the two flares for VOCs, SO₂, NO_x, CO, and hydrogen sulfide (H₂S). Petition at 53. The Petitioners assert that this is in violation of 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§ 7661c(a) and 7661c(c). The Petitioners point to TCEQ’s RTC, stating that it is the first

time TCEQ identifies how Valero calculates emissions for purposes of complying with the flares' hourly and annual limits for VOCs, SO₂, NO_x, CO, and H₂S. *Id.* at 54 (citing RTC at 73). According to the portion of TCEQ's response included in the Petition, this monitoring includes flow monitors and composition analyzers to ensure compliance with NO_x, CO, and VOC, and continuous analyzers for H₂S and SO₂.

The Petitioners provide multiple reasons for why they assert the methods of calculating emissions identified by TCEQ cannot ensure compliance with the limits for the flares. The Petitioners contend that the identified methods are not listed in either PSD Permit 2501A or the title V permit. *Id.* The Petitioners acknowledge that the Permit requires flow monitors and composition analyzers but state that the requirement is vague as to how emissions are calculated. The Petitioners note that the Special Condition 37.F states that hourly emission rates are to be determined using "above readings" and "emission factors used in the permit amendment application PI-1 Dated May 9, 2012" but does not identify what the above readings are supposed to be. *Id.* Further, upon request, TCEQ was unable to locate the emission factors and acknowledged that the reference in Special Condition 37.F was incorrect. The Petitioners also assert that the permit 2501A does not specify that continuous analyzers for H₂S and SO₂ are installed. *Id.* at 55.

The Petitioners next assert that even if the Permit included the monitoring identified by TCEQ, the Permit could not ensure compliance because the Permit does not identify assumptions and/or emission factors necessary to calculate emissions of these pollutants from the flares. *Id.* The Petitioners assert that if Valero calculates VOC emissions using flow rates and data from the composition analyzers as identified by TCEQ, then Valero would need to use an assumed destruction efficiency. The Petitioners note that TCEQ guidance calls for using an assumed 98 percent destruction efficiency for heavier VOC compounds and 99 percent for lighter VOC compounds. *Id.* To ensure compliance with VOC limits, the Petitioners state that the Permit must identify those assumed destruction efficiencies. Further, the Petitioners argue that if Valero is relying on a destruction efficiency of 98 percent and 99 percent, this cannot ensure compliance with the flares' hourly and annual VOC limits for those periods during which the flares are not meeting the assumed destruction efficiencies. *Id.* at 56. The Petitioners note that as part of the petroleum refining sector NESHAP, facilities are required to meet a net heating value of 270 BTU/scf in order to ensure a 98 percent destruction efficiency. *Id.* (citing 80 Fed. Reg. 75,178, 75,212 (Dec. 1, 2015)). The Petitioners provide examples for when the flares at the Facility did not meet this minimum heating value and contend that if Valero was using a 98 percent or 99 percent destruction efficiency they would have underestimated VOC emissions from the flares. *Id.* at 57. The Petitioners further contend that even if Valero complied with the minimum heating value, it still would be unable to ensure a 99 percent destruction efficiency since the NESHAP was designed to, at best, achieve 98 percent. As a result, the Petitioners assert that Valero should only be allowed to assume 98 percent destruction for both light and heavy compounds, except for those periods where the flares are not meeting the opacity and net heating value requirements from the NESHAP (during which a lower destruction percentage should be used). *Id.*

The Petitioners raise additional concerns for why the identified monitoring cannot ensure compliance with the hourly and annual VOC limits. Specifically, the Petitioners note that it is unclear if the composition analyzers are measuring all VOCs in the waste gas or only a subset of

the VOCs. *Id.* at 58. The Petitioners evaluated Valero's 2019 flare management plan and were unable to find any VOC composition analyzers listed beyond a reference to a highly reactive VOC analyzer. *Id.* The Petitioners contend that if Valero is only measuring highly reactive VOCs instead of all VOCs, then their calculations would be underestimating VOC emissions from the flares. *Id.* The Petitioners final concern regarding VOC monitoring involves the flow monitors, which the Petitioners assert cannot ensure compliance because it is unclear if they are measuring all of the gases entering the flares, including sweep and purge gases. If Valero is not measuring the purge and sweep gases then the Petitioners claim that VOC emissions from the flare would be underestimated. *Id.*

Similar to VOCs, the Petitioners assert that the Permit must identify any assumed conversion efficiencies that are used to calculate SO₂ emissions from the flares. *Id.* at 59. The Petitioners further assert that if Valero is using an assumed conversion efficiency, it may be underestimating the percentage of sulfur that is converted to SO₂ and should be required to assume that 100 percent of the sulfur compounds in the flare waste gases are converted to SO₂. *Id.* In addition, the Petitioners assert the continuous sulfur analyzers cannot ensure compliance because the upper bound of total sulfur concentration that the analyzer can measure is too low. The Petitioners state that the flare management plan indicates that the analyzers can only measure sulfur in waste gases at concentrations up to 5,000 ppmv. The Petitioners present an example of another refinery with much higher sulfur contents and contend that Valero's sulfur analyzer should be set to a span of 1,000,000 ppmv. *Id.*

Regarding CO, the Petitioners assert that the Permit must specify which version of AP-42 emission factors Valero uses to calculate CO emissions from the flares. *Id.* at 56. The Petitioners note that EPA updated emission factors for CO emissions from flares in 2015 and that the Permit requires that emission rates are determined using emission factors in an application dated May 9, 2012. *Id.* The Petitioners assert that if Valero uses a pre-2015 version of the CO emission factors, it cannot ensure compliance with the hourly and annual CO limits. The Petitioners assert that the AP-42 emission factor for NO_x from flares also cannot ensure compliance with the hourly and annual NO_x limits because they are outdated and inaccurate. *Petition at 59.* Specifically, the Petitioners note that the AP-42 factors were based on limited testing almost 40 years ago on propylene flares that bear no resemblance to the flares located at the Facility. *Id.*

The Petitioners final argument is that the only flare-monitoring related conditions in the Permit include monitoring for visible emissions as required by 40 C.F.R. part 63, subpart CC and measuring and recording the presence of the pilot flame. *Id.* at 60. The Petitioners claim that neither of these requirements can ensure requirements with the specific hourly and annual limits for VOCs, SO₂, NO_x, CO, and H₂S. The Petitioners note that the Permit cites purported monitoring, recordkeeping and reporting provisions from Permit 2501A but assert that TCEQ does not explain how any of these provisions can ensure compliance with the hourly and annual limits. *Id.* In addition to these permit conditions, the Petitioners also contend that while the flares are subject to certain NESHAP and NSPS requirements, these alone cannot ensure compliance with the limits. The Petitioners assert this is because "nothing in the [P]ermit ties the NSPS or NESHAP requirements to specific VOC, CO, SO₂, H₂S or NO_x hourly or annual emission rates or the MAERT flare limits or explains how the NSPS or NESHAP monitoring can be used to determine specific, actual emissions of the various pollutants listed in the MAERT for the

flares.” *Id.* at 62 (citing *Shell Deer Park Order* at 21–23). The Petitioners further contend that the permit record also does not explain how the NSPS or NESHAP monitoring can be used to determine actual hourly or annual emissions of these pollutants from the flares especially since, apart from the H₂S limits in subpart Ja, the NSPS and NESHAP provisions do not include any limits for the pollutants listed in the MAERT. *Id.*

To ensure adequate monitoring, the Petitioners provide a listing of revisions it asserts the EPA should require TCEQ to make to the Permit. *Id.* at 63–64. These include specifying the monitoring and emission calculation methods being used to ensure compliance with the flare limits including any assumed destruction and conversion efficiencies for calculating VOC and SO₂ emissions. Additionally, the Petitioners claim that Valero should be required to directly monitor VOC emissions or be required to use a lower destruction efficiencies during periods when Valero is not meeting the combustion zone net heating value. The Petitioners also argue that TCEQ and Valero should not be able to use the 99 percent destruction efficiency provided in the TCEQ guidance “unless TCEQ and Valero can point to a specific reasoned, sound technical basis for this assumption...” *Id.* at 64. The Petitioners also call for the Permit to ensure that Valero measures all VOCs coming into the flare inlet—not just a subset of VOCs and including sweep and purge gases. For SO₂, the Petitioners propose that the Permit should assume that all the total sulfur compounds in the waste gases are converted to SO₂ and that for NO_x, the permit should require using an emission factor value that is the highest measure value from the limited testing done to support the current AP-42 emission factor. *Id.*

The Petitioners address TCEQ’s RTC stating that the response is inadequate to address the Petitioners’ claim regarding monitoring and emission calculation requirements for VOCs, SO₂, NO_x, CO, and H₂S from the flares. *Id.* at 67. The Petitioners reiterate that the monitoring and emission calculation methods identified by TCEQ cannot ensure compliance with the hourly and annual limits. In its response, TCEQ pointed to Permit 2501A Special Conditions and state and federal regulations that include monitoring and reporting requirements for the flares. However, the Petitioners state that these provisions cannot ensure compliance with the “very specific hourly and annual limits for the reasons discussed above”. *Id.* at 68.

EPA’s Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 37 states (*in part*):

The following requirements apply to Flares 30FL1 and 30FL6. The flares are subject to all applicable requirements of 40 CFR Part 60, Subpart Ja. The flares are designed and will operate in accordance with the following requirements:

D. The permit holder shall install continuous flow monitors and composition analyzers that provide a record of the vent stream flow and composition to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the

flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

F. The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a 12 month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §60.18(f)(4) shall be recorded at least once every 15 minutes. Hourly emission rates shall be determined and recorded using the above readings and the emission factors used in permit amendment application, PI-1 dated May 9, 2012.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 9–10.

TCEQ Response to Comment

In response to public comments regarding this issue, TCEQ stated:

[TCEQ] notes flare monitoring requirements are stated in multiple sections of the Draft Permit. For example, Page 266 of the Draft Permit includes special conditions in NSR Permit 2501A which list monitoring and reporting requirements for the flare units. The Draft Permit (Pages 62-63 and 190) also lists applicable monitoring and reporting requirements for flare units subject to applicable state and federal regulations. Commenters also state “While the Valero flares are subject to certain NESHAP and NSPS requirements, these alone cannot ensure compliance with the very specific hourly and annual limits in the MAERT”. [TCEQ] notes that NSR Permit No. 2501A Special Condition 37 requires flow monitors and composition analyzers to demonstrate compliance with the MAERT limits. These flow monitors as composition analyzers are used to ensure hourly and annual compliance with NO_x, CO, and VOC hourly rates (AP-42 emission factors and flow rates are used for NO_x and CO and composition analyzers and flow rates are used for VOC). Per NSPS Ja (also specified in the condition), H₂S GCs and Total Sulfur SOLAs are installed, providing continuous measurements of the H₂S and SO₂ hourly emissions.

RTC at 74.

EPA Analysis

The Petitioners have demonstrated that the permit record is too unclear for one to determine whether the monitoring required to assure compliance with the hourly and annual limits on VOCs, SO₂, NO_x, CO, and H₂S for Flares 30FL1 and 30FL6 satisfies CAA title V monitoring requirements under part 70. To begin, as noted by the Petitioners, Permit Condition 37.F requires that hourly emission rates are determined using emission factors from permit amendment application PI-1, dated May 9, 2012. However, as confirmed by TCEQ, this reference in Special Condition 37.F is incorrect as TCEQ is unable to locate the emission factors in the referenced application. *See* Petition Exhibit 9. Petitioners raised this issue in their comments on the draft

title V permit; however, TCEQ failed to revise the Final Permit with the correct location for the emission factors.²⁸ See RTC at 6. For these emission factors to be properly incorporated into the Permit, information necessary to identify their location must be included in the Permit. See *US Steel I Order* at 43 (finding that for incorporation by reference, it is important that descriptive information be included so that there is no ambiguity as to which version of a document is being referenced).

Further, in its RTC, TCEQ identified emission factors and continuous monitors as the required compliance; however, it's unclear in the Permit how these methods are being used to calculate the flare emissions to demonstrate compliance. For instance, TCEQ notes in its RTC that subpart Ja requires the installation of continuous H₂S and total sulfur monitors and that these monitors are being used to demonstrate compliance with H₂S and SO₂ hourly emission limits, but the Permit does not state that those monitors are being used to demonstrate compliance with the H₂S and SO₂ limits for Flares 30FL1 and 30FL6 in the MAERT for NSR Permit No. 2501A, nor does the Permit explain how those calculations are done. To the extent that TCEQ is relying on other preexisting requirements, such as subpart Ja, to demonstrate compliance with the hourly or annual H₂S and SO₂ limits found in the MAERT for Flares 30FL1 and 30FL6, the Permit must clearly state the connection between the NSPS requirements and these flare limits, and the permit record must explain how those requirements assure compliance with the H₂S and SO₂ flare limits. *E.g.*, *In the Matter of Owens-Brockway Glass Container Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021).

With regard to assuring compliance with the VOC, NO_x and CO limits, in addition to the incorrect reference to the location of the relevant emission factors, the Permit is also not clear on how compliance will be determined, including the destruction efficiencies that are being relied upon in the calculations. If it is necessary for Valero to assume destruction efficiencies to calculate emissions, those assumptions must be clear in the Permit. The Petitioners have demonstrated that the record is unclear as to whether the Permit assumes a 98 or 99 percent destruction efficiency. In addition, the Petitioners have demonstrated that the record is unclear as to whether the permit contains adequate conditions and work practice standards to assure that Valero is meeting the 98 or 99 percent destruction efficiency. Finally, the Petitioners have demonstrated that the permit record does not contain a justification for why the 98 or 99 percent destruction efficiency will assure compliance with the underlying VOC emission limit.

Lastly, as the Petitioners observe, the Permit is not clear as to whether the compositions analyzers are measuring all VOCs in the waste gas or only a subset of the VOCs, and whether the flow monitors are measuring all gases including sweep and purge gases. The EPA agrees with the Petitioners that VOC emissions may be underestimated if the analyzers are not measuring all VOCs in the waste gas and/or the flow monitors are not measuring all gases, in which case these identified monitoring cannot ensure compliance with the hourly and annual VOC limits. The Petitioners therefore have demonstrated that these specifics are not clear in NSR Permit 2501A Special Condition 37.

²⁸ The EPA notes that TCEQ issued a modification of the title V permit on February 2, 2022, and that the incorrect citation is still included in NSR Permit 2501A Special Condition 37.F.

Direction to TCEQ: In response to this Order, in order to rely on emissions factors to demonstrate compliance, TCEQ must revise the Permit to include the correct reference to the document identifying the emission factors to be used for calculating hourly emission rates. If these emission factors are specified in a different permit amendment application than the one currently identified in the Permit, the Permit must include the correct application date. Further, the Permit must identify the destruction efficiencies and conversion efficiencies that are being used for emission calculations to determine compliance with the flare emission limits. The EPA notes that NSR Permit 2501A Special Condition 37.G does specify that the flare shall operate with no less than 98 percent efficiency; however, it is not clear if that is the destruction efficiency that is being used for emission calculations for the purpose of determining compliance with the title V permit. In any event, the selected destruction and conversion efficiencies must be included in the Permit, and the justifications for their selection must be provided in the permit record.

The Permit must also be revised to clarify how compliance is being determined for each pollutant; where continuous monitors are being used, the Permit must clearly state such. Additionally, TCEQ must specify in the Permit which VOCs and gases are being monitored to demonstrate compliance with the VOC emission limit. The EPA notes that other applicable requirements that require flare monitoring may provide the information that the Petitioners highlight. Specifically, 40 C.F.R. part 63, subpart CC, for which both flares are subject, requires Valero to conduct flare vent gas composition monitoring. *See* 40 C.F.R. § 63.670(j). The definition of flare vent gas under this provision includes all waste gas, portion of sweep gas not recovered, flare purge gas, and flare supplemental gas (but does not include pilot gas, total steam or assist air). 40 C.F.R. § 63.641. Subpart CC also requires Valero to install a flow monitoring system and allows that different flow monitoring methods may be used “provided that the flow rates of all gas streams that contribute to the flare vent gas are determined.” 40 C.F.R. § 63.670(i). If TCEQ is relying upon other requirements such as those found in the NSPS or NESHAP in order to assure compliance with the emission limits found in the MAERT, then the Permit must clearly state this connection and the permit record should provide a basis for this connection.

Claim D.3: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with the Hourly and Annual VOC Limits for the DAF Unit.”

Claim D.3 is found on pages 68–72 (Section V.C) of the Petition.

Petitioners’ Claim: The Petitioners claim that, in violation of 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§ 7661c(a) and 7661c(c), the Permit “does not include adequate monitoring, reporting, recordkeeping, or emission calculation requirements to ensure compliance with hourly and annual VOC limits for the Dissolved Air Floatation (DAF) unit from the refinery’s wastewater treatment system” that are required by Permit 2501A’s MAERT. Petition at 68. The Petitioners assert that the only monitoring requirements in the Permit that are applicable to the DAF unit are in Permit 2501A Special Condition 36. This condition requires Valero to take monthly wastewater grab samples to determine VOC concentration in the wastewater and to demonstrate compliance with the allowable emission rates. The samples taken shall be in a representative

portion of the wastewater stream upstream and downstream of the DAF unit. The Petitioners contend that monthly sampling cannot ensure compliance with an hourly limit. *Id.* (citing *Sierra Club v. EPA*, 536 F.3d 673, 675 (D.C. Cir. 2008) and claiming that the court held that annual testing is unlikely to assure compliance with a daily emission limit). The Petitioners explain that this is because there are several variables that can change quickly and frequently affect VOC emissions. *Id.* (referring to EPA’s Emissions Estimation Protocol for Petroleum Refineries, Table 7-5). With regards to the annual limit, the Petitioners state that “[b]ecause Valero is not required to take these variables into account when calculating VOC emissions from the DAF unit, the requirements from Special Condition 36 are inadequate to ensure compliance with the annual limit as well, especially for a source with such high VOC emissions.” *Id.* at 69.

The Petitioners evaluated other Special Conditions that are applicable to the DAF unit, including Permit 2501A Special Conditions 3–5. *Id.* The Petitioners contend that these Special Conditions only generally list the various NSPS and NESHAP subparts that are applicable to all the various units covered by the Permit but do not list any provisions specific to the DAF unit. Further, even if there were specific NSPS or NESHAPs that are applicable to the DAF unit, the Petitioners assert the permit is flawed because it does not explain how the NSPS or NESHAP monitoring can be used to determine VOC emissions. *Id.* at 70.

The Petitioners challenge TCEQ’s RTC, stating that it is inadequate to address the Petitioners’ claim. The Petitioners explain that while TCEQ responded that Valero continuously measures wastewater flow to the DAF unit, “nowhere does permit 2501A or the [Permit] actually require Valero to measure influent flow, much less on a continuous basis.” *Id.* at 69, 71. The Petitioners further assert that using unspecified sampling procedures and calculations that are not listed in the permit such as determining what is a “representative portion of the wastewater stream” is also inadequate to ensure compliance with the limits. *Id.* at 69. The Petitioners acknowledge that TCEQ stated in its response that the Facility is subject to 40 C.F.R. part 61, subpart FF, which regulates Benzene Waste Operations that are applicable to the DAF unit and which requires test methods, calculation procedures, and recordkeeping and reporting requirements. The Petitioners contend that subpart FF cannot ensure compliance with the VOC limits in the MAERT for the DAF unit because it regulates only emissions of benzene and not all the various other VOCs emitted by the DAF unit. Additionally, the Petitioners assert that TCEQ does not explain how subpart FF can ensure compliance with the hourly and annual VOC limits and nothing in the Permit or permit record ties or correlates the subpart FF requirements to the DAF unit VOC emission rates. *Id.* at 72.

The Petitioners provide a summary of recommended revisions to the Permit to address their claim. These include requiring continuous measurement of variables, daily VOC concentration sampling, using methods cited in EPA’s Emissions Estimation Protocol for Petroleum Refineries to calculate the hourly VOC emissions, and ensuring the Permit specifies the exact calculation methods and/or models and input parameters required. *Id.* at 70.

EPA Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 36 states:

Wastewater grab samples shall be taken at least monthly to determine the VOC concentration in the wastewater. The samples shall be taken in a representative portion of the wastewater stream upstream and downstream of the Dissolved Air Floatation Unit. The wastewater VOC concentrations shall be used to demonstrate compliance with the allowable emission rates. Sampling procedures shall be approved by the TCEQ Regional Director.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 9.

TCEQ Response to Comments

In response to public comments regarding this issue, TCEQ stated:

[M]onitoring requirements for the DAF unit are specified in NSR Permit No. 2501A Special Condition 36 which states “The wastewater VOC concentrations shall be used to demonstrate compliance with the allowable emission rates”. The sampling frequency of measuring VOC concentrations is determined on a case-by-case basis by the requirements stated in the permit conditions, by the state or federal rule and by the process dynamics (e.g., slow or fast acting) which determines the nature of the pollutant source. Hourly and annual VOC emission rates are calculated based on continuous influent flow to the DAF unit and wastewater VOC concentration measured under Special Condition 36. [TCEQ] notes that the entire [Facility] is subject to regulations under 40 CFR Part 61, Subpart FF. That is, Benzene Waste Operations ‘BWON’ regulation is a sitewide requirement that also applies to the DAF unit. This sitewide requirement is in special term 14 in the Proposed Permit and in special condition 3 in the NSR 2501A permit. Under NESHAP FF regulation, the DAF unit is subject to citations §61.355 for test methods and calculation procedures, §61.36 for recordkeeping requirements, and §61.357 for reporting requirements.

RTC at 73.

EPA Analysis

The Petitioners have demonstrated that it is not clear if the Permit contains monitoring sufficient to demonstrate compliance with the hourly and annual VOC emission rates for the DAF unit. As the EPA explained in response to Claim D.1, the CAA requires that, “Each permit issued under [title V] shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(c). In its response, TCEQ stated that VOC emission rates are calculated based on continuous influent flow. However, TCEQ failed to identify where in the Permit there is a requirement to install and maintain a continuous influent flow monitor. Additionally, TCEQ did not provide an explanation for how the continuous influent flow monitor is used in conjunction with the monthly VOC concentrations to demonstrate compliance with the

hourly and annual VOC emission limits or identify where this explanation could be found in the record. TCEQ also identified part 61, subpart FF as having requirements, including test methods and calculation procedures, that may be relevant to this claim. However, TCEQ failed to explain how these requirements are connected to demonstrating compliance with the hourly and annual VOC emission limits. As noted by the Petitioners, part 61, subpart FF requires Valero to determine total annual benzene from the facility but does not address other VOC emissions. Based on the foregoing reasons, the EPA is granting this claim.

Direction to TCEQ: In response to this Order, TCEQ must revise the Permit to include monitoring sufficient to demonstrate compliance with the hourly and annual VOC emission limits including what test methods and calculation procedures are required. TCEQ should consider whether additional direct or parametric monitoring, such as hourly monitoring of throughput, would be necessary to assure ongoing compliance with the hourly VOC emission limits. To the extent that TCEQ is relying on monitoring requirements and/or sampling procedures in part 61, subpart FF, or another NSPS or NESHAP, to assure compliance with the hourly and annual VOC emissions limits for the DAF unit, TCEQ must clearly identify these provisions in the Permit as requirements relative to the DAF unit. Further, TCEQ must amend the permit record to include the rationale to demonstrate that the monitoring, recordkeeping, and reporting is sufficient to assure compliance with the hourly and annual VOC emission limits.

Claim D.4: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with the PM and Opacity Limits for Several of the Refinery’s Boilers.”

Claim D.4 is found on pages 72–76 (Section V.D) of the Petition.

Petitioners’ Claim: The Petitioners claim that in violation of 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§7661c(a) and 7661c(c), the Permit fails to include adequate monitoring to ensure compliance with the hourly and annual PM_{2.5}, PM₁₀, and opacity limits for boilers 1–4 that are listed in the MAERT in NSR Permit 124424. Petition at 72. The Petitioners provide background information regarding NSR Permit 124424,²⁹ including that it authorized a new boiler and contained emission limits for the new boiler and the existing units. The Petitioners identified the PM-specific monitoring as conducting a stack test for initial compliance testing and determining opacity using Method 9 observations during the initial stack test and once per year thereafter. *Id.* at 73 (citing NSR Permit 124424, Special Conditions 11, 23). The Petitioners assert that the Permit does not impose a requirement for additional stack tests unless Valero wants authorization to fire at a rate above the maximum rate established during the initial testing. The Petitioners argue that these provisions cannot ensure compliance with the hourly and annual MAERT PM limits and the opacity limit because the monitoring is too infrequent and additional stack testing is not required in the Permit beyond the initial test. *Id.* The Petitioners note that boiler performance degrades over time and therefore initial stack testing and infrequent visual observations cannot substitute for using CEMS and more frequent stack testing. *Id.*

²⁹ As noted by the Petitioners, the title V permit incorporates NSR Permit 124424, which was issued in May 2016. TCEQ revised and issued NSR Permit 124424 in July 2020 and September 2020. However, as the title V permit still incorporates the May 2016 version, that is the one upon which the Petitioners’ claim is based.

The Petitioners claim that NSR Permit 2501A's MAERT also contains hourly and annual PM_{2.5} and PM₁₀ limits for boilers 1–3 that match those found in NSR Permit 124424. However, the Petitioners assert that the monitoring and reporting provisions for these limits also cannot ensure compliance as they are very similar to the requirements of NSR Permit 124424. *Id.* at 74. As stated by the Petitioners, NSR Permit 2501A Special Condition 53 is even more lax because it requires initial testing for opacity and not PM. *Id.* The Petitioners note that strong PM monitoring is especially important to confirm that the PM emissions increases resulting from the project authorized by NSR Permit 124424 do not trigger major PSD. *Id.* at 74–75.

The Petitioners contend that EPA should require PM CEMS and continuous flow and temperature measurements for compliance with the filterable portions of the PM limits and require annual stack testing. *Id.* at 75.

The Petitioners address TCEQ's RTC, stating that “[it] does nothing more than recite the monitoring and testing requirements from permit 124424.” *Id.* at 76. Additionally, in response to TCEQ's contention that NSR Permit 124424 limits the boilers to a maximum firing rate, the Petitioners note that TCEQ has given no indication if the boilers could not achieve their maximum firing rate during the one-time stack testing and thereby triggers the requirement to limit future firing rates to the highest rate achieved during testing. TCEQ also cited to NSPS Db as including monitoring requirements that ensure compliance with PM and opacity limits. The Petitioners claim that TCEQ did not assert how these NSPS requirements assure compliance and further, nothing in the Permit or permit record ties or correlates the NSPS requirements to the PM, PM_{2.5}, PM₁₀, emission rates or opacity rates, or the MAERT PM limits for the boilers. *Id.*

EPA Response: For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 11 states:

Opacity of emissions from the boilers (EPNs 81BF01, 50BF02, 50BF03, 50BF04, 50BF05 and 81BF06) shall not exceed 5 percent averaged over a six-minute period. Opacity shall be determined by the [EPA] Test Method 9 during the initial compliance testing and at least once per year thereafter.

NSR Permit 124424 (May 13, 2016) at 3.

Special Condition 23 states (*in part*):

The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere by the Boilers 1-6 ... to demonstrate compliance with the MAERT...

B. Air contaminants emitted from [Boilers 1–6] to be tested for include (but are not limited to) VOC, NO_x, CO, PM_{2.5}, NH₃ [ammonia], except that the requirement to test

for PM_{2.5} shall not apply to [Boilers 5 and 6]. If the boilers are unable to reach the maximum firing rate during testing, then future firing may be limited to the highest firing rate achieved during testing. Furthermore, if the boilers are unable to comply with the emission limits of this permit for any or all of the pollutants of this permit while operating at maximum firing during the test, then future firing will be limited to the maximum emissions-complying firing tested. Additional stack testing may be required for higher firing outside the emissions-complying maximum achieved during the test to be authorized.

NSR Permit 124424 (May 13, 2016) at 12–13.

Special Condition 53 states (*in part*):

The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere by the Package Boilers 1, 2, and 3...

B. The air contaminants emitted from the boilers to be tested for include (but are not limited to) NO_x, CO, NH₃, O₂, VOC, and opacity.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 25–26.

TCEQ Response to Comments

In response to public comments regarding this issue, TCEQ stated:

Monitoring requirements for [Boiler 4] that assure compliance with applicable PM and PM opacity limits [are listed] under § 60.48b of NSPS Db.

In regard to the Commenter's assertion that "The monitoring and reporting provisions from Permit 124424 (which are incorporated into the draft Title V permit at Page 210) are inadequate to ensure compliance with annual and short-term PM limits—as well as an opacity limit—for several boilers at the refinery, and most notably boiler No. 4", Special Condition 23 of Permit No. 124424 includes PM stack testing requirement for boilers 1-4. This condition specifies that if boilers are unable to reach the maximum firing rate during testing, then future firing may be limited to the highest firing rate achieved during testing (firing rate is an operational parameter). Special Condition No. 11 of the same permit has limits on opacity from all boilers (Test Method 9 measurements during the initial compliance test and yearly thereafter). Boilers 5 and 6 (Unit's 81BF05 and 81BF06) are no longer at the site and have been removed from the Proposed Permit.

RTC at 74.

EPA Analysis

As noted previously, the sufficiency of monitoring is a context-specific and fact-specific inquiry, conducted on a case-by-case basis. Title V permits must contain monitoring sufficient to assure compliance with each applicable requirement, consistent with the requirements of 40 C.F.R. §§ 70.6(a)(3)(i) and 70.6(c)(1). If there are periodic monitoring provisions in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure compliance as required by 40 C.F.R. § 70.6(c)(1). Here, TCEQ is relying upon an initial stack test to demonstrate compliance with the hourly and annual PM limits and annual visual opacity monitoring to demonstrate compliance with the continuous opacity limit.³⁰

Regarding opacity, the EPA has historically found that biannual and quarterly Method 9 visual observations are inadequate to assure compliance with opacity limits that apply continuously. *See In the Matter of TVA, Bull Run Order on Petition No. IV-2015-14 at 11–12 (November 10, 2016).*³¹ TCEQ has not provided any justification for why a single visual observation conducted annually would be sufficient to determine compliance with an opacity limit that applies at all times or how that single observation would yield reliable data from the relevant time period that is representative of the source's compliance with the Permit, as required by 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(2)(iv).

The Petitioners have also demonstrated that TCEQ has not provided sufficient justification for why an initial stack test without future mandated stack tests, or any apparent parametric monitoring, would be adequate for demonstrating compliance with hourly and annual PM emission limits. In its response, TCEQ cites to Permit No. 124424, Special Condition 23, noting that it limits future firing if the boilers are unable to reach the maximum firing rate during testing. However, TCEQ does not address whether the initial stack test resulted in any firing limitations. Additionally, if the initial stack test did not result in any limitations, TCEQ did not address how a single stack test with no additional stack testing required can ensure ongoing compliance with hourly and annual limits.

TCEQ stated that the firing rate is an operational limitation. However, TCEQ does not provide what that operational limitation is nor where it would be found in the Permit or other document that is properly incorporated by reference.

³⁰ The EPA notes that the February 2022 revised title V permit incorporates NSR Permit 124424, which was issued in July 2020. The July 2020 NSR Permit did not have material changes with relation to the permit conditions cited in this claim with the exception of eliminating Boilers 5 and 6 from the NSR Permit.

³¹ *See also In the Matter of PacifiCorp's Jim Bridger and Naughton Electric Utility Steam Generating Plants*, Order on Petition No. VIII-00-1 at 19 (finding that quarterly Method 9 observations are inadequate to assure compliance with a SIP opacity limits within the meaning of 40 C.F.R. § 70.6(c)(1)); *In the Matter of Public Service Co. of Colorado, dba Xcel Energy, Pawnee Station*, Order on Petition No. VIII-2010-XX at 20-21 (finding authority did not adequately explain how annual Method 9 testing assured compliance with the opacity limits in the permit); *In the Matter of EME Homer City Generation LP Indiana County, Penn.*, Order on Petition Nos. III-2012-06, III-2012-07, III-2013-02 (July 30, 2014) at 45 (finding that the permitting authority did not adequately explain how a weekly Method 9 observation assured compliance with the opacity limits in the permit).

Direction to TCEQ: In response to this Order, TCEQ must revise the Permit to include monitoring sufficient to demonstrate compliance with the hourly and annual PM emission limits and the continuous opacity limit, including any parametric monitoring on which the state is relying to ensure compliance. Because initial stack testing for these units has already occurred, TCEQ should be able to identify whether limitations on the maximum firing rate are needed. If applicable, this limitation must be included in the Permit. TCEQ references NSPS Db as also having monitoring requirements that assure compliance with PM and opacity limits. To the extent that TCEQ is relying on the requirements of NSPS Db to demonstrate compliance with the PM limits found in NSR Permit 124424 and NSR Permit 2501A, the Permit must clearly state this connection and the permit record must provide a basis for this connection.

Claim D.5: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with Hourly and Annual VOC Limits for Fugitive Emissions.”

Claim D.5 is found on pages 76–78 (Section V.E) of the Petition.

Petitioners’ Claim: The Petitioners claim that, in violation of 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§ 7661c(a) and 7661c(c), the Permit does not include adequate monitoring, reporting, recordkeeping, or emission calculation requirements to ensure compliance with VOC limits for fugitive emissions that are required by NSR Permit 2501A. Petition at 76.

The Petitioners assert that the hourly and annual fugitive VOC emission rates are applicable requirements. This is because NSR Permit 2501 states that the VOC limits are an “estimate” and “enforceable through compliance with the applicable special condition(s) and permit application representations.” *Id.* at 76–77 (citing NSR Permit 2501A MAERT fn. 5). The Petitioners state that TCEQ’s EPA-approved NSR rules provide that representations in permit applications become conditions upon which the facility operates and Valero and TCEQ relied upon these “estimates” to determine that fugitive emissions would not result in unacceptable air quality impacts and were controlled at a level consistent with LAER. *Id.* at 77.

The Petitioners first assess what they claim to be the main fugitive monitoring requirement from NSR Permit 2501A, which is quarterly monitoring using a gas analyzer. *Id.* (citing NSR Permit 2501A Special Condition 39). The Petitioners assert that this monitoring cannot ensure compliance with the fugitive VOC requirements because it is too infrequent and likely to miss leaks from valves, pumps, seals, and other equipment. *Id.* The Petitioners acknowledge that NSR Permit 2501A Special Condition 39.I addresses fugitive emission calculations but is limited to components on Valero’s “delay of repair list.” Beyond that, the Petitioners assert that NSR Permit 2501A is silent regarding how fugitive emissions from the thousands of components at issue are to be calculated. *Id.* Because of this, the Petitioners assert the Permit cannot ensure compliance with the hourly and annual fugitive VOC limits.

The Petitioners assessed other provisions of the Permit that are relevant to the limits for fugitives, including Special Conditions 2–5, 40, 45, 60 and 64. The Petitioners determined that these requirements were inadequate to ensure compliance with the fugitive VOC emissions because some of the conditions only list various NSPS and NESHAP subparts without details, or

they speak to fugitive emissions of other pollutants, not VOCs, are for very limited situations, or are general recordkeeping and reporting provisions.

Regarding the NESHAP, NSPS, and SIP provisions listed in the Permit, the Petitioners assert that these provisions do not speak to monitoring and reporting for the specific hourly and annual VOC requirements, and there is nothing in the Permit that ties any NSPS or NESHAP requirement to the fugitive VOC rates or explains how the NSPS or NESHAP monitoring could be used to determine the fugitive emissions of VOCs. *Id.* at 78 (citing *Deer Park Order* at 21–23).

The Petitioners assert that the EPA should require TCEQ to revise the Permit to require optical gas imaging. *Id.* They also note that in violation of title V requirements, TCEQ did not respond to Petitioners' significant comments regarding the inadequate monitoring for the hourly and annual fugitive VOC limits. Therefore, the Petitioners are unable to “explain how [TCEQ’s] response to the comment is inadequate to address the issue raised in public comment.” *Id.* (citing 40 C.F.R. § 70.12(a)(2)(vi)).

EPA Response: For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.

This claim concerns annual (385.63 tons per year (tpy)) and hourly (88.09 pounds per hour (lbs/hr)) VOC limits for fugitive emissions. *See* NSR Permit 2501A MAERT. Title V permits must include sufficient monitoring to assure compliance with all applicable limits. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c); *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008). This monitoring must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. 40 C.F.R. § 70.6(a)(3)(i)(B). Petitioners have demonstrated that it is unclear how the Permit assures compliance with the hourly and annual VOC limits for fugitive emissions found in NSR Permit 2501A. Additionally, although the Petitioners presented this issue in their comments on the Draft Permit, TCEQ failed to provide an explanation in response as required by 40 C.F.R. § 70.7(h)(6).

The Permit lists the Special Conditions in NSR Permit 2501A that have the monitoring and testing requirements to demonstrate compliance with the hourly and annual fugitive VOC emission limits. *See* Final Permit at 265, Major NSR Table. These include Special Conditions 3, 4, 5, 39, 40, and 45. After reviewing these conditions, the EPA finds that they do not provide clarification on how the VOC emissions are calculated. Specifically, Special Conditions 3 through 5 only list general NSPS and NESHAPs that are applicable to the facility but neither the Permit nor permit record provide details on how they are used to demonstrate compliance with the NSR Permit 2501A emission limits. Condition 39 cites requirements for a leak detection and repair program and does contain calculations for determining VOC emissions; further, it is limited only to components on a delay of repair list, not to all components likely to leak. Conditions 40 and 45 provide additional monitoring requirements but either do not include VOC emissions or are limited to the subset of piping and components that require repairs.

Direction to TCEQ: In response to this Order, TCEQ must revise the Permit to include monitoring sufficient to demonstrate compliance with the hourly and annual VOC emission

limits found in NSR Permit 2501A. The EPA notes that TCEQ does have a fugitive guidance document for the chemical sector.³² If TCEQ is relying upon this document for the source to use to demonstrate compliance with the VOC limits, then that needs to be clearly cited in the Permit. Further, to the extent the title V permit, the underlying NSR permit, and/or any other relevant document contains terms that TCEQ is relying upon to adequately assure compliance with these emission limits, then TCEQ must amend the Permit and permit record to identify such terms, properly incorporate those terms by reference, and explain how these requirements assure compliance with these emission limits.

Claim D.6: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with Hourly and Annual PM and VOC Limits for the Atmospheric Tower Heater.”

Claim D.6 is found on pages 79–84 (Section V.F) of the Petition.

Petitioners’ Claim: The Petitioners claim that in violation of 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(1) and 42 U.S.C. § 7661c(a) and 7661c(c), the Permit does not include adequate monitoring, reporting, recordkeeping, or emission calculation requirements to ensure compliance with hourly and annual VOC and PM limits for the Atmospheric Tower Heater required by NSR Permit 2501A. Petition at 79. The Petitioners assert that the monitoring, reporting, and recordkeeping requirements associated with the heater in the Permit and NSR Permit 2501A cannot ensure compliance because they do not address VOC emissions. *Id.* The Petitioners acknowledge that the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP establishes carbon monoxide (CO) as a surrogate for emissions of non-dioxin organic HAPs; however, they assert that it is very difficult to establish reliable CO and VOC correlations. Further, the NESHAP does not establish CO as a surrogate for all VOCs that might be emitted from the heater. Therefore, while the Permit requires a CO CEMS, this cannot ensure compliance with specific VOC limits. *Id.*

The Petitioners state that there are only two requirements from NSR Permit 2501A incorporated into the Major NSR summary table that could somehow assure compliance with PM limits for the heater. These include a requirement to burn refinery fuel gas or natural gas and a requirement that opacity does not exceed a 5 percent average over a six-minute period. *Id.* at 79–80 (referring to NSR Permit 2501A Special Conditions 7.A and 8). The Petitioners assert that the first of these requirements affects the amount of PM emitted but does not determine quantitatively the specific amount of PM that is emitted. Additionally, simply noting that the heater can burn refinery fuel or natural gas does not ensure PM and VOC limits are met. The Petitioners assert that if the heater is burning only refinery fuel gas or natural gas it can still exceed hourly and annual limits. *Id.* at 80.

The Petitioners further assert that the opacity requirement also cannot ensure compliance with PM limits because the Permit does not require Method 9 inspections on any set schedule or for any set period of time. *Id.* Additionally, the Method 9 observations can only be conducted during specific conditions. *Id.* The Petitioners note that EPA has found that infrequent Method 9

³² Air Permit Technical Guidance for Chemical Sources, Fugitive Guidance (June 2018), available at <https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/fugitive-guidance.pdf>.

observations cannot ensure compliance with continuous opacity limits. The Petitioners assert that this is applicable to hourly and annual PM limits as well. *Id.* at 80 (citing *In the Matter of EME Homer City Generation L.P.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 44 (June 30, 2014); *In the Matter of PacifiCorp's Jim Bridger and Naughton Electric Utility Steam Generating Plants*, Order on Petition No. VIII-00-1 at 19 (November 16, 2000); *In the Matter of Tennessee Valley Authority, Bull Run*, Order on Petition IV-2015-14 at 11 (November 10, 2016).

The Petitioners address the portions of the Permit's Applicable Requirements Summary applicable to the heater, which the Petitioners assert only addresses a NSPS subpart Ja requirement for H₂S, SIP limits for NO_x and CO emissions, and a NESHAP requirement under 40 C.F.R. § 63.7540 to conduct an annual tune-up. *Id.* at 81. The Petitioners argue that these provisions cannot ensure compliance with the heater's PM and VOC limits because "they do not link any specific NSPS, SIP, or NESHAP monitoring or other requirements to determining specific, actual emissions of PM or VOCs from the heater" nor does the Permit or permit record explain how these provisions ensure compliance with the PM or VOC emission limits. *Id.* The Petitioners reiterate that the NESHAP covering industrial boilers and process heaters established CO as a surrogate for emissions of non-dioxin organic HAPs from those units subject to numeric limits but note that the heater is not subject to numeric limits under this NESHAP. The Petitioners provide additional reasoning for why monitoring condensable PM rather than CO ensures compliance. *Id.* at 82.

The Petitioners assert that TCEQ should be required to revise the Permit to require COMS be installed with periodic stack testing for both filterable and condensable PM and VOCs. *Id.* .

The Petitioners reject TCEQ's RTC, which identifies the monitoring provisions used to demonstrate compliance including Special Conditions 3, 4, 5, 7, and 59. *Id.* at 83. In response, the Petitioners reiterate that these provisions cannot ensure compliance with the VOC and PM limits for the heater. Specifically, the Petitioners observe that Conditions 3–5 "only generally list the various NSPS and NESHAP subparts (without detailing any of the specific provisions of those subparts) that are applicable to all of the various units and processes covered by Permit 2501A, and they do not list any provisions specific to this heater." *Id.* The Petitioners also note that Condition 7 does not address VOC emissions at all and Condition 59 only pertains to CEMS for NO_x, CO, and O₂. *Id.* Additionally, in its RTC, TCEQ identified fuel flow as a compliance measure. The Petitioners assert that this cannot ensure compliance with the VOC and PM limits because "VOC emissions are affected not only by type (*i.e.*, the composition of the fuel) and quantity of fuel burned, but also by the combustion conditions in the heater." *Id.* at 84.

EPA Response: For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.

TCEQ Response to Comments:

Sufficient monitoring for [the atmospheric tower heater] is listed on the Major NSR Summary Table as having monitoring/testing requirements included in Special Condition Nos. 3, 4, 5, 7, and 59 of Permit 2501A. In addition, the Proposed Permit

was revised to replace the high level requirements with more specific requirements for 40 CFR Part 63, Subpart DDDDD regulations for units subject to these regulations in the applicable requirements summary (ARS) table ... These units are also subject to monitoring requirements under 30 TAC Chapter 117, § 117.340(a) for measuring fuel flow.

RTC at 74.

The Petitioners have demonstrated that the Permit does not specify any monitoring or calculation methodology associated with the hourly and annual VOC and PM limits associated with the Atmospheric Tower Heaters. It is TCEQ's responsibility, as the title V permitting authority, to ensure that the title V permit "set[s] forth," "include[s]," and "contain[s]" monitoring sufficient to assure compliance with all applicable requirements and permit terms. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(a), (a)(3). While TCEQ stated in the RTC that NSR Permit 2501A Special Condition Nos. 3, 4, 5, 7, and 59 have sufficient monitoring, these conditions do not contain information necessary to demonstrate how compliance with the VOC and PM limits, particularly the hourly and annual limits, is achieved. Specifically, Special Conditions 3 through 5 generally list NSPS and NESHAPs that are applicable to the Facility, but these conditions provide no specifics on calculating PM and VOC emissions from the tower heaters, nor do these conditions indicate whether there are specific NSPS or NESHAPs that would require those calculations. Special Condition 7 does contain requirements specific to the heaters, such as limiting fuel types used and opacity emissions, but contains no explanation for how those requirements correlate to compliance with the PM and VOC limits. Lastly, Special Condition 59 requires that NO_x, CO, and O₂ CEMS be installed but does not explain if and how those units are being used to assure compliance with PM and VOC limits.

TCEQ further cites to 40 C.F.R. part 63, subpart DDDDD as being applicable to the Tower Heater and states that the specific requirements from this subpart have been included in the Permit but does not explain which of these Specific Requirements is being used to demonstrate compliance with the Atmospheric Tower Heater PM and VOC limits found in NSR Permit 2501A's MAERT. As noted in response to previous claims, to the extent that TCEQ is relying on the requirements of a separate applicable requirement to demonstrate compliance with the limits found in NSR Permit 2501A's MAERT, the Permit must clearly state this connection and the permit record must provide a basis for this connection.

Direction to TCEQ: In response to this Order, TCEQ must revise the Permit to include additional monitoring or specify the existing monitoring that is sufficient to demonstrate compliance with the hourly and annual VOC and PM emission limits associated with the Atmospheric Tower Heater. The justification for this monitoring must be included in the permit record. If TCEQ is relying on other applicable requirements to demonstrate compliance with these limits, then those specific provisions must be identified and their role as compliance assurance requirements for the Atmospheric Tower Heater VOC and PM limits must be made explicit in the Permit. The EPA notes that in the permit record, Valero stated that "[a]ctual flow meter data, F_D factor and AP-42 emission factors for PM and VOC are being used for MAERT compliance demonstration." Project File at 8. If these calculations are being used to demonstrate compliance, then the manner in which this information is used must be specified in the Permit.

Claim D.7: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with Hourly and Annual Limits for the Refinery’s Tanks.”

Claim D.7 is found on pages 84–93 (Section V.G) of the Petition.

Petitioners’ Claim: The Petitioners claim that the Permit “does not include adequate monitoring, reporting, recordkeeping or emission calculation requirements to ensure compliance with hourly and annual limits for VOCs and other pollutants for tanks covered by [NSR Permit 2501A], for either routine emissions or emissions during planned [maintenance, startup, and shutdown (MSS)].” Petition at 84. The Petitioners note that adequate monitoring is especially important because Harris County is in nonattainment for ozone, for which VOCs are precursors and because tank emissions at the Facility can rapidly spike to levels that would negatively affect air quality. *Id.* at 85.

The Petitioners assert that the main monitoring provisions for the tanks specify that Valero calculates emissions using two methods. The first is to use unnamed calculation methods from a TCEQ publication titled “Technical Guidance Package for Chemical Sources – Storage Tanks,” in combination with information including tank capacity, VOC molecular weight, VOC monthly average temperature, VOC vapor pressure at the monthly average material temperature, and VOC throughput for each month. *Id.* (citing NSR Permit 2501A Special Condition 29.F-G). The second method, which is for calculating MSS emissions, uses AP-42 emission factors and methods from “the permit application” in combination with information including total volumetric flow, VOC vapor pressure, volume necessary to float the roof, and times regarding the start and end of degassing. *Id.* at 86 (citing NSR Permit 2501A Special Conditions 46.F(3)-(4), 47). The Petitioners provide six reasons for why they assert the Permit does not demonstrate compliance with the tanks hourly and annual VOC and other limits.

The Petitioners first assert that it is impossible for the public or regulators to determine how emissions are to be calculated under varying circumstances of tank operations. *Id.* (citing *Deer Park Order* at 22). The Petitioners pose a variety of questions including where the methods are found and for what emissions they are to be used. The Petitioners note that while Valero’s application for the MSS limits and the 2001 TCEQ guidance both generally rely on AP-42 methods, that is not the same as the 2006 AP-42 methods. *Id.*

The Petitioners next assert that the methods from the application and TCEQ guidance cannot ensure compliance because the methodologies for calculating emissions are not clear on the face of the Permit. *Id.* The Petitioners state that “[b]ecause the permits do not list any specific methods from the permit application or guidance for calculating emissions, the public and regulators cannot be sure how or whether any such methods, individually or in combination, can ensure compliance with the tank limits.” *Id.* at 87. The Petitioners note that, in response to a request for Valero’s MSS permit application, they received nine PDF files with over 2,000 pages of documents and that TCEQ was unable to—at the time—locate the most recent updates to the application. The Petitioners contend that the public should not be expected to spend hours

wading through permit application files in an effort to find calculation methods that should be listed in the Permit. *Id.*

The Petitioners assert that “to the extent Valero is expected to use the 2006 AP-42 methods to calculate MSS emissions, those methods cannot ensure compliance with the tank limits because that version of AP-42 does not address short-term emissions from tanks—only annual emissions.” *Id.* The Petitioners further assert that the 2006 methods cannot accurately determine emissions during short-term MSS or degassing periods when emissions can rapidly spike and that the tank emissions can “easily vary by a degree that would cause an exceedance of the applicable limits and that variability should be accounted for in any method of calculating the tank emissions here.” *Id.* at 87–88.

The Petitioners’ next reason is that the methods from the November 2007 MSS permit application, the 2001 TCEQ guidance, and AP-42 all require Valero to make certain assumptions to calculate emissions, but the Permit does not require that these assumptions be substantiated. The Petitioners assert that to ensure these assumptions and inputs are accurate, Valero should confirm them at least quarterly to account for seasonal variability and other possible changes to the parameters. *Id.* at 88.

The Petitioners’ fifth reason is that the Permit’s calculation methods for estimating tank emissions are inadequate because NSR Permit 2501A only requires Valero to inspect floating roof tanks annually or less frequently. *Id.* (citing NSR Permit 2501A Special Condition 29.C, which requires inspections and seal gap measurements in compliance with 40 C.F.R. § 60.113b). The Petitioners assert that the inspections are not frequent enough to assure that each tank seal is properly maintained and the unspecified and vague requirements to inspect tanks annually, with no accompanying and detailed checklist, provides no assurance that each potential seal will be inspected. *Id.* at 88–89.

The Petitioners’ final reason is that the Permit fails to require Valero to periodically verify the accuracy of the required calculation methods. The Petitioners note that verifying compliance using AP-42 calculation methodologies is an indirect means of verification since it cannot address limitations inherent in the methodologies themselves and only direct measurements can verify compliance with emission limits. *Id.* at 89. The Petitioners assert that direct measurements of tank VOC emissions have shown that AP-42 can underestimate VOC emissions from tanks. *Id.* Additionally, the Permit does not contain monitoring or other requirements to assure compliance with the MSS provisions. The Petitioners further note that the Permit contains no monitoring, recordkeeping, or reporting requirements for the MSS benzene limit for the tanks. *Id.* at 90.

The Petitioners evaluate other Special Conditions that the Permit identifies as relevant to tank emissions and assert that these too cannot ensure compliance. These include NSR Permit 2501A Special Conditions 3–5, 29–30, 42–43, 46–47, and 60–61. *Id.* at 90–91.

The Petitioners provide a listing of revisions it asserts TCEQ should make to the Permit. These include requiring (1) the emission calculation methods used for calculating tanks’ emissions clear in the Permit, (2) the methodology proposed in the revisions to the 2006 AP-42 methods for

short-term emissions, (3) the collection of data at least quarterly to confirm each input or assumption for the calculation method, (4) inspections of tank seals using optical imaging methods at least quarterly, and (5) direct verification of routine emissions from tanks containing high pressure products at least annually to verify AP-42 based methods. *Id.* at 91–92.

The Petitioners address TCEQ’s response stating that it is inadequate to address the Petitioners’ comments. Specifically, the Petitioners contend that the response does not identify how tank emissions are actually calculated except for saying that the “emissions are calculated based on EPA/TCEQ permitted methods and procedures.” *Id.* at 93 (quoting RTC at 114). The Petitioners note that TCEQ refers to NSR Permit 129444 for calculating TANK-MSS emissions but the Petitioners assert that this NSR Permit does not cover the specific tanks from NSR Permit 2501A and TCEQ does not explain how NSR Permit 129444 could ensure compliance with the subject tanks. *Id.*

EPA’s Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 29 states (in part):

Storage tanks are subject to the following requirements:

C. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and seal gap measurements as specified in Title 40 [C.F.R.] § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates seals were inspected and seal gap measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.

...

F. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date.

G. Emissions for tanks shall be calculated using: the TCEQ publication titled “Technical Guidance Package for Chemical Sources – Storage Tanks.”

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 7–8.

Special Condition 46 states (in part):

This permit authorizes emissions associated with the storage tanks planned floating roof landings...

F. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis....

(4) ... The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 – Storage of Organic Liquids" dated November 2006 and the permit application.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 20–21.

EPA Analysis

The EPA has explained in previous orders how to properly incorporating monitoring requirements into a title V permit. The *US Steel I Order* articulates the EPA's position on incorporation by reference:

EPA has discussed incorporation by reference in several guidance documents and title V orders. *See e.g., White Paper 2; [Tesoro Order] at 9; [Premcor I Order] at 29.* Incorporation by reference may be appropriate where the cited requirement is part of the public docket or is otherwise readily available, clear and unambiguous, and currently applicable. *Tesoro at 9.* As EPA explained in *White Paper 2*, it is important to exercise care to balance the use of incorporation by reference with the need to issue permits that are clear and meaningful to all affected parties, including those who must comply with or enforce their conditions. *White Paper 2*, at 34–38. *See also Tesoro at 8.* In order for IBR 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 the 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 not reasonably subject to misinterpretation. *See White Paper 2 at 37.*

US Steel I Order at 43.

The Petitioners have cited to two monitoring provisions that specify how Valero is to calculate emissions for the tanks. The first of these methods uses the TCEQ publication titled "Technical Guidance Package for Chemical Sources – Storage Tanks." *See NSR Permit 2501A Special Condition 29.G.* The Petitioners have demonstrated that this condition does not provide sufficient information to consider the guidance document properly incorporated by reference for the following two reasons. The permit condition includes the title but does not include a date of the

publication to ensure the correct version is being used. The Permit also does not identify what calculations or sections of the guidance are applicable to the Facility.

The next monitoring provision highlighted by the Petitioners requires Valero to calculate MSS emissions for the tanks using methods described in AP-42 and “the permit application.” *See* NSR Permit 2501A Special Condition 46.F(4). The Petitioners have demonstrated that the Permit’s reference to “methods described in the permit application”—without specifically identifying the application document, including the type of application, date of application, and/or location of specific provisions in the application (*e.g.*, page number)—is insufficient to properly incorporate this application material by reference. As noted by the Petitioners, permit applications can be hundreds, if not more, pages long. Therefore, the general statement in the Permit incorporating the permit application without more details of the location of the calculation method is not specific enough to satisfy the requirements in title V for the permit to “set forth,” “include,” or “contain” monitoring to assure compliance with all applicable requirements.

Without information explaining how the Facility is calculating VOC emissions for the tanks, the EPA is unable to determine if the selected monitoring is sufficient to demonstrate compliance with the Permitted emission limits.

Direction to TCEQ: In response to this Order, TCEQ must revise the Permit to more clearly identify the location of the emission factors and calculations upon which the Permit relies for determining compliance. For the Permit to “set forth,” “include,” or “contain” monitoring to assure compliance with all applicable requirements, a special condition would need to include, at a minimum, the date of the application (if the relevant monitoring is found in an application) and specific location of the incorporated information, for example, by providing a page number from the application (again, if the relevant monitoring is found in an application). Additionally, TCEQ should ensure that this incorporated information is readily available. Alternatively, a more straightforward approach that would obviate these IBR-related concerns would be for TCEQ to directly include the emission factors and calculation methods being used to demonstrate compliance within the Special Conditions of the title V permit itself. When identifying the monitoring that is to be used to calculate the annual and hourly emissions, TCEQ should consider the arguments raised in the Petition and explain why the selected monitoring is sufficient to assure compliance with the relevant emission limits.

Claim D.8: The Petitioners Claim That “The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with Hourly and Annual PM₁₀ Limits for the Refinery’s Cooling Towers.”

Claim D.8 is found on pages 93–97 (Section V.H) of the Petition.

Petitioners’ Claim: The Petitioners claim generally that in violation of 40 C.F.R. § 70.6(c)(1), and 42 U.S.C. §§ 7661c(a) and 7661c(c), the Permit does not include adequate monitoring, reporting, recordkeeping or emission calculation requirements to ensure compliance with the PM₁₀ limits for several cooling towers at the Facility. Petition at 93. These limits are found in the MAERT for NSR Permit 2501A.

The Petitioners assert that even though the emission rates for PM₁₀ emissions from the cooling towers are identified in the Permit as an “estimate” and “enforceable through compliance with the applicable special condition(s) and permit application representations,” they are applicable requirements that require monitoring and reporting sufficient to ensure compliance with them. *Id.* at 94 (citing 42 U.S.C. § 7661c(c)).

The Petitioners claim that the main monitoring for PM from the cooling towers “allows Valero to choose either: (1) monthly sampling for total dissolved solids (TDS); or (2) quarterly TDS sampling coupled with daily conductivity monitoring using a TDS-to-conductivity ratio.” *Id.* (citing NSR Permit 2501A Special Condition 28.D). The Petitioners assert that this cannot ensure compliance because it does not specify how the TDS sampling is used to calculate PM₁₀ emissions. The Petitioners further assert that the permit must list any assumptions, emission factors, and/or other parameters that are used to calculate PM₁₀ emissions. *Id.*

The Petitioners next assert that the sampling requirement cannot ensure compliance because it does not require measurement of the cooling water flow rate or use flow rate in PM₁₀ emission calculations and that the flow rate can fluctuate. *Id.* The Petitioners acknowledge that TCEQ’s RTC stated that cooling towers are subject to 30 TAC § 115.764(a)(1), which requires a continuous flow monitor, but the Petitioners maintain that there is no indication Valero monitors flow rate for PM₁₀ compliance or is required to use the flow rate in its PM₁₀ calculations. *Id.* at 95.

The Petitioners point to NSR Permit 2501A Special Condition 28.C, which requires that each cooling tower be equipped with drift eliminators with manufacturer’s design assurances. The Petitioners assert that if the manufacturer design assurances are being used to establish the drift rate for calculating emissions, this cannot ensure compliance with PM₁₀ limits because the Permit establishes no mechanism to validate that these assurances are still accurate. *Id.*

The Petitioners claim that the TDS sampling for both monitoring options is too infrequent to ensure compliance with the hourly and annual PM₁₀ limits. The Petitioners explain that the TDS percentage in refinery cooling water can vary greatly from hour to hour. Due to this variability, monthly sampling cannot ensure compliance with the annual or hourly PM 10 limits and the daily conductivity monitoring also cannot ensure compliance with the hourly limits. *Id.* at 96.

EPA Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim.

Relevant Permit Terms and Conditions

Special Condition 28 states (in part):

The cooling towers shall be operated and monitored in accordance with the following:

C. Each cooling tower shall be equipped with drift eliminators having manufacturer’s design assurance as represented in the attached table below. Drift

eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.

D. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀ and PM_{2.5}. The data shall result from collection of water samples from the cooling tower return water and represent the water being cooled in the tower. Cooling towers shall be analyzed for particulate emissions using one of the following methods:

(1) The cooling water shall be sampled at least once a month for dissolved solids (TDS); or

(2) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios provided the highest ratio is not more than 10% larger than the smallest ratio. The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS. The permit holder shall validate the TDS-to-conductivity factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.

(3) The analysis method for TDS can be EPA Method 106.1, ASTM D5907, or SM 2540 C ... The analysis method for conductivity can be ASTM D1125-95A or SM2510 B.

NSR Permit 2501A / PSDTX767M2 (January 18, 2019) at 6–7.

TCEQ Response to Comments:

Monitoring of PM from the cooling towers is stated in NSR Permit 2501A, Special Condition Nos. 3, 4, 5, and 28. In addition, cooling towers are also subject to the requirements under 30 TAC Chapter 115, such as 30 TAC § 115.764(a)(1), listed in the Draft Permit for GRP-CWT unit, which requires a continuous flow monitor on the cooling tower return line.

RTC at 137.

EPA Analysis:

The Petitioners have demonstrated that the Permit is unclear regarding the monitoring of PM from the cooling towers. As detailed in response to Claim D.1, the CAA requires: “Each permit issued under [title V] shall set forth ... monitoring ... requirements to assure compliance with the

permit terms and conditions.” 42 U.S.C. § 7661c(c). The Permit requires that the cooling towers be analyzed for particulate emissions by sampling for TDS. *See* NSR Permit 2501A Special Condition 28.D. However, the Permit does not explain what the correlation is between the measured TDS or its correlated conductivity, and the hourly PM₁₀ limits. For instance, the Permit does not include any emission factors, assumptions or calculations that could be used to determine PM₁₀ emissions.

In addition to Special Condition 28, TCEQ states that Special Conditions 3, 4, and 5 of NSR Permit 2501A also provide monitoring for PM from the cooling towers. Special Conditions 3 through 5, however, only provide high level citations to the NSPSs and NESHAPs that are applicable to the facility and provide no detailed information regarding PM monitoring or compliance with TCEQ-specific hourly and annual PM₁₀ emission limits for the cooling towers.

Direction to TCEQ: In response to this Order, TCEQ must revise the Permit to include monitoring sufficient to demonstrate compliance with the hourly and annual PM₁₀ emission limits for the cooling towers. The justification for this monitoring must be included in the permit record. If TCEQ is relying on other applicable requirements to demonstrate compliance with these limits, then that must be clarified in the Permit. The EPA notes that in the permit record, Valero stated that “process water flow data (obtained from the flow monitor...), TDS Measurements (direct sampling required by 2501A), liquid drift factors (from manufacturer, shown on 2501A, inspection required by 2501A) are used to calculate PM, with $PM\ tpy = PM\ Emission\ Factor\ (lb/kgal) \times Recirculation\ Rate\ (kgal/min) \times 60\ (min/hr) \times 24\ (hr/day) \times nos\ (day/yr) \times 1/2,000\ (lb/ton)$. This calculation methodology is described in the permit application (implicitly included in the draft SOP).” Project File at 8. If these calculations are being used to demonstrate compliance with hourly and annual PM₁₀ limits, then this calculation methodology should be specified in the Permit and the location of the calculation method needs to be clearly identified in the Permit as well.

Claim E: The Petitioners Claim That “In Violation of 40 C.F.R. § 70.7(A)(5), TCEQ Failed to Provide a Reasoned Explanation for Why the Proposed Permit Ensures Compliance with the Limits at Issue Here for the FCCU, Flares, DAF Unit, Boilers, Fugitive Emissions, Atmospheric Tower Heater, Tanks, and Cooling Towers.”

Claim E is found on page 98 (Section VI) of the Petition.

Petitioners’ Claim: The Petitioners assert that “in addition to the failure of the proposed Title V permit to ensure compliance with limits for the FCCU, flares, DAF unit, boilers, fugitive emissions, atmospheric tower heater, tanks, and cooling towers, the permit and permit record are also deficient for the independent and separate reason that TCEQ has not adequately explained how the proposed Title V permit provisions can ensure compliance with these limits.” Petition at 98. The Petitioners maintain that the statement of basis does not address why the permit’s monitoring, reporting, or other requirements are adequate to ensure compliance with the relevant limits discussed within the petition and TCEQ’s RTC also does not provide a reasoned explanation for how the provisions ensure compliance. *Id.*

The Petitioners argue that TCEQ’s failure to provide a reasoned explanation in the permit record violates 40 C.F.R. § 70.7(a)(5)’s requirement that permitting authorities “provide a statement that sets forth the legal and factual basis for the draft permit conditions.” *Id.* Petitioners further assert that TCEQ did not respond to Petitioner’s significant comments regarding TCEQ’s failure to offer a reasoned explanation for why the monitoring and other permit requirements ensure compliance with these limits and therefore, the Petitioners are unable to ‘explain how [TCEQ’s] response to the comment is inadequate to address the issue raised in the public comment.’ *Id.* (citing 40 C.F.R. § 70.12(a)(2)(vi)).

EPA Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim.

The title V regulations require that the permitting authority provide a statement setting forth the legal and factual basis for the draft permit conditions. *See* 40 C.F.R. § 70.7(a)(5). As detailed in response to the individual claims, the Petitioners have demonstrated that the permit record, including TCEQ’s statement of basis and RTC, does not contain sufficient information to conclude that there is adequate monitoring to assure compliance with relevant emission limits.

The EPA is not suggesting that TCEQ must go out of its way to explain the technical basis for every condition of every permit it has issued to a source each time it renews a title V permit. However, when a state receives public comments raising legitimate challenges to the sufficiency of monitoring provision, the EPA expects TCEQ to engage with these comments and explain the basis for its decisions (or specifically identify where any prior justification may be found). Because TCEQ’s title V permit record, including TCEQ’s RTC, does not clearly explain the basis for TCEQ’s conclusion that the monitoring associated with the FCCU, flares, DAF Unit, boilers, fugitive emissions, atmospheric tower heater, tanks, and cooling towers assures compliance, the EPA grants this claim.

Direction to TCEQ: In response to this Order, TCEQ should amend the title V permit to ensure it contains sufficient monitoring to assure compliance with the emission limits associated with the relevant units as directed in response to the individual claims found in Claims D.1 through D.7. Additionally, the permit and/or permit record should be updated to include TCEQ’s justification for why the monitoring is adequate to demonstrate compliance with the emission limits.

Claim F: The Petitioners Claim That “The Proposed Permit Includes Unlawful Provisions Relaxing Federally Enforceable Emission Limits During Startup, Shutdown, and Maintenance Periods.”

Claim F is found on pages 98–108 (Section VII) of the Petition.

Petitioners’ Claim: Within Claim F, the Petitioners raise various concerns related to limits and other provisions covering emissions from various units during periods of startup, shutdown, and maintenance (MSS) that are included in NSR Permit 2501A, and which are in turn incorporated into the title V permit.

The Petitioners claim that in violation of 40 C.F.R. §§ 70.1(b), 70.6(a)(1), and 70.7(a)(1)(iv) and 42 U.S.C. § 7661c(a), the title V permit, by incorporating the MSS provisions of NSR Permit 2501A, “unlawfully inflate[s] major NSR/PSD limits—and also unlawfully revise[s] NESHAP and NSPS standards.” Petition at 98–99. The Petitioners discuss units and the associated MSS limits from NSR Permit 2501A that they assert unlawfully inflate the applicable major NSR/PSD limits within Permit 2501A, as well as other applicable limits required by various NSPS and NESHAP regulations. *Id.* at 101–05. The Petitioners note that the limits from a major NSR/PSD permit and NSPS and NESHAP standards are “applicable requirements” as defined by 40 C.F.R. § 70.2 with which the Permit must assure compliance. *Id.* at 99, 105. The Petitioners further assert that the CAA and title V regulations require title V permits to include “enforceable emission limitations and standards.” *Id.* (citing 42 U.S.C. § 7661c(a)). The Petitioners further argue that under the CAA, a state’s title V program cannot be approved by EPA unless it ensures compliance with all the requirements established under § 7412 and title I, which would include NESHAP, NSPS, and NSR/PSD requirements. *Id.* at 106 (citing 42 U.S.C. § 7661a(f)). The Petitioners argue that contrary to these requirements, the MSS provisions render unenforceable, during MSS periods, the limits normally applicable to the affected units. *Id.* at 99, 106–107.

The Petitioners also challenge the substance of the MSS limits themselves, asserting that they were not established in accordance with applicable guidance addressing when and how alternative MSS limits may be created, particularly when such limits modify otherwise applicable NSR limits. *See id.* at 99–101, 105. The Petitioners also address various aspects of TCEQ’s RTC concerning the establishment of these MSS limits. *See id.* at 107–08.

The Petitioners assert that because of the alleged flaws with how the MSS limits in NSR Permit 2501A were established, “EPA should instruct TCEQ to make clear in the [Permit] that the MSS provisions from [NSR Permit 2501A] are not incorporated into the [Permit]. If TCEQ wishes to still incorporate the MSS limits and provisions into the [Permit], it must designate them as state-only, non-federally-enforceable provisions under 40 C.F.R. § 70.6(b)(2)” *Id.* at 101.

The Petitioners address various points in TCEQ’s RTC, including TCEQ’s response that issues with the MSS limits should be raised through the appropriate NSR permit process and not in the title V permit action. *Id.* at 105 (citing RTC at 78). The Petitioners contend that TCEQ has not pointed to any provisions in the CAA or EPA’s part 70 regulations to support its position. *Id.* The Petitioners acknowledge the EPA’s previously stated policy on this question, as articulated in several Orders, including *In the Matter of Exxon Mobil Corporation, Baytown Olefins Plant*, Order on Petition No. VI-2016-12 (March 1, 2018) (the “*Baytown Olefins Order*”), which was upheld by the Fifth Circuit Court of Appeals in *Environmental Integrity Project v. EPA*, 969 F.3d 529 (5th Cir. 2020): that title V permitting procedures are not the appropriate forum for review of certain title I permitting decisions. The Petitioners disagree with the EPA’s and TCEQ’s position, stating that it is contrary to the language of the CAA and title V regulations, but nonetheless acknowledge the binding precedent of the Fifth Circuit on this subject. *Id.* at 105–06. The Petitioners argue that even if the NSR permit establishing the MSS limits was noticed for public comment, as TCEQ states in its RTC, this “provides no basis for interpreting Congress’ intent when promulgating Title V or EPA’s intent when promulgating its Part 70 regulations.” *Id.* at 107. The Petitioners reiterate that the CAA and title V regulations are clear that title V permits

must ensure compliance with major NSR/PSD limits, which provides an avenue for Petitioners to challenge TCEQ's alleged relaxation of the NSR and PSD limits during MSS periods.

Further, the Petitioners note that even if the MSS provisions were established through TCEQ's NSR permitting processes, including notice and comment, this would not allow TCEQ to revise NESHAP and NSPS standards for MSS periods since only the EPA can revise those standards. *Id.*

EPA Response: For the following reasons, the EPA denies the Petitioners' request for an objection on this claim.

TCEQ Response to Comments

In responding to public comments challenging the MSS limits established in NSR Permit 2501A, TCEQ stated, in relevant part:

[TCEQ] respectfully disagrees with the Commenter's assertion that the Draft Permit, which incorporates by reference NSR Permits 2501A and PSDTX767M2, includes unlawful provisions relaxing federally enforceable emission limits during maintenance, startup, and shutdown (MSS) periods.

Under the 2-part air permitting system in Texas, only preconstruction NSR permits authorize air emissions under 30 TAC Chapter 116. The Draft Permit does not authorize any emission limits or changes to emission limits for various emission sources. Planned MSS emissions have been properly authorized in the underlying NSR permit in accordance with EPA-approved permitting requirements.

The NSR permits amended to authorize planned MSS emissions at the Valero Refinery were issued in accordance with EPA-approved permitting rules in 30 TAC Chapter 116. As the commenter indicates, Permit No. 2501A was amended June 25, 2012 to authorize planned MSS. As indicated in the Source Analysis and Technical Review, this project was noticed for public comment on March 17, 2007 and no comments were received. Concerns or challenges to the validity of a NSR permit such as asserted deficiencies including whether it is federally enforceable, has missing emission calculations or emission factors, use of confidential business information or any other comment regarding the completeness are raised or should be raised through the appropriate NSR permit process, not Title V. It is not appropriate for Commenters to attempt to challenge these issues in a Title V permit action.

RTC at 79.

EPA Analysis

The Petitioners' claim addresses various alleged problems, including: (i) whether the MSS limits in NSR Permit 2501A satisfy NSR requirements and guidance related to the establishment of

such limits, and how those MSS limits impact other applicable NSR-based limits in NSR Permit 2501A; (ii) whether those MSS limits should be designated as “state-only” within the title V permit; and (iii) how those MSS limits impact other applicable NSPS- and NESHAP-based limits in the title V permit. These issues are addressed in turn.

First, the portion of the Petitioners’ claim that challenges the substance of the MSS limits contained within NSR Permit 2501A—including whether TCEQ followed applicable guidance in establishing these limits and how these limits impact (*e.g.*, relax) other limits within the same NSR permit—raises the issue of whether decisions made in issuing a title I preconstruction permit, like NSR Permit 2501A, should be considered by the EPA when responding to a petition to object to the issuance of a title V operating permit. As explained in Part II.C of this Order, and in several previous title V petition orders, where the EPA has approved a state’s title I permitting program (whether PSD, NNSR, or minor NSR), duly issued preconstruction permits will establish the NSR-related “applicable requirements” for the purposes of title V, and the terms and conditions of such permits should be incorporated into the Title V permit without further review by EPA. *See generally Baytown Olefins Order; Big River Steel Order.*³³ The task of TCEQ in issuing or modifying the title V permit is to incorporate the terms and conditions of the underlying title I permit and to ensure there are adequate monitoring, recordkeeping, and reporting requirements to assure compliance with those terms and conditions. *See Big River Steel Order* at 8–9, 14–20. As the EPA and courts have noted on many occasions, title V was not intended to add new substantive permitting requirements to a source. *See e.g., United States Sugar Corp. v. EPA*, 830 F.3d 579, 597 (D.C. Cir. 2016) (“Title V does no more than consolidate ‘existing air pollution requirements into a single document, the Title V permit, to facilitate compliance monitoring’ without imposing new substantive requirements.” (quoting *Sierra Club v. Leavitt*, 368 F.3d 1300, 1302 (11th Cir. 2004)); *Environmental Integrity Project v. EPA*, 969 F.3d 529, 543 (5th Cir. 2020) (“By all accounts, Title V’s purpose was to simplify and streamline sources’ compliance with the Act’s substantive requirements. Rather than subject sources to new substantive requirements—or new methods of reviewing old requirements—‘[t]he intent of Title V [was] to consolidate into a single document (the operating permit) all of the clean air requirements applicable to a particular source of air pollution.’”) (quoting *Sierra Club v. Johnson*, 541 F.3d 1257, 1260 (11th Cir. 2008)). Thus, in reviewing the merits of a petition to object to a source’s title V permit, EPA will not consider a permitting authority’s decisions undertaken in the course of issuing a duly issued preconstruction permit. *See Environmental Integrity Project v. EPA*, 969 F.3d at 546 (finding persuasive and upholding “EPA’s view that Title V permitting is not the appropriate vehicle for reexamining the substantive validity of underlying Title I preconstruction permits.”).³⁴

³³ This interpretation of the EPA’s regulations and the rationale supporting the interpretation are more fully explained in the *Big River Steel Order*.

³⁴ The Petitioners state that the relevant holding of the *Baytown Olefins Order* was that “Title V permitting should not address the applicability of major NSR when a minor NSR permit has already issued for the project in question” and attempt to distinguish their claim from that in the *Baytown Olefins Order*, by arguing that here, “no minor NSR permit ever issued and the applicability of major NSR (rather than minor NSR) is not at issue.” *See* Petition at 105, FN 140. However, contrary to the Petitioners’ assertions, the *Baytown Olefins Order* did not address whether major NSR (rather than minor NSR) was applicable to a specific project and was not so limited in scope. In any case, the facts of this claim are squarely within the framework contemplated in the Fifth Circuit’s consideration of the *Baytown Olefins Order*. On appeal, the Fifth Circuit examined the EPA’s “view that the Title V permitting process

As applied to the present challenge raised by the Petitioners—a portion of which squarely attacks the substantive terms and conditions of NSR Permit 2501A—EPA again finds that this title V petition is not the appropriate forum for review of state preconstruction permitting issues.³⁵ Rather, any challenges to the validity of TCEQ’s decisions regarding the terms and conditions of NSR Permit 2501A should have been raised through the state’s title I permitting processes, or through an enforcement action. *See Big River Steel Order* at 15–20.

Here, the MSS emissions limits that Petitioners challenge as unlawful are terms of NSR Permit 2501A. This permit was issued pursuant to procedures approved by the EPA under title I of the CAA—specifically, as TCEQ explains, the NSR permitting regulations in 30 TAC Chapter 116.³⁶ The Petitioners do not contest that Permit 2501A was a title I (NSR) permit duly issued under TCEQ’s EPA-approved SIP regulations (but instead challenge the content of this NSR permit). Moreover, TCEQ stated in its RTC that the NSR permit amendments authorizing the planned MSS emissions were noticed for public comment, but that TCEQ received no comments. RTC at 79. This permitting action would also have been subject to judicial review through the state court system. *See* 30 TAC 80.275; Tex. Gov’t Code § 2001.171–178. Those title I-based procedures were the appropriate venue for raising the Petitioners’ concerns with the MSS limits established in NSR Permit 2501A. The Petitioners have not presented any evidence to suggest that they were somehow precluded from participating in the title I permitting procedures, nor do they offer any argument as to why, given their concerns about the terms of NSR Permit 2501A, they did not attempt to challenge it when it was issued. The Petitioners may not now use this title V petition to raise legal concerns over NSR Permit 2501A that should have been raised at the time the permit was issued in the NSR permitting process. Accordingly, to the extent that Petitioners seek to challenge certain MSS limits in NSR Permit 2501A as unlawful, such claim is denied.

does not require substantive reevaluation of the underlying Title I preconstruction permits,” *Environmental Integrity Project v. EPA*, 969 F.3d at 541, and upheld EPA’s policy:

We find persuasive the agency’s view that the Act’s overall structure supports its interpretation of Title V. We have frequently noted the Act’s ‘experiment in cooperative federalism.’ Applied to NSR, this principle of federalism means it is the states, not EPA, that issue preconstruction permits for new sources. And it is the states, not EPA, that issue Title V permits. While EPA retains near-plenary authority to approve or recall SIPs it finds inconsistent with the Act, 42 U.S.C. § 7410(k)... the agency’s authority over improperly issued preconstruction permits generally stops there.

Id. at 545 (internal citations and quotation marks omitted). Because the Petitioners’ claim seeks “substantive reevaluation of the underlying Title I preconstruction permits,” the holding in *EIP v. EPA* applies.

³⁵ As noted previously, “a decision by the EPA not to object to a title V permit that includes the terms and conditions of a title I permit does not indicate that the EPA has concluded that those terms and conditions comply with the applicable SIP or the CAA. However, until the terms and conditions of the title I permit are revised, reopened, suspended, revoked, reissued, terminated, augmented, or invalidated through some other mechanism, such as a state court appeal, the ‘applicable requirement’ remains the terms and conditions of the issued preconstruction permit and they should be included in the source’s title V permit.” *Big River Steel Order* at 19.

³⁶ The EPA has approved Texas’s PSD, NNSR, and minor NSR programs as part of its SIP. *See* 40 C.F.R. § 52.2270(c) (identifying EPA-approved regulations in the Texas SIP). Texas’s major and minor NSR provisions, as approved by the EPA into Texas’s SIP, are contained in portions of 30 TAC Chapters 116 and 106.

To the extent that the Petitioners assert that the MSS limits in NSR Permit 2501A should be designated as state-only, non-federally enforceable provisions, the EPA does not agree. As noted in the preceding paragraphs, these limits were established in an NSR permit through TCEQ's EPA-approved SIP regulations pursuant to title I of the CAA. Any term or condition of a preconstruction permit issued pursuant to regulations approved through title I are federally-enforceable applicable requirements that must be contained in the title V permit. 40 C.F.R. § 70.2. These limits would not qualify as being state-only. *See* 40 C.F.R. § 70.6(b)(2) (stating that the permitting authority shall specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit *that are not required* under the Act or under any of its applicable requirements) (emphasis added)).

To the extent that the Petitioners are concerned that the MSS limits listed in NSR Permit 2501A supersede NSPS and NESHAP standards, the Petitioners have not explained why they believe this to be case; nor have they demonstrated that during periods of MSS, the NSPS and NESHAP limits no longer apply. The EPA recognizes that there are times when multiple limits apply to the same emission unit for the same pollutant based on different underlying applicable requirements. The EPA has provided guidance that would allow, in certain circumstances, streamlining these requirements. *See White Paper Number 2*. However, unless the Permit clearly streamlines these limits, then each limit still applies independently, with full force, and the title V permit must ensure compliance with all such applicable requirements. Given that neither the title V permit nor NSR Permit 2501A indicate that the MSS limits in Permit 2501A supersede the otherwise applicable NSPS and NESHAP standards, the Permit must be read such that the NSPS and NESHAP limits are not affected by the MSS limits in NSR Permit 2501A. Accordingly, the Petitioners have not demonstrated that the presence of the MSS limits in NSR Permit 2501A result in the title V permit not assuring compliance with the applicable NSPS and NESHAP limits.

Because the Petitioners' claim challenges the content of "applicable requirements" established through the NSR permitting process, the EPA denies the Petitioners' claim. Moreover, the EPA finds no reason to conclude that the NSR-based MSS limits have superseded or relaxed limits required by applicable NESHAPs or NSPSs.

Claim G: The Petitioners Claim That "The Proposed Permit Unlawfully Incorporates Language Giving TCEQ Discretion Regarding Whether CEMS Data May be Used to Determine Compliance."

Claim G is found on pages 108–111 (Section VIII) of the Petition.

Petitioners' Claim: The Petitioners claim that some of the underlying permits incorporated in the title V permit contain language giving TCEQ discretion regarding whether data from CEMS can be used to determine compliance. The Petitioners reference NSR permits 2501A and 124424 as containing this language, which states: "The data from the CEMS *may, at the discretion of the TCEQ*, be used to determine compliance with the conditions of this permit." Petition at 108 (referencing NSR Permit 2501A Special Conditions 59.H, 60.D and Permit 124424 Special Condition 24.D). The Petitioners assert that in NSR Permit 2501A this condition applies to 23

different CEMS for eight different units and the CEMS are meant to ensure compliance with some of the most significant limits at the refinery.

The Petitioners assert that these provisions are unlawful because they:

“(a) violate the credible evidence rule, and thus make it so that the Title V permit cannot ensure compliance with the affected limits and cannot promote enforcement, (b) make it so that the Title V permit’s monitoring and reporting provisions cannot ensure compliance with the limits that have corresponding CEMS and (c) improperly shield Valero from its Title V requirement to independently certify compliance.”

Id. at 109.

The Petitioners provide background on the EPA’s 1997 credible evidence rule, stating that it “amended various provisions of EPA’s regulations to ‘make clear that enforcement authorities can prosecute actions based exclusively on any credible evidence, without the need to rely on any data from a particular reference test.’” *Id.* (quoting 62 Fed. Reg. 8314, 8316 (February 24, 1997)). The Petitioners also cite to CAA provisions that allow the EPA and courts to consider credible evidence. *Id.* (citing 42 U.S.C. § 7413(a), (e)). The Petitioners further cite to prior EPA orders that also supported the use of direct emissions monitoring data from CEMS to determine compliance. *Id.* (citing *In the Matter of TVA Gallatin and Johnsonville Power Plants*, Order on Petition No. IV-2003-4 at 9 n.6 (July 29, 2004) (*Gallatin Order*) and also citing the *Shell Deer Park Order* at 38, in which EPA found unlawful “permit terms excluding the use of credible evidence.”).

The Petitioners assert that the permit language violates the credible evidence rule “because it leaves it up to the discretion of TCEQ to determine whether to exclude the CEMS data as credible evidence of compliance” and if the EPA or the public brought a suit to enforce violations of limits on the basis of CEMS data, Valero might argue that it was up to TCEQ, not the EPA, public, or court to decide if CEMS data could be used to determine compliance. “As such, in violation of 40 C.F.R. §§ 70.1(b), 70.6(a)(1), and 70.7(a)(1)(iv) and 42 U.S.C. § 7661c(a), the proposed Title V permit cannot ensure compliance with the affected major NSR/PSD limits.” *Id.*

The Petitioners further assert that the CAA and title V regulations require title V permit to include “enforceable emission limitations and standards” and that the language here could render unenforceable the affected limits. The Petitioners also note that the language renders the monitoring and reporting requirements incapable of ensuring compliance with the affected limits because it does not specify alternate monitoring that would apply if the CEMS data is not used. The Petitioners compare this to a previous order in which the EPA objected. *Id.* at 110 (citing *Gallatin Order* at 4–8).

The Petitioners' last claim is that the language improperly shields Valero from its title V requirement to independently certify compliance. The Petitioners cite to title V regulations requiring that each title V permit include requirements for compliance certification regarding the

“status of compliance with the terms and conditions of the permit for the period covered by the certification.” *Id.* at 110 (citing 40 C.F.R. § 70.6(c)(5)(iii)(C); *see also* 30 TAC §§ 122.142(b)(1), 122.143(15), 122.165). The Petitioners cite to the *Gallatin Order* asserting that the EPA explained that every source must base its annual compliance certification on its own evaluation of such data and not shift the burden of assessing compliance to the permitting authority. *Id.* (citing *Gallatin Order* at 8–9). The Petitioners assert that the CEMS language improperly shifts the burden of assessing compliance status to TCEQ and allows Valero to certify compliance based on something other than its own evaluation of its data. *Id.*

The Petitioners conclude that the EPA should require TCEQ to remove the language from NSR Permit 2501A and 124424 and any other permits that may have similar language that are incorporated into the Permit. Otherwise, TCEQ should be required to revise the permit to ensure the provisions are not incorporated into the Permit.

EPA Response: For the following reasons, the EPA denies the Petitioners’ request for an objection on this claim.

TCEQ Response to Comments:

Nothing in the Draft Permit prohibits the use of credible evidence to demonstrate compliance (or noncompliance) with the applicable requirements in the permit. Special Term 27 in the Draft Permit at Page 14 requires “The permit holder shall comply with 30 TAC §§ 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other **credible evidence** or information” (emphasis added).

In addition, Special Terms 22 and 25 in the Draft Permit include the deviation reporting requirements of 30 TAC § 122.145. A deviation is defined in 30 TAC §§ 122.10(6) as “any indication of noncompliance with a term or condition of the permit as found using compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other **credible evidence** or information.” (emphasis added). Any data generated by a CEMS operating in compliance with the requirements stated in Permit Nos. 2501A, PSDTX767M2, and 124424 may be used as credible evidence. Since the Draft Permit already requires credible evidence to be used in conjunction with reporting requirements, revising the draft permit is unnecessary. Lastly, there is nothing in the terms of the underlying NSR permits or in the conditions of the Draft Permit that shield Valero from independently certifying compliance with applicable requirements using credible evidence. All Title V permit holders must certify compliance with the permit in accordance with 30 TAC § 122.146, Compliance Certification Terms and Conditions.

RTC at 81.

A title V permit may not preclude any entities, including the EPA, citizens, or states, from using any credible evidence to enforce emission standards, limitations, conditions, or any other provisions of a title V permit. *See* Compliance Assurance Monitoring, 62 Fed. Reg. 54900, 54907–08 (October 22, 1997). As the EPA has previously stated, to demonstrate that a title V permit fails to provide for the use of credible evidence, petitioners must specifically identify permit terms excluding the use of credible evidence. *See, e.g., In the Matter of Luminant Generation Company, Big Brown, Monticello, and Martin Lake Steam Electric Station*, Order on Petition Nos. VI-2014-01, VI-2014-02, and VI-2014-03 (January 23, 2015) at 15–16; *In the Matter of Louisiana Pacific Corporation, Tomahawk, Wisconsin*, Order on Petition No. V-2006-3 (November 5, 2007) at 11–12.

Here, the Petitioners have not shown that the Permit language specifically excludes the use of credible evidence or that TCEQ otherwise excluded the use of credible evidence for these NSR permits. Instead, this language expresses what is already true under the credible evidence rule—that TCEQ may use the CEMS to demonstrate compliance. This language does not supersede any other monitoring that is required by the Permit to demonstrate compliance, nor does it impede EPA or the public from also relying on CEMS data as credible evidence for determining potential violations of Permit terms and limits. As noted by TCEQ in its RTC, the Permit does not leave it to TCEQ’s discretion if Valero may use CEMS as evidence for certifying compliance or reporting of deviations and instead specifically directs Valero to use, at a minimum, continuous monitors or any other credible evidence, and furthermore does not restrict EPA or the public from using CEMS data or other credible evidence for purposes of determining compliance.

V. CONCLUSION

For the reasons set forth in this Order and pursuant to CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby grant in part and deny in part the Petition as described in this Order.

Dated: JUN 30 2022



Michael S. Regan
Administrator