BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Petition No. III-2024-15

In the Matter of

AdvanSix Resins and Chemicals LLC, Hopewell Plant

Permit No. PRO50232

Issued by the Virginia Department of Environmental Quality

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ORDER GRANTING IN PART AND DENYING IN PART A PETITION FOR OBJECTION TO A TITLE V OPERATING PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated July 19, 2024 (the Petition) from Chesapeake Bay Foundation, Mothers Out Front, Sierra Club, Falls of the James Group, and Virginia Interfaith Power & Light (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. PRO50232 (the Permit) issued by the Virginia Department of Environmental Quality (VADEQ) to the AdvanSix Resins and Chemicals LLC Hopewell Plant (AdvanSix) in Hopewell, Virginia. The Permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and Article 1 Federal Operating Permits for Stationary Sources of Title 9, Agency 5, Chapter 80 of the Virginia Administrative Code (VAC) (9VAC5-80-50 *et seq*.). *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also known 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 and objects to the issuance of the Permit. Specifically, the EPA grants in part Claim 1 and denies the rest of the claims.

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 Commonwealth of Virginia (Virginia) submitted a title V program governing the issuance of operating permits on September 10, 1996, followed by

several amendments. The EPA granted interim approval to the title V operating permit program in March 1998 and full approval in November 2001. 66 Fed. Reg. 62961 (December 4, 2001). This program, which became effective on November 30, 2001, is codified in 9VAC5-80, Article 1.

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. 40 C.F.R. § 70.1(b); 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. 32250, 32251 (July 21, 1992). 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 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).

[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*.

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 (Aug. 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 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

[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.

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 (Jan. 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).[8]

Another factor the EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning contained in the permit record. 81 Fed. Reg. at 57832; *see Voigt v. EPA*, 46 F.4th 895, 901–02 (8th Cir. 2022); *MacClarence*, 596 F.3d at 1132–33.[9] This includes a requirement that petitioners 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). 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 determining 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 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

[6] *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (Sept. 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 (Apr. 20, 2007); *In the Matter of Georgia Power Company*, Order on Petitions at 9–13 (Jan. 8, 2007) (*Georgia Power Plants Order*); *In the Matter of Chevron Products Co., Richmond, Calif. Facility*, Order on Petition No. IX-2004–10 at 12, 24 (Mar. 15, 2005).

[8] *See also In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (Feb. 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 (Dec. 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); *Georgia Power Plants Order* at 9–13 (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).

during the agency's review of a petition on a proposed permit, those documents may also be considered when determining whether to grant or deny the petition. *Id*.

If the EPA grants a title V petition and objects to the issuance of a permit, a permitting authority may address the EPA's objection by, among other things, providing the EPA with a revised permit. 42 U.S.C. § 7661d(b)(3), (c); 40 C.F.R. § 70.8(d); *see id*. § 70.7(g)(4); 70.8(c)(4); *see generally* 81 Fed. Reg. at 57842 (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. If a final permit has been issued prior to the EPA's objection, the permitting authority should determine whether its response to the EPA's objection requires 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 revision 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 (Sept. 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (Dec. 19, 2007).

III. BACKGROUND

A. The AdvanSix Hopewell Facility

AdvanSix Resins and Chemicals LLC, Hopewell Plant: The facility includes nine major chemical process areas, a powerhouse, and a marine terminal for transfer of fuel and bulk materials. The facility is a title

V major source of particulate matter (PM_{10} and $PM_{2.5}$), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), volatile organic compounds (VOC), and greenhouse gases, as well as hazardous air pollutants (HAPs).

B. Permitting History

VADEQ first issued a title V permit for the Advansix Hopewell Plant in 2014. On February 1, 2019, AdvanSix applied for a title V permit renewal. On May 23, 2023, AdvanSix submitted revisions to its title V permit renewal application. VADEQ published notice of a draft permit on January 12, 2024, subject to a public comment period that originally ran until February 12, 2024, and was extended until February 26, 2024. On April 4, 2024, VADEQ submitted the Proposed Permit, along with its responses to public comments (RTC)[10] and statement of basis document (SOB), to the EPA for its 45-day review. The EPA's 45-day review period ended on May 20, 2024, during which time the EPA did not object to the Proposed Permit. VADEQ issued the final title V renewal permit for the Hopewell Plant on June 10, 2024.

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 May 20, 2024. Thus, any petition seeking the EPA's objection to the Permit was due on or before July 19, 2024. The Petition was received July 19, 2024. Therefore, the EPA finds that the Petitioners timely filed the Petition.

D. Environmental Justice

The EPA used EJScreen[11] to review key demographic and environmental indicators within a five-kilometer radius of the Hopewell Plant. This review showed a total population of approximately 22,866 residents within a five-kilometer radius of the facility, of which approximately 54 percent are people of color and 46 percent are low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indexes, which combine certain demographic indicators with 13 environmental indicators. The following table identifies the Environmental Justice Indexes for the five-kilometer radius surrounding the facility and their associated percentiles when compared to the rest of Virginia.

EJ Index	Percentile in State
Particulate Matter 2.5	77
Ozone	78
Nitrogen Dioxide	61
Diesel Particulate Matter	68

[10] On June 11, 2024, VADEQ issued a revised responses to public comments document that expanded upon certain responses relevant to the Petition. The Petition addresses the responses in this revised June 11 document. The references to the RTC in this Order also refer to the revised June 11 document.

[11] 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*. The information herein is based on an August 21, 2024, report using EJScreen version 2.3.

Toxic Releases to Air	94
Traffic Proximity	69
Lead Paint	87
Superfund Proximity	61
RMP Facility Proximity	93
Hazardous Waste Proximity	91
Underground Storage Tanks	78
Wastewater Discharge	93
Drinking Water Non-Compliance	0

The Petitioners also present demographic information about the City of Hopewell, describing it as "an environmental justice community." Petition at 5; *see id.* at 4–6. The Petitioners argue that due to existing health challenges, environmental burdens, and economic hardships, "it is critical that [the] EPA ensure that the conditions in the AdvanSix permit are sufficient to prevent the facility's emissions from imposing a disproportionate burden on the health and well-being of the Hopewell community." *Id.* at 6.

IV. EPA DETERMINATIONS ON PETITION CLAIMS

A. Claim 1: The Petitioners Claim That "[VA]DEQ and AdvanSix Failed to Provide the Public with Requisite Emissions Information Needed to Identify Applicable Requirements and Assess the Adequacy of the Draft Permit's Monitoring Requirements."

Petition Claim: The Petitioners claim that the permit application accompanying the draft permit failed to satisfy federal requirements under 40 C.F.R. § 70.5(c) to include information needed to determine the applicability of and to impose applicable requirements, and section 70.5(c)(3) for the inclusion of emissions-related information. Petition at 11; *see id.* at 11–22. The Petitioners further claim that this omission was inconsistent with the public participation requirements of Part 70 because it prevented the public from being able to effectively review the draft permit during the public comment period. *Id.*

The Petitioners claim that title V "applications must include unit-specific emissions rates and the underlying emissions calculations." *Id.* at 11. The Petitioners elaborate on this claim, stating that emissions must be described and calculated in the application "on a unit by unit basis" (*id.* at 12), and that "Part 70 requires a unit-by-unit, pollutant-by-pollutant accounting of emissions along with supporting emissions calculations in Title V applications." *Id*. at 14. The Petitioners argue that this information is required both for determining the applicability of requirements and for assessing the adequacy of monitoring, recordkeeping, and reporting to assure compliance with applicable requirements. *Id.* The Petitioners allege that the AdvanSix application was "almost wholly devoid" of unit-specific emissions information and therefore the application was incomplete. *Id.* at 11, 15 (citing 40 C.F.R. § 70.7(a)(1)(i)).

In support of their claims, the Petitioners quote several part 70 regulations concerning the submittal of emissions information in title V applications:

> [R]egulations at 40 C.F.R. § 70.5(c) state that a Title V permit application "may not omit information needed to determine the applicability of, or to impose, any applicable

> requirement." Further, 40 C.F.R. § 70.5(c)(3)(i) requires the disclosure of "[a]ll emissions of pollutants for which the source is major, and all emissions of regulated air pollutants." Moreover, this calculation of emissions must be made on a unit-by-unit basis: "[a] permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit."[12] The Title V rules at 40 C.F.R. § 70.5(c)(3)(iii) further require submission of "[e]missions rate in tpy [tons per year] and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method." Finally, 40 C.F.R. § 70.5(c)(3)(viii) requires an application to include the "[c]alculations on which the [foregoing emissions information] is based."

Id. at 11–12.

The Petitioners acknowledge that the SOB lists facility-wide actual emissions for some pollutants. *Id.* at 13. However, they claim that this information is not suitable "to assess applicable requirements and monitoring conditions that apply to specific emission units." *Id.* Additionally, the Petitioners note that actual emissions are distinct from *potential* emissions, which they claim are needed to determine certain applicable requirements. *Id.*

The Petitioners point out that the EPA previously objected to a title V permit on the grounds that the application lacked emissions calculations, specifically for fugitive emissions, and characterize this objection as relevant precedent. *Id.* (citing *In the Matter of Cash Creek Generation, LLC,* Order on Petition No. IV-2020-4 (June 22, 2012).

The Petitioners state: "The lack of unit-specific emissions estimates, emission factors, and emissions calculations in AdvanSix's title V permit renewal application materially impacted the public's ability to identify potential deficiencies in the draft Title V permit during the public comment period." *Id.* at 16.

The Petitioners claim that emissions information is particularly important for assessing the applicability of requirements related to Compliance Assurance Monitoring (CAM) because pre-controlled potential emissions of criteria pollutants is one of the criteria of CAM applicability. *Id.* The Petitioners acknowledge that the application included a table assessing CAM applicability that lists pre-control emission rates for various units. *Id.* However, the Petitioners claim that this table does not include emissions calculations. *Id.* Specifically, the Petitioners point to five Hydroxylamine Diammonium Sulfonate (HDS) Trains units, claiming that their Potential to Emit (PTE) is "just shy" of the CAM applicability threshold of 100 tpy. *Id.* at 16–17 (citing Application Table 14-3). The Petitioners claim that without calculations for the PTE estimates for the HDS Trains units, the Petitioners cannot verify the accuracy of the estimates and, by extension, the applicability of CAM requirements to the units. *Id.* The Petitioners supply a list (in Appendix A of the Petition) of many units "for which CAM applicability could not be determined due to the lack of emissions information." *Id.* at 17.

Additionally, the Petitioners claim that they cannot determine the adequacy of monitoring, recordkeeping, and reporting in the Permit without emissions calculations. *Id.* The Petitioners state that title V permits must include adequate monitoring (citing 40 C.F.R. § 70.6(3)(i)(B))[13] and argue that emissions calculations would enable the public to assess the potential for noncompliance for specific

[12] *Id.* at 12 (citing 40 C.F.R. § 70.5(c)(3)(i)).
[13] The Petitioners likely meant to cite 40 C.F.R. § 70.6(a)(3)(i)(B).

emissions units and determine whether additional monitoring, recordkeeping, and reporting would, therefore, be necessary to assure compliance with the Permit's limits. *Id.* at 17–18.

The Petitioners then address VADEQ's RTC, claiming that it "does not explain, resolve, or rectify the failure" to provide the public with the required emissions information. *Id.* at 18; *see id.* at 18–22.

The Petitioners first quote VADEQ's response that cites an EPA guidance document[14] and states that an applicant need not "prepare and submit extensive information about the source that 'proves' it is subject to any requirements that it stipulates are applicable." *Id.* at 18 (quoting RTC at 8). The Petitioners argue that this justification is "off point" because they "are not concerned about applicable requirements that AdvanSix concedes apply to it, but rather the requirements or monitoring that potentially apply but that cannot be ascertained due to the absence of emissions calculations." *Id.* at 19. The Petitioners also claim that VADEQ's responses concerning AdvanSix's major source status do not address the previously quoted requirements for applications under 40 C.F.R. § 70.5(c)(3)(i), (iii), and (viii). *Id.* at 19–20.

EPA Response: For the following reasons, the EPA grants in part and denies in part this Petition claim and objects to the issuance of the Permit.

40 C.F.R. § 70.5(c), entitled "Standard application form and required information," addresses minimum information requirements for title V permit applications and clarifies that, although states have discretion in structuring standard application forms, "an application may not omit information needed to determine the applicability of, or to impose, any applicable requirement." The requirements for emissions-related information in title V applications are found under 40 C.F.R. § 70.5(c)(3). *See also* 9VAC5-80-90 D. 40 C.F.R. § 70.5(c)(3)(i) requires that the standard application form include:

> All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted under this paragraph (c) of this section. The permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed under the fee schedule approved pursuant to § 70.9(b) of this part.

40 C.F.R. § 70.5(c)(3)(iii) requires:

> Emissions rate in tpy and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method. For emissions units subject to an annual emissions cap, tpy can be reported as part of the aggregate emissions associated with the cap, except where more specific information is needed, including where necessary to determine and/or assure compliance with an applicable requirement.

And 40 C.F.R. § 70.5(c)(3)(viii) requires: "Calculations on which the information in paragraphs (c)(3)(i) through (vii) of this section is based."

[14] White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program (March 5, 1996) (White Paper 2).

To the extent the Petition asserts broadly that the EPA must object because the application did not provide detailed emissions information specific to each emissions unit at the facility, the EPA denies the Petition. Section 70.5 does not require, in the Petitioners' words, a "unit-by-unit, pollutant-by-pollutant accounting of emissions." Petition at 14. While part 70 does require some information about each emissions unit in a complete application, the level of detail specific to each emissions unit required by section 70.5(c) is always determined with reference to context, and the permitting authority has a substantial degree of discretion in this area. This is evident in the text of section 70.5(c)(3), as is apparent in the section 70.5(c)(3)(ii) requirement for "identification and description of all points of emissions described in paragraph (c)(3)(i) of this section *in sufficient detail to establish* the basis for fees and applicability of requirements of the Act." (emphasis added). Section 70.5(c)(3) requires emissions information specific to individual emissions units where appropriate, as determined by the context of the applicable requirements at issue.

This interpretation is consistent with the guidance articulated in two EPA documents, known as "White Paper 1"[15] and "White Paper 2," issued during the period after enactment of title V when permitting authorities were developing programs for submittal to the EPA. Both guidance documents explain that the requirements of section 70.5(c) to provide emissions-related information are context-specific. For example, in White Paper 1, pp. 6–7, the EPA explained:

> [T]here are different expectations for information from emissions units depending on whether and how applicable requirements apply. . . Applications should contain information to the extent needed to determine major source status, to verify the applicability of part 70 or applicable requirements, to verify compliance with applicable requirements, and to compute a permit fee (as necessary). Section 70.5(c) requires the application to describe emissions of all regulated air pollutants for each emissions unit. This would require at least a qualitative description of all significant emissions units, including those not regulated by applicable requirements. While part 70 does not require detailed emissions inventory building, it does require limited emissions-related information for each pollutant and emissions unit combination which is regulated at the source. Section 70.5(c)(3)(iii) requires for such units emissions rate descriptions in tpy and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method. The EPA interprets the tpy estimates to not be required at all where they would serve no useful purpose, where a quantifiable emissions rate is not applicable (*e.g.*, section 112(r) requirements or a work practice standard), or where emissions units are subject to a generic requirement . . . .

Thus, to demonstrate a basis for objection related to this aspect of 40 C.F.R. § 70.5(c), a petitioner would need to provide some context-specific analysis showing that additional emissions information or detail is necessary to establish or satisfy specific requirements that are (or may be) applicable to specific emissions units.

In responding to comments that the Petitioners submitted during the public comment period, VADEQ cites guidance in White Paper 2 as being supportive of its approach to the title V application process,

[15] White Paper for Streamlined Development of Part 70 Permit Applications (July 10, 1995).

and in particular of not requiring AdvanSix to provide the type of detailed emissions information for every single emissions unit, as requested by the Petitioners. VADEQ's response states:

> At this time, the facility is considered major for all regulated criteria pollutants emitted by the facility: NO_x, CO, VOC, SO_2, PM_{10}, and $PM_{2.5}$. Additionally, the facility is major for Hazardous Air Pollutants (HAP). All applicable federal standards for major sources apply. The facility is not major for sulfuric acid mist, which is a regulated air pollutant, but there are no federal standards for major sources of sulfuric acid mist that are potentially applicable. The comment does not identify any possible applicable requirements that are not in the Title V permit.
>
> On page 12 of the application form, the application gives the facility the option to check the statement that says, "I have reviewed my Calendar Year 20_ emissions update and find that it properly accounts for all emission units except those specified below." In the updated application dated May 18, 2023, this box was checked, indicating that the 2021 emissions update was accurate (the 2022 emissions inventory had not been finalized as of May 18, 2023). The emissions update provides actual annual emissions calculations and were included by cross-reference in AdvanSix's renewal application.
>
> Additionally, page 13 requires the permittee to list all pollutants for which the source is major. The instructions state, "EPA's White Paper [2], to which the [VA]DEQ subscribes as a matter of policy, allows sources to stipulate that they are major sources as a means of streamlining the application process. When stipulating, sources need not demonstrate the applicability of the title V rule, such as by indicating the quantity of annual pollutant emissions."
>
> . . . Because the facility has stipulated that it is major for NO_x, CO, VOC, SO_2, PM_{10}, and $PM_{2.5}$, as well as for HAP emissions, and has further stipulated to applicable federal requirements for major sources, as detailed in the application, extensive PTE calculations are not necessary for applicability purposes.

RTC at 7–8.

To the extent that the Petitioners challenge the emissions information that was available, they have failed to demonstrate that the "Emissions Inventory" tpy emissions included in the application and SOB does not satisfy the section 70.5(c)(3)(iii) requirement to include "[e]missions rate in tpy[.]" SOB at 5; *see* Application at 13. Specifically, it is not apparent what useful purpose tpy emissions rates on a unit-by-unit basis would serve, and, aside from the CAM applicability issues addressed below, the Petitioners do not explain with any specificity what purpose they believe would be served. As explained in White Paper 1, quoted above, emissions unit-specific information is not required where it would serve no useful purpose. VADEQ explains in its RTC that AdvanSix has stipulated it is a major source for various pollutants and therefore subject to applicable federal requirements. *See* RTC at 7–8. The Petitioners do not challenge the applicability of any specific requirement and do not raise concerns that any requirements are missing from the Permit except for requirements related to CAM, and in this case, as the Petitioners acknowledge, the application did include tpy emissions estimates for all units potentially subject to CAM. *See* Petition at 16. Therefore, to the extent the Petition requests the EPA's

objection on the basis that the application did not include tpy emissions rates for every single emissions unit, the EPA denies the Petition.

The Petitioners present more meritorious arguments when they focus on the PTE of specific units and the calculations underlying PTE estimates in the application. As discussed below, the Petitioners persuasively argue that such information was necessary to determine the applicability of CAM requirements for specific units, and therefore should have been included in the application according to 40 C.F.R. § 70.5(c), but was not provided in the application. However, to the extent the Petitioners argue that such a requirement applies to every emissions unit at a facility subject to title V, without regard to the context of the applicable requirements being addressed, the EPA disagrees, and denies any such claim in the Petition.

The Petitioners argue PTE calculations are necessary to determine the applicability of CAM requirements and to assess the adequacy of monitoring, recordkeeping, and reporting. *See* Petition at 16–19. These topics are addressed in turn.

CAM

As the Petitioners point out, potential pre-control device emissions are directly relevant to determining the applicability of CAM requirements for certain units. 40 C.F.R. § 64.2(a)(3); *see* Petition at 16. Therefore, where relevant, this emissions-related information and the calculations upon which it is based are required elements of title V applications according to 40 C.F.R. § 70.5(c)(3)(i) and (viii).

VADEQ's response in its RTC addressing the Petitioners' comments on this issue points to the CAM Applicability Assessment Table in the permit application that contains PTE estimates for all emissions units at the facility potentially subject to CAM. RTC at 11. However, the response fails to address the issue of underlying calculations and, therefore, the public's ability to verify the PTE estimates and, by extension, the applicability of CAM requirements.

The Petitioners demonstrate that these calculations are particularly necessary for determining the applicability of CAM in the case of the five HDS Trains units, where the PTE estimates are near the threshold for CAM applicability and are the only reason that VADEC determined that CAM is not applicable to these units. Petition at 16–17. Furthermore, due to the unavailability of the underlying calculations during the public comment period, the Petitioners were unable to raise concerns regarding the applicability of CAM to the HDS Trains units to VADEQ, and VADEQ was unable to respond to such concerns. Potential errors in AdvanSix's PTE calculations could have resulted in an incorrect determination that the units were not subject to CAM. The EPA, therefore, grants Claim 1 with respect to the calculations underlying the PTE estimates for the HDS Trains units. 40 C.F.R. §§ 70.7(a)(1)(i), 70.5(c)(3)(i), (viii).

The Petitioners fail to make a similar argument for the other 52 units included in Petition Appendix A, or any other argument as to why the accuracy of the PTE estimates is particularly relevant in those cases to determining the applicability of CAM requirements, and thereby fail to demonstrate a basis for the EPA's objection related to those units.

Adequacy of Monitoring, Recordkeeping, and Reporting

The Petitioners also claim that emissions calculations are needed to assess the adequacy of monitoring, recordkeeping, and reporting in the Permit. When a title V petition seeks an objection based on emissions information missing from an application, the EPA considers, among other things, whether the information was "necessary to determine and/or assure compliance with an applicable requirement." 40 C.F.R. § 70.5(c)(3)(iii). As part of this analysis, the EPA generally determines whether the petitioner has demonstrated that the absence of information resulted in, or may have resulted in, a deficiency in the permit's content. Without such a showing, it may be difficult to conclude that the information was required under the regulations governing title V applications. As explained under Claim 2 in Section IV.B of this Order, the Petitioners have failed to demonstrate any specific potential flaw in the Permit's content related to monitoring, recordkeeping, and reporting. The Petition lacks any case-specific analysis of permit terms that such a demonstration would require. The EPA, therefore, denies Claim 1 with respect to emissions calculations related to assessing the adequacy of monitoring, recordkeeping, and reporting.

Direction to VADEQ: VADEQ must reissue the Permit with a revised permit application from AdvanSix that includes calculations underlying the pre-control device potential emissions estimates for the five HDS Trains units, and VADEQ must provide an opportunity for public comment on these calculations.

B. Claim 2: The Petitioners Claim That "The Renewal Permit Fails to Assure Compliance with Applicable Requirements Because It Lacks Adequate Periodic Monitoring and Testing Requirements."

Petition Claim: The Petitioners claim that the Permit fails to satisfy the requirement to assure compliance with all applicable requirements because the monitoring conditions for many emissions units do not periodically measure emissions directly, but rather rely on opacity and parametric monitoring. Petition at 22; *see id.* at 22–30.

The Petitioners state: "Title V permits must include 'periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit.'" *Id.* at 22 (quoting 40 C.F.R. § 70.6(a)(3)(i)(B)); *see id.* at 24 (citing 42 U.S.C. § 7661c(a), (c); 40 C.F.R. § 70.6(a)(3), (c)(1))).

The Petitioners claim that AdvanSix has a "checkered compliance history," including numerous recent and outstanding violations, many notably for failed initial stack tests. *Id.*

The Petitioners claim that the Permit encompasses 220 emission points but contains Continuous Emissions Monitoring Systems (CEMS) for only nine stacks and initial stack tests for only "about a dozen" other units. *Id.* at 22–23. The Petitioners state: "the Permit relies solely on opacity and parametric monitoring (at most) for 211 plus emission points." *Id.* at 23.

The Petitioners argue that the unavailability of emissions data (explained in Claim 1) rendered the public unable to review the adequacy of monitoring conditions and identify specific deficiencies. *Id.* at 23, 25. The Petitioners state: "[The] EPA should also direct [VA]DEQ to require a complete application with requisite emissions calculations and to hold another comment period such that the public—and

EPA—can review the adequacy of the draft permit's periodic monitoring and identify any instances where that monitoring is deficient." *Id.* at 24. However, the Petitioners outline general circumstances under which they believe the monitoring in the Permit may be inadequate, claiming that "units with potential or actual emissions that are substantial enough to potentially exceed emission limits should be subject to more than just parametric monitoring, *i.e.* periodic stack tests or CEMS." *Id.* at 23 (citing *In the Matter of Consolidated Edison Co. of NY, Inc., Ravenswood Steam Plant*, Order on Petition No. II-2001-08 at 21 (Sep. 30, 2003)).

The Petitioners provide further detail on one emissions unit—the Kellogg Ammonia Plant Combustion System (KAPCS-1). *Id.* at 23–24. The Petitioners describe that this unit is subject to several tpy and lb/hr limits on criteria pollutants. *Id.* at 23 (citing Permit Condition 405). The Petitioners claim that the KAPCS-1 unit's PTE in relation to these limits is unstated in the permit application. *Id.* The Petitioners claim that the only monitoring for this unit is opacity and purge gas compressor pressure monitoring and argue that the sufficiency of this monitoring would depend on whether the unit's PTE is "high enough to potentially exceed the emission limits," in which case the Petitioners claim that parametric monitoring should be paired with periodic compliance tests. *Id.* at 23–24 (citing Permit Conditions 411 and 412).

The Petitioners then address VADEQ's response in its RTC that states that the Petitioners' public comments did not specifically identify any limit with allegedly deficient monitoring or demonstrate why such monitoring was deficient. *Id.* at 25–26 (citing RTC Response 12). The Petitioners argue that they could not provide this level of detail without access to emissions data for individual units, referencing arguments they made in Claim 1. *Id.* The Petitioners claim that VADEQ's responses do not justify why most units "are not subject to any periodic, real-world emissions monitoring like stack tests or CEMS." *Id.* at 30.

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

All title V permits must "set forth . . . monitoring . . . requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c); *see* 40 C.F.R. § 70.6(c)(1). Determining whether monitoring contained in a title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry. To aid permitting authorities and the public in this fact-specific exercise, the EPA has identified a non-exhaustive list of relevant factors:

> (1) [T]he variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities.

In the Matter of CITGO Refining and Chemicals Company, L.P., Order on Petition No. VI-2007-01 at 7–8 (May 28, 2009).

Because the sufficiency of monitoring is always a context-specific issue, in order to demonstrate a basis for the EPA's objection due to inadequate monitoring, petitioners must provide some fact-specific

analysis of the permit terms in question. *See* 40 C.F.R. § 70.12(a)(2)(iii) (requiring petitioners provide "[a]n *explanation of how* the term or condition in the permit . . . is not adequate . . . ." (emphasis added)).

Here, the Petitioners do not address any specific monitoring conditions or permit terms, with the exception of permit terms for a single unit, the KAPCS-1 unit. Rather, the Petitioners implicate "211 plus" emissions units (and an unspecified number of related monitoring conditions), claiming that "the Permit relies solely on opacity and parametric monitoring" to assure compliance with the limits that apply to these units. Petition at 23. The Petitioners claim that this type of monitoring may be insufficient to assure compliance when "a unit has previously failed a compliance test and instances where emissions are close enough to the relevant emission limit." *Id.* at 26. However, the Petitioners provide no support for these broad statements to show that opacity and parametric monitoring can *never* sufficiently assure compliance in such cases, nor do they provide any analysis to demonstrate these principles in any specific case, aside from the KAPCS-1 unit. *See e.g., In the Matter of Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East)*, Order on Petition Nos. VIII-2022-13 & VIII-2022-14 at 23–27 (July 31, 2023) (*Suncor Plant 2 (East) Order)*.

The Petitioners do refer to certain limits and monitoring conditions applicable to the KAPCS-1 unit. *See id.* at 23–24. The EPA notes that monitoring for the KAPCS-1 unit was not mentioned in public comments. 40 C.F.R. §§ 70.8(d), 70.12(a)(2)(v). Moreover, the Petitioners fail to provide any substantive analysis of the monitoring requirements for the KAPCS-1 unit. The Petitioners' arguments concerning the sufficiency of the monitoring requirements applicable to the KAPCS-1 unit depend on a hypothetical comparison of the unit's PTE to its emissions limits:

> If emissions for these units are well below the limits, parametric monitoring alone may be acceptable to assure the units will not exceed their emission limits; on the other hand, if emissions estimates show that emissions are high enough to potentially exceed the emission limits, parametric monitoring alone is likely insufficient to assure compliance in the long term and must be paired with periodic compliance tests.

Id. at 24.

The Petitioners argue that because emissions information was absent from the permit application, they could not assess the adequacy of the monitoring for the KAPCS-1 unit or many other units, and they could not provide more specific analysis. *Id.* at 23.

The EPA agrees that PTE and other emissions information could be relevant to assessing the adequacy of monitoring in some cases, especially as it relates to the likelihood of violation of requirements.[16] However, the lack of such information does not obviate the necessity for a petitioner to otherwise demonstrate a flaw in the Permit related to specific monitoring conditions based on the information that was available in the permit record. Moreover, the likelihood of violation is only one possible element of such a demonstration. For example, in this case, even if the Petitioners were able to show that a given unit was likely to violate a certain emissions limit, determining the sufficiency of opacity

[16] As the Petitioners point out, VADEQ's statement that "PTE is defined by the emission limits listed in the Permit" is likely incorrect for many of the limits in the Permit, and this response seems to misunderstand the Petitioners' comments on this issue. RTC at 8; *see* Petition at 28–29.

and parametric monitoring would still require a substantive analysis of specific permit terms and potentially a variety of other case-specific factors (*e.g.*, the specific parameter being monitored, the frequency of monitoring, etc.). The Petitioners provide no such analysis of any specific monitoring conditions, and thereby fail to demonstrate that the Permit does not assure compliance with any specific applicable requirement or permit term. 40 C.F.R. § 70.12(a)(2)(iii).[17]

C. Claim 3: The Petitioners Claim That "[VA]DEQ Failed to Provide a Rationale for Why the Permit's Monitoring is Sufficient to Assure the Facility's Compliance with Applicable Requirements, Impairing the Public's Ability to Evaluate the Draft Permit's Adequacy."

Petition Claim: The Petitioners claim that VADEQ failed to satisfy 40 C.F.R. § 70.7(a)(5)'s requirement to provide a SOB containing the rationale for the monitoring conditions selected for emissions units subject only to parametric monitoring. Petition at 30; *see id.* at 30–32.

The Petitioners claim that the rationale for all monitoring in the permit must be in the SOB. *Id.* at 30, 31 (citing 40 C.F.R. § 70.5(a)(5);[18] *In the Matter of United States Steel, Granite City Works*, Order on Petition No. V-2009-03 at 7–8 (January 31, 2011)). The Petitioners allege that the SOB was "devoid" of justification for "why parametric and opacity monitoring alone are sufficient monitoring for the vast majority of" emissions units. *Id.* at 30.

The Petitioners quote a selection from the SOB as an example of the rationale that VADEQ provided for certain monitoring conditions: "The monitoring, testing, notification, and recordkeeping requirements in Conditions 365, 378, and 379 of the 9/8/2022 NSR permit (Title V Conditions 412-414) have been examined and determined to meet Part 70 requirements as is." *Id.* (quoting SOB at 26). The Petitioners claim that similar statements are repeated throughout the SOB. *Id.* The Petitioners state: "This conclusory statement does not provide any rationale for why the selected monitoring provisions are sufficient to assure compliance." *Id.*

The Petitioners provide more detail concerning the rationale for the monitoring for the KAPCS-1 unit, claiming that the SOB does not explain how opacity and purge gas compressor pressure monitoring assures compliance with hourly and annual limits on PM, CO, SO_2, and VOC. *Id.* at 31 (citing Permit Conditions 411 and 412). The Petitioners claim that this is common for other units as well. *Id.*

The Petitioners claim that "the deficient Statement of Basis also rendered the permit process and required public participation procedure ineffective." *Id.* at 32. Additionally, the Petitioners allege that the RTC failed to address this issue. *Id.* (citing 40 C.F.R. § 70.7(h)(6)).

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

As the Petitioners point out, 40 C.F.R. § 70.7(a)(5) requires states to prepare "a statement that sets forth the legal and factual basis for the draft permit conditions." The EPA's regulations do not dictate the specific content or level of detail that must be contained in such a statement, which the EPA often calls "a statement of basis." However, the EPA has issued a guidance memorandum addressing this

[17] *See supra* notes 6–8 and accompanying text.
[18] The Petitioners likely meant to cite 40 C.F.R. § 70.7(a)(5).

topic (2014 SOB Guidance),[19] and has addressed this topic in various title V petition orders. *See e.g., Suncor Plant 2 (East) Order* at 28–34. With respect to monitoring, the 2014 SOB Guidance suggests that permitting authorities should "list anything that deviates from simply a straight recitation of applicable requirements," including "any monitoring that is required under 40 C.F.R. § 70.6(a)(3)(i)(B)" (that is, monitoring added through title V when absent from an underlying applicable requirement), and any "periodic monitoring decisions, where the decisions deviate from already agreed-upon levels." 2014 SOB Guidance Att. 2 at 2–3 (quoting several prior EPA documents).

The EPA generally evaluates permit record-focused claims under 40 C.F.R. § 70.7(a)(5) by evaluating whether the permit record as a whole—not only the statement of basis, but also the response to comments and potentially other parts of the permit record—supports the terms and conditions of the permit. *See, e.g.*, *In the Matter of US Steel Seamless Tubular Operations, LLC, Fairfield Works Pipe Mill*, Order on Petition No. IV-2021-7 at 8–9 (June 16, 2022) (*US Steel Fairfield Order*).

The EPA has granted title V petitions where a permitting authority failed to explain the basis for its monitoring decisions *in response to public comments*. In so doing, the EPA clarified:

> [The] EPA is not suggesting that [the state] 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 [a] monitoring provision*, the EPA expects [the state] to engage with these comments and explain the basis for its decisions (or specifically identify where any prior justification may be found).

In the Matter of Valero Refining-Texas, Valero Houston Refinery, Order on Petition No. VI-2021-8 at 62 (June 30, 2022) (emphasis added); *see In the Matter of BP Amoco Chemical Company, Texas City Chemical Plant*, Order on Petition No. VI-2017-6 at 18 (July 20, 2021) (same).

In these cases, the obligation for a permitting authority to explain the basis for individual permit terms is inextricably tied to the prompting of public comments. The EPA has never interpreted 40 C.F.R. § 70.7(a)(5) to require permitting authorities to proactively justify every single permit term (or every single monitoring requirement), particularly for permit terms that are not created or changed through a title V action, but which are simply carried forward during renewal permits.

Additionally, the EPA's evaluation of petition claims under 40 C.F.R. § 70.7(a)(5) considers whether "the petitioner has demonstrated that the permitting authority's alleged failure resulted in, or may have resulted in, a deficiency in the content of the permit." *US Steel Fairfield Order* at 8. Where petitioners have failed to demonstrate a flaw in a permit resulting from permit record-focused concerns, the EPA has denied related claims alleging a deficiency with the permit record with respect to 40 C.F.R. § 70.7(a)(5). *See, e.g., In the Matter of Waelz Sustainable Products, LLC*, Order on Petition No. V-2021-10 at 18–19 (March 14, 2023); *US Steel Fairfield Order* at 8–10; *In the Matter of U.S. Dep't of Energy, Hanford Operations*, Order on Petition Nos. X-2014-01 & X-2013-01 at 25–26 (May 29, 2015); *In the Matter of Tesoro Refining and Marketing Co., Martinez, California Facility*, Order on

[19] Memorandum from Stephen D. Page*, Implementation Guidance on Annual Compliance Certification Reporting and Statement of Basis Requirements for Title V Operating Permits*, Att. 2 (April 30, 2014).

Petition No. IX-2004-6 at 25, 44 (March 15, 2005); *In the Matter of Sirmos Division of Bromante Corp.*, Order on Petition No. II-2002-03 at 15–16 (May 24, 2004) (*Sirmos Order*).

Here, as explained in the EPA's response to Claim 2 in section IV.B of this Order, the Petitioners have failed to demonstrate any flaw in the Permit with respect to any specific monitoring condition.

Moreover, the relevant public comments in this case were not specific enough to necessitate a more detailed response from VADEQ. The public comments questioned the adequacy of monitoring for numerous emissions units by describing general circumstances under which the commenters would be skeptical of compliance assurance but did not refer to specific permit terms or emissions units (with few exceptions). When public comments did refer to specific emissions units or monitoring conditions, VADEQ provided more detail justifying those conditions:

> As written, the only specific applicable requirements that the comment alleges have insufficient monitoring is the PM limit for the Area 11 centrifuges and the SO_2 limit for TW-18. Even for these two applicable requirements, the comment does not address the monitoring requirements already included in the draft permit, nor why the existing monitoring requirements are insufficient to provide a reasonable assurance of compliance. . ..
>
> The Area 11 centrifuges (controlled by scrubber DC-25) included in this comment were re-tested on September 19, 2017, and demonstrated compliance with the permitted PM/PM_{10} limit of 0.35 lb/hr (the highest emissions rate of three test runs was 0.08 lb/hr). Since $PM_{2.5}$ is a subset of PM_{10}, the test also demonstrated compliance with the $PM_{2.5}$ limit of 0.10 lb/hr. AdvanSix is required by the draft permit to monitor the scrubber (DC-25) liquid flow rate and differential pressure, and to keep records of these parameters (as well as records of all scheduled and unscheduled maintenance for process equipment and air pollution control equipment, an inventory of spare parts to minimize air pollution control equipment breakdowns, written operating procedures for all process equipment and air pollution control equipment, and operator training records). Given the compliance margins and low levels of emissions, this periodic monitoring is considered sufficient with an adequate margin of safety.
>
> A repeat stack test of TW-18 SO_2 emissions was conducted on October 8, 2015, and demonstrated compliance with the permit limit of 2.2 lb/hr (the highest emission rate of three test runs was 0.32 lb/hr). SO_2 emissions from TW-18 (Area 9 C-train disulfonate tower) are controlled by a packed bed scrubber (SE-19). Condition 162.c.ii of the draft permit requires the facility to establish and maintain the total pressure drop across and the scrubber liquid flow rate for the TW-18 packed bed scrubber (SE-19) necessary to demonstrate compliance with the sulfur dioxide emission limit for TW-18. AdvanSix is also required by the draft permit to monitor the scrubber (SE-19) liquid flow rate and differential pressure, and to keep records of these control device operating parameters (as well as maintain written operating procedures for all process equipment and air pollution control equipment, an inventory of spare parts to minimize duration of air pollution control equipment breakdowns, records of scheduled and unscheduled maintenance, and operator training records). Additionally, the facility instituted

> enhanced monitoring of the mist eliminators for all five of the Area 9 disulfonate towers as a result of the failed SO_2 stack test for TW-18, which included installing visual flow indicators to ensure flow to the spray nozzles of the mist eliminator in each tower, and a sight glass for the observation of the demister packing (candles) to ensure that the flow through each mist eliminator is uniform. The flow indicators and sight glasses are observed daily. This monitoring will be added to the permit, along with associated recordkeeping requirements.

RTC at 14–15.

The Petitioners do not acknowledge these responses and do not mention in the Petition the limits or monitoring conditions that the responses reference. In addition, the only permit terms the Petitioners reference with any specificity in the Petition (related to the KAPCS-1 unit) were not mentioned in public comments.

Therefore, to the extent that Claim 3 alleges that VADEQ's permit record fails to satisfy 40 C.F.R. § 70.7(a)(5) or § 70.7(h)(6) because VADEQ did not justify the adequacy of monitoring to assure compliance for each emissions unit not subject to CEMS or periodic stack testing, the EPA denies Claim 3.

D. Claim 4: The Petitioners Claim That "[VA]DEQ Unreasonably Refused to Hold a Public Hearing on the AdvanSix Title V Permitting Action, Ignoring Significant Public Interest."

Petition Claim: The Petitioners claim that VADEQ violated the requirement in 40 C.F.R. § 70.7(h) to offer an opportunity for a public hearing on the draft permit. Petition at 32; *see id.* at 32–40.

The Petitioners claim that title V regulations require VADEQ to "offer[] an opportunity for public comment and a hearing on the draft permit." *Id.* at 32 (quoting 40 C.F.R. § 70.7(h); citing 42 U.S.C. § 7661a(b)(6)). The Petitioners assert that "regulations at [9VAC5-80-35 C(1)] go beyond the federal title V regulations and specify circumstances under which [VADEQ] must grant a hearing[,]" specifying the receipt of 25 individual requests for a public hearing as a criterion, among others, for when VADEQ must hold such a hearing. *Id.* at 33. The Petitioners argue that VADEQ still has discretion to hold a public hearing even if it is not required to do so according to Virginia's title V regulations at 9VAC5-80-35 E. *Id.* The Petitioners claim that VADEQ abused its discretion in denying requests to hold a hearing solely because it did not receive 25 individual requests "without regard to demonstrated, widespread public interest in the permit proceeding." *Id.*

The Petitioners describe nine individual requests, listing some of the reasons expressed therein for requesting a hearing: "[T]he facility's substantial emissions and their potential health effects, the disproportionate burden that Hopewell residents face from air pollution and other environmental hazards, AdvanSix's history of environmental violations and safety failures, and the need to allow the views of affected community members to influence [VA]DEQ's permitting decision." *Id.*

The Petitioners claim that VADEQ's decision to deny the requests based on receiving fewer than 25 requests is arbitrary "and does not give effect to title V's requirement that the public be given an opportunity for a hearing." *Id.* at 34.

The Petitioners quote a decision by the EPA's Environmental Appeals Board (EAB) that found significant public interest had been demonstrated for a draft construction permit when only three requests for a public hearing were submitted:

> "[G]auging the degree of public interest is not simply a numbers game," but involves considering other factors including "the materiality of issues raised by requesters, the degree of public interest in related State or local proceedings, the amount of media coverage, the significance of the permit action, whether any substitute process was provided, and demographic information." Notably, the EAB agreed "that permitting authorities should consider environmental justice when deciding whether to hold a public hearing," and that "environmental justice considerations . . . are plainly relevant to a permit issuer's decision as to whether to exercise its discretion to hold a public hearing under [federal regulations]."'

Id. at 34–35 (quoting *Sierra Pacific Industries*, 16 E.A.D. 1 at 23–24 (EAB 2013)). The Petitioners argue that considering the same factors as the EAB applied in the *Sierra Pacific* decision in this case shows that there was significant public interest in the draft permit and, therefore, VADEQ should have held a public hearing. *Id.* at 35. The Petitioners then provide details according to each factor from the *Sierra Pacific* decision in support. *Id.* at 36–37.

Additionally, the Petitioners claim that the denial of hearing requests was "contrary to the policy embodied in EPA air permitting guidance and in the Virginia Environmental Justice Act." *Id.* at 37 (citing EPA Office of Air and Radiation *EJ in Air Permitting – Principles for Addressing Environmental Justice Concerns in Air Permitting* at 2 and 3 (December 22, 2022)).

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

Permitting authorities are not obligated to hold a public hearing on all title V permit proceedings, but rather are required to "offer [] an *opportunity* for . . . a hearing" of "permit actions, including applications, renewals, or revisions." 42 U.S.C. § 7661a(b)(6); 40 C.F.R. § 70.7(h) (emphasis added). The EPA has previously interpreted these federal requirements to require "a hearing *where appropriate*." 57 Fed. Reg. 32290 (July 21, 1992) (emphasis added). Part 70 does not provide specific guidance on when, or under what circumstances, a hearing should be held.

When confronted with similar claims in the past, the EPA has explained:

> Permitting authorities have considerable discretion when determining whether to hold a public hearing . . . Neither the Act nor [the] EPA's implementing regulations require a permitting authority to hold a hearing when one is requested . . . The permitting authority must independently analyze each request and make a reasonable judgment as to whether the facts before it warrant granting a particular request[.]

In the Matter of ExxonMobil Refining and Supply Company, Complex Baton Rouge, Order on Petition No. VI-2004-01 at 11–12 (June 29, 2005); *see, e.g., In the Matter of Piedmont Natural Gas, Inc.,*

Wadesboro Compressor Station, Order on Petition No. IV-2014-13 at 5–6 (March 20, 2019); *In the Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 13–15 (September 14, 2016) (*Hu Honua II Order*); *In the Matter of Bristol-Meyers Squib Co.*, *Inc.*, Order on Petition No. II-2002-09 at 7–8 (February 18, 2005); *Sirmos Order* at 6–7; *see also In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 8–9 (December 14, 2012).

The *Sierra Pacific* decision cited by the Petitioners concerned the EPA's issuance of a prevention of significant deterioration permit and specifically the EPA's interpretation of 40 C.F.R. § 124.12 where the term "significant degree of public interest" was undefined. This regulation is not directly relevant to a title V permitting action.

The EPA has also explained that, in considering requests for a hearing "it is not unreasonable for the permitting authority to take account of written comments, including those from the Petitioner, that were received with the request for the public hearing." *Hu Honua II Order* at 15.

In this case, VADEQ denied the requests for a public hearing on the draft permit, explaining:

> Public hearing requests for draft Title V renewal permits . . . are subject to the public participation provisions of Virginia's Title V regulation (9VAC5-80-270 *et al.* of the Virginia Regulations for the Control and Abatement of Air Pollution). . . 9VAC5-80-270 C references 9VAC5-80-35, which applies to public hearing requests for draft federal operating permits under 9VAC5 Chapter 80 Article 1 and specifies the criteria for evaluation requests for public hearings received during the comment period. 9VAC5-80-35 C states that the Director of DEQ shall review all public hearing requests received during the comment period and, within 30 days of the end of the comment period, shall grant a hearing if the Director finds:
>
> 1. That there is significant public interest in the issuance, denial, amendment, modification, or revocation of the permit in question as evidenced by receipt of a minimum of 25 individual requests for a public hearing;
>
> 2. The requesters raise substantial, disputed issues relevant to the issuance, denial, amendment, modification, or revocation of the permit in question; and
>
> 3. The action requested by the interested party is not on its face inconsistent with, or in violation of, the Virginia Air Pollution Control Law, federal law or any regulation promulgated thereunder.
>
> In this case, all public participation mandated by law and regulation, including specific advertisement in the city where the facility is located, as well as an extension to the comment period beyond the statutory requirement, has been performed for the draft permit. In addition, the draft permit addresses all applicable federal requirements in effect for the facility as indicated in the SOB. The criteria in 9VAC5-80-35 C of the Virginia Regulations which require the granting of a public hearing were not met, as fewer than 25 individual requests for a public hearing were received. Accordingly, a public hearing is not required for the draft AdvanSix Title V renewal permit under Virginia's Title V

regulations at 9VAC5-80-270 *et al.* or under Virginia's permitting regulations at 9VAC5-80-35 *et al.*

RTC at 5–6.[20]

VADEQ's responses also provided emissions and attainment information to address requests for a public hearing that expressed interest in "more information regarding the draft permit's alignment with EPA's recently updated standards for $PM_{2.5}$." *Id.* at 4; *see id.* at 4–5. Addressing other concerns raised in the requests, VADEQ stated that emissions from the facility have significantly decreased since the issuance of the prior title V renewal permit in 2014, partly due to the recent shutdown of a coal-fired facility supplying steam to the AdvanSix facility. *Id.* at 4–5. VADEQ also explained that the Permit's purpose is to incorporate all applicable federal requirements and not "to create new applicable requirements, such as emission limits, fuel restrictions, closure schedules, or to consider less-polluting alternative processes." *Id*. at 5. Therefore, VADEQ found that "additional public engagement pursuant to the [Virginia Environmental Justice Act] is not required and would not be beneficial at this time[.]" *Id*. at 5.

The Petitioners have not demonstrated that VADEQ's decision to deny the requests for a public hearing on the draft permit was contrary to Virginia's title V regulations, the CAA, or part 70. Nor have the Petitioners shown that VADEQ's decision was an otherwise unreasonable exercise of its discretion. For these reasons, the EPA denies Claim 4.

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 and object to the issuance of the Permit as described in this Order.

Dated: December 16, 2024

Michael S. Regan
Administrator

[20] Although both VADEQ and the Petitioners describe the criteria for holding public hearings in 9VAC5-80-35 C as part of Virginia's title V regulations, the EPA notes that the revisions to 9VAC5-80-270 incorporating these criteria were not part of the EPA's approval of Virginia's title V operating program in 2001 because they were revised thereafter, and the agency's records do not indicate that the state notified the agency of or sought approval for these particular revisions. *See* 66 Fed. Reg. 62961 (December 4, 2001); 25:6 VA.R. 1235-36, 1238 November 24, 2008; 39:5 VA.R. 429-30 October 24, 2022.