BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Petition No. IV-2024-32

In the Matter of

Tennessee Valley Authority, Shawnee Fossil Plant

Permit No. V-23-006

Issued by the Kentucky Division for Air Quality

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ORDER DENYING A PETITION FOR OBJECTION TO A TITLE V OPERATING PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated December 20, 2024 (the Petition) from Kentucky Resources Council, National Parks Conservation Association, Sierra Club, and Kentucky Conservation Committee (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. V-23-006 (the Permit) issued by the Kentucky Division for Air Quality (KDAQ) to the Tennessee Valley Authority (TVA), Shawnee Fossil Plant (Shawnee Plant) in McCracken County, Kentucky. The Permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and 401 Kentucky Administrative Regulations (KAR) 52:020. *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 denies the Petition requesting that the EPA Administrator object to the Permit.

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 Kentucky submitted a title V program governing the issuance of operating permits in 1993. The EPA granted full approval of Kentucky's title V operating permit program in 2001. 66 Fed. Reg. 54953 (Oct. 31, 2001). This program, which became effective on November 30, 2001, is codified in 401 KAR 52:020.

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).

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.

[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*.

§ 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 persuasive.").[6] Relatedly, the EPA has pointed out in numerous previous orders that general assertions

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[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.

[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*).

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 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*.

[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) (*Hu Honua II Order*); *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).

III. BACKGROUND

A. The Shawnee Plant

The Shawnee Plant, owned by TVA, is an electric utility power generating station established in 1957 and located in McCracken County, Kentucky. The facility consists of multiple emission sources including nine coal-burning electrical generating unit boilers, various coal handling sources, and various storage sources. The facility is a title V major source of several individual hazardous air pollutants, total hazardous air pollutants, particulate matter (PM_{10} and $PM_{2.5}$), carbon monoxide, volatile organic compounds, sulfur dioxide (SO_2), and nitrogen oxides (NO_x).

B. Permitting History

TVA first obtained a title V permit for the Shawnee Plant in 2004, which was subsequently renewed. On July 22, 2022, TVA applied for a minor modification to the title V permit to install selective catalytic reduction (SCR) reactors onto emission units 2, 3, and 5–9. On November 18, 2022, TVA applied for a title V permit renewal. On August 14, 2023, TVA applied for a significant modification to the title V permit to incorporate an emission limit applicable to the Shawnee Plant's nine boilers of 8,208 tons per year (tpy) of SO_2 on a rolling 12-month basis. KDAQ published notice of a draft renewal permit (Draft Permit) incorporating both modifications on February 13, 2024, subject to a public comment period that ran until March 14, 2024. On September 9, 2024, KDAQ submitted the Proposed Permit, along with its statement of basis document (SOB) and responses to public comments (RTC), to the EPA for its 45-day review. The EPA's website indicated that the EPA's 45-day review period ended on October 23, 2024, during which time the EPA did not object to the Proposed Permit.

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 website indicated that the EPA's 45-day review period expired on October 23, 2024. Thus, any petition seeking the EPA's objection to the Permit was due on or before December 23, 2024. The Petition was submitted December 20, 2024. Therefore, the EPA finds that the Petitioners timely filed the Petition.

IV. EPA DETERMINATIONS ON PETITION CLAIMS

A. Claim 1: The Petitioners Claim That "The Draft Permit and Statement of Basis Lacked Sufficient Legal and Factual Basis for a New Sulfur Dioxide Limit."

Petition Claim: The Petitioners claim that Draft Permit and SOB failed to set forth the legal and factual basis for a limit on SO_2 emissions, thus depriving them of the opportunity to effectively comment on the Draft Permit, in violation of 40 C.F.R. § 70.7(a)(5), (h), and (h)(2). *See* Petition at 5–7.

First, the Petitioners note that the Draft Permit contained a new plant-wide[10] annual SO_2 limit (restricting SO_2 emissions to 8,208 tpy), which cited simply "Regional Haze" in brackets following the condition. *Id.* at 5. The Petitioners claim that the Draft Permit and Draft SOB offered no further explanation for this limit. *Id.* The Petitioners claim that neither a letter from KDAQ to TVA concerning the limit nor a four-factor analysis,[11] which the Petitioners characterize as the legal and technical basis for the limit, were posted on KDAQ's Public Notices webpage during the public comment period for the Draft Permit. *Id.*

The Petitioners assert that KDAQ was required to "set[ ] forth the legal and factual basis for the draft permit conditions," provide "an opportunity for public comment[,]" and "respond in writing to all significant comments raised during the public participation process[.]" *Id.* (quoting 40 C.F.R. § 70.7(a)(5), (h), and (h)(6); citing 42 U.S.C. § 7661a(a); 57 Fed. Reg. 32250, 32251 (July 21, 1992); *In the Matter of United States Steel Corporation, Edgar Thomson Plant*, Order on Petition no. III-2023-15 at 2 (Feb. 7, 2024)). The Petitioners continue: "In the public notice, the permitting authority is required to list where interested parties may obtain, among other things, the application and all relevant supporting materials." *Id.* (citing 40 C.F.R. § 70.7(h)(2)). The Petitioners allege that, in violation of these requirements, the Draft Permit and Draft SOB lacked any explanation of the legal basis for the new SO_2 limit, which should have included a "description of the underlying monitoring, modeling, and emissions, or required four-factor analysis." *Id.* at 6.

Similarly, the Petitioners claim that it is still unclear how the Shawnee Plant will comply with the SO_2 limit, and, therefore, the SOB lacks the "factual basis" for the limit. *Id.*; *see id.* at 7. The Petitioners contend that the Permit implies spray dry absorber (SDA) systems will be installed on units 2, 3, and 5-9, referring to testing requirements in Condition 3.1, but the Permit fails to mention these controls in the Control Equipment Summary for these units. *Id.* at 6. The Petitioners claim that, since any changes to operating conditions needed to comply with the SO_2 limit could impact the enforceability of the limit and emissions of other pollutants, any such compliance information should have been included in the Permit and SOB. *Id.*

Ultimately, the Petitioners assert they were unable to effectively comment on the Draft Permit:

> The public, including petitioners, also lacked sufficient information to fully evaluate the Permit's purported compliance with applicable requirements of the CAA, including the requirements of the [Regional Haze Rule] and applicable implementation plan. Were that information available, the public could have provided meaningful comment on the justification proffered in a draft permit, including a technical and legal review of four-factor analysis that should have supported the proposed SO_2 limit—an opportunity the Title V implementing regulations require.

[10] Although the Petitioners describe the SO_2 limit as "plant-wide," the EPA notes that it is only applicable to the facility's nine boilers.

[11] The Petitioners cite Petition Exhibit 3, *Letter from Michael Kennedy, P.E., Director, KYDAQ, to Shannon Benton, Shawnee Fossil Plant Manager, Tennessee Valley Authority (February 14, 2023)*; Petition Ex. 4, *Letter from Michael K. Bottorff, Plant Manager, Shawnee Fossil Plant to Melissa Duff, Director, Kentucky Division for Air Quality (Oct. 26, 2020), and Enclosure, Regional Haze Four-Factor Analysis, Tennessee Valley Authority Shawnee Fossil Plant, Prepared by Mike Zimmer, Principal Consultant, Trinity Consultants (Oct. 23, 2020)*.

Id. at 6. The Petitioners claim they "could have (and would have) commented on how applicable requirements and the four-factor analysis show SO_2 controls to be 'not only necessary, but achievable.'" *Id.* at 7.

The Petitioners allege that KDAQ "acknowledges the insufficient legal basis in the Response to Comments" and, by including additional explanation in a revised SOB, "reinforc[es] the fact that sufficient information was not available at the time of the public comment period." *Id.* at 6–7 (citing RTC at 10, 19–20; SOB at 3).

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

The EPA has previously explained that when a petition seeks the EPA's objection based on the unavailability of information during the public comment period, a petitioner must demonstrate that the unavailability of information deprived the public of the opportunity to meaningfully participate during the permitting process. In evaluating such claims, the EPA generally considers whether the unavailability of information resulted in, or may have resulted in, a flaw in the permit's content.

> Without such a showing, it may be difficult to conclude that the ability to comment on the information would have been meaningful. In implementing the requirements for public participation under title V, the EPA is mindful that the part 70 regulations were promulgated in light of CAA section 502(b)(6)'s requirement that state permit programs include "[a]dequate, streamlined, and reasonable procedures . . . for public notice, including offering an opportunity for public comment and a hearing." 42 U.S.C. § 7661a(b)(6).

In the Matter of U.S. Department of Energy, Hanford Operations, Order on Petition No. X-2026-13 at 11 (Oct. 15, 2018); *see In the Matter of Sirmos Division of Bromante Corp.,* Order on Petition No. II-2002-03 at 15 (May 24, 2004) (*Sirmos Order*); *In the Matter of Plains Marketing et al.*, Order on Petition Nos. IV-2023-1 & IV-2023-3 at 15–16 (Sept. 18, 2023) (*Plains Marketing Order*).

Here, the Petitioners fail to connect their claims about the unavailability of information during the public comment period to any flaw in the Permit. The Petitioners argue that if they had had access to more information about the new limit on SO_2 emissions, they would have commented that further controls were necessary. However, the Petitioners do not specify what controls they would have proposed, nor do they cite any authority that would have compelled the inclusion of these unspecified controls in the Permit. The Petitioners' references to a four-factor analysis appear more related to requirements applicable to KDAQ under the Regional Haze Rule—*e.g.*, 40 C.F.R. § 51.308(f)(2)(i)—rather than any requirement applicable to the Shawnee Plant. The Petitioners identify no requirement under the Regional Haze Rule or any associated state implementation plan (SIP) applicable to the Shawnee Plant that is not accounted for in the Permit.

The majority of the Petitioners' arguments focus on the content of the SOB (and primarily the *Draft SOB*), alleging that it lacked the legal and factual basis for the new SO_2 limit. The EPA generally evaluates claims concerning information in the statement of basis by considering whether the permit record as a whole—not only the statement of basis, but also the responses to comments, and

potentially other parts of the permit record—supports the terms and conditions of the permit. *See e.g., Sirmos Order* at 15–16; *Hu Honua II Order* at 10–11; *In the Matter of US Steel Seamless Tubular Operations, LLC, Fairfield Works Pipe Mill*, Order on Petition No. IV-2021-7 at 8–10 (June 16, 2022). That is, the EPA will allow information contained anywhere in the permit record to satisfy the requirements of § 70.7(a)(5). This holistic view of the permit record is consistent with obligations on permitting authorities and petitioners throughout the permitting process. The public may submit comments with questions about the basis of a permit term that are not fully answered in the statement of basis, and the permitting authority is obligated to respond. 40 C.F.R. § 70.7(h)(6). A petitioner is expected to address the collective permit record, including the responses to comments, if it believes the permit record insufficient to support a permit term. 40 C.F.R. § 70.12(a)(2)(vi).

Here, the Petitioners acknowledge that KDAQ provided information requested in public comments in the RTC and revised SOB. Indeed, the Petitioners characterize this addition of information as a concession by KDAQ that the Draft SOB was deficient, supporting the basis of their petition claim. However, this characterization is inconsistent with the public participation procedures of title V. The exchange between the Petitioners and KDAQ in this instance appears to have followed the proper sequence outlined above—KDAQ noticed a draft permit with a statement of basis, the Petitioners submitted comments requesting additional information about the basis of a permit term, KDAQ responded and supplied additional information in its RTC and revised SOB, and the Petitioners submitted a title V petition. The Petitioners have not demonstrated that by supplementing the permit record with information requested during the public comment period KDAQ violated the title V public participation requirements in 40 C.F.R. § 70.7(a)(5), (h)(2), or (h)(6).

To the extent the Petitioners claim that the revised SOB is still deficient because it lacks information explaining how the Shawnee Plant will reduce its emissions to comply with the SO_2 limit, which the Petitioners characterize as the factual basis of the limit, the Petitioners fail to demonstrate that the information in the SOB is insufficient. As is clear in the Permit, the SOB, and the RTC, the Permit assures compliance with the SO_2 limit via a continuous emissions monitoring system (CEMS). Permit at 10; SOB at 3; RTC at 5, 6, 10.[12] The Petitioners speculate that changes to hours of operation or throughput could "significantly impact both the SO_2 limit's enforceability, as well as potentially impact emissions of other pollutants," Petition at 6, but fail to provide any analysis related to these hypothetical impacts. The Petitioners' assertion that the Permit implies SDAs will be installed on emission units 2, 3, and 5–9 is incorrect. *See* SOB at 5 (indicating that SDA systems are only installed on units 1 and 4); RTC at 16 (explaining that the performance tests establishing sulfuric acid mist emission rates that the Petitioners reference are related to the installation of SCR—not SDA—systems on units 2, 3, and 5–9).

The Petitioners also claim that the Draft Permit should have been accompanied by a four-factor analysis to support the SO_2 limit. As previously explained, this analysis appears to relate to requirements applicable to KDAQ—not the Shawnee Plant—under the Regional Haze Rule, and the Petitioners fail to explain why KDAQ was required to make such an analysis available during the public comment period on the Draft Permit. Any concerns regarding requirements applicable to KDAQ under the Regional Haze Rule are more appropriately addressed through KDAQ's public notice of its Regional Haze SIP and proceedings related to the EPA's review of KDAQ's Regional Haze SIP, not through a title V

[12] The EPA addresses the Petitioners' challenges to the compliance assurance method for the SO_2 limit in Claim 4.

petition. As KDAQ noted in its RTC: "The public comment period for the regional haze state implementation plan is separate from the public comment period for the draft permit." RTC at 19–20. The EPA notes that KDAQ noticed its draft Regional Haze SIP on June 4, 2024, and the public comment period ran until July 11, 2024. Once KDAQ submits its Regional Haze SIP to the EPA and the EPA proposes to take action on KDAQ's Regional Haze SIP, members of the public will have an opportunity to comment on the EPA's proposed action and voice any concerns to the EPA regarding related requirements.

In summary, the Petitioners fail to demonstrate any deficiency in the Permit or SOB, or that KDAQ violated any of the public participation requirements of title V. The EPA, therefore, denies the Petitioners' request for objection on this claim.

B. Claim 2: The Petitioners Claim That "The Proposed Permit Grants an Improper, Over-Broad Permit Shield for Regional Haze Requirements."

Petition Claim: The Petitioners claim that the Draft Permit "contained an over-broad permit shield without clearly stating the applicable requirements to which it applied" and that related revisions to the Proposed Permit following the public comment period necessitated an additional round of public participation. Petition at 8; *see id.* at 7–8.

The Petitioners assert that "TVA requested that [KDAQ] grant it a permit shield as part of this Title V permit" and note that the Permit includes a permit shield provision stating: "Compliance with the conditions of this permit shall be considered compliance with: (1) Applicable requirements that are included and specifically identified in this permit; and (2) Non-applicable requirements expressly identified in this permit." *Id.* at 7 (quoting Permit at 58). The Petitioners claim that 401 KAR 52:020 Section 11 requires KDAQ to "specifically identify" the permit provisions to which the permit shield applies and that the Draft Permit did not cite the "Regional Haze Rule." *Id.* (citing 42 U.S.C. § 7661c(f)).

Noting that Kentucky's Regional Haze SIP had not yet been finalized by the state (or submitted to and approved by the EPA) at the time of the public comment period on the Draft Permit, and arguing that KDAQ failed to explain how the SO_2 limit discussed in Claim 1 satisfies "the [Regional Haze Rule] and the four statutory factors," the Petitioners assert that "it is premature, at best, to claim that, under the permit shield provision, compliance with the proposed SO_2 emission cap satisfies Shawnee's Regional Haze obligations for the second planning period." *Id.* at 8 (citing 89 Fed. Reg. 63884 (Aug. 06, 2024)).

The Petitioners state:

> Petitioners do not object here to the specific limit, and acknowledge that the level of the SO_2 limit is properly determined through the Regional Haze SIP process—which was only conducted after this permit was issued. Petitioners only claim that there was no way to determine at the time of the public comment period whether the permit satisfied "all applicable requirements," and therefore improperly provided a permit shield for requirements that had not yet been determined (and could not be in a single permit).

Id. at 8 n.13.

Additionally, the Petitioners claim that KDAQ's addition of "the applicable regulation, 40 CFR 51, Subpart P, Protection of Visibility" to the Permit and, by extension, the permit shield, following the public comment period, was a significant permit modification that required a new round of public notice and comment. *Id.* at 8 (citing RTC at 12; Permit at 3, 10). The Petitioners characterize this revision as a change seeking "to avoid an applicable requirement," *i.e.*, a four-factor analysis, and argue that such changes constitute significant permit modifications, which require a new round of public notice and comment. *Id.* (citing 40 C.F.R. § 70.7(e)(2)(i)(A)(4), (e)(4)(i), and (e)(4)(ii); RTC at 4, 12).

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

Permit Shield

A permitting authority may include a permit shield in a title V permit that provides that compliance with the title V permit "shall be deemed compliance with other [non-title V] applicable provisions" if, critically, "the permit includes the applicable requirements of such provision." 42 U.S.C. § 7661c(f); *see* 40 C.F.R. § 70.6(f). Part 70, section 70.2 defines applicable requirements "as they apply to emissions units in a part 70 source."

Here, the Permit contains a permit shield which provides: "Compliance with the conditions of this permit shall be considered compliance with: (1) Applicable requirements that are included and specifically identified in this permit; and (2) Non-applicable requirements expressly identified in this permit." Permit at 57–58.

The Petitioners appear to be concerned that this permit shield provision covers applicable requirements under the Regional Haze Rule because the Permit lists "40 CFR 51, Subpart P, Protection of Visibility ('Regional Haze')" under "Applicable Regulations" for emission units 1–9. Permit at 3. The Petitioners refer specifically to "the four statutory factors," implying that the permit shield covers requirements related to conducting a four-factor analysis (*e.g.*, 40 C.F.R. § 51.308(f)(2)(i)). However, the Permit does not include or specifically identify requirements related to conducting a four-factor analysis as applicable requirements for the Shawnee Plant. Moreover, permit shields do not cover requirements that apply to states, such as the requirement to conduct a four-factor analysis under the Regional Haze Rule, since they do not apply to "emissions units in a part 70 source" and, therefore, are not applicable requirements under title V. 42 U.S.C. § 7661c(f); 40 C.F.R. §§ 70.6(f), 70.2.

Indeed, the Permit does not appear to include and specifically identify *any* applicable requirements for the Shawnee Plant under the Regional Haze Rule, 40 C.F.R. § 51 subpart P, nor is the EPA aware of any. The Regional Haze Rule places requirements on states—not directly on sources such as the Shawnee Plant—to develop and implement air quality protection plans (Regional Haze SIPs) to reduce the pollution that causes visibility impairment in national parks and wilderness areas. Any concerns that the permit shield covers yet-to-be-determined applicable requirements under Kentucky's yet-to-be-finalized Regional Haze SIP are also baseless. The permit shield cannot and does not cover applicable requirements that do not yet exist. 40 C.F.R. § 70.6(f)(1) (providing that a permit shield may state "that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements *as of the date of permit issuance*" (emphasis added)). Since Kentucky has not finalized its

Regional Haze SIP or submitted it to the EPA (and the EPA, therefore, has not approved the SIP), the Regional Haze SIP does not contain applicable requirements for the Shawnee Plant.

Therefore, the EPA finds no merit in the Petitioners' claims that the permit shield is over-broad and denies the Petitioners' request for objection on this claim.

Additional Round of Public Notice and Comment

The EPA's regulations specify when public notice and comment is required for specific types of permit actions, including initial permits, renewal permits, and significant permit modifications. 40 C.F.R. § 70.7(h). However, neither the CAA nor the EPA's regulations expressly speak to when a second public comment period is required based on changes made to a permit *before it is finalized* (*i.e.*, within the same permit action—between draft and proposed permits), as is the case here. The Petitioners' arguments citing the criteria for permit modifications are not, therefore, directly relevant to whether KDAQ was required to re-notice the Permit for public comment in this case. The EPA's framework for evaluating this issue recognizes, first of all, the permitting authority's discretion in deciding whether to re-notice a permit. This discretion, however, is not unlimited and involves a fact-based, case-specific decision. In determining whether a second public comment period was necessary, the EPA has applied the administrative law principle of "logical outgrowth" (typically used in the context of rulemakings) to title V permitting, stating:

> The CAA and its implementing regulations at part 70 provide for public comment on "draft" permits and generally do not require permitting authorities to conduct a second round of comments when sending the revised "proposed" permit to EPA for review. It is a basic principle of administrative law that agencies are encouraged to learn from public comments and, where appropriate, make changes that are a "logical outgrowth" of the original proposal.

In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC, Order on Petition No. II-2000-07 at 7 (May 2, 2001) (citations omitted). This prevents a never-ending cycle of public notice each time a permitting authority provides additional information in response to public comments. "The question under the 'logical outgrowth' test is whether the final action is in character with the original proposal and a logical outgrowth of the notice and comments." *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 11 (Apr. 20, 2007). Put another way: "In determining whether a changed provision in a final permit qualifies as a logical outgrowth of a draft permit, the [EPA Environmental Appeals] Board has held that the 'essential inquiry' is whether interested parties reasonably could have anticipated the final permit condition from the draft permit." *In re Springfield Water and Sewer Commission*, 18 E.A.D. 430, 451 (EAB 2021) (citations omitted).

Here, following the public comment period, KDAQ added to the Permit a reference to "40 CFR 51, Subpart P, Protection of Visibility ('Regional Haze')" under "Applicable Regulations" for emission units 1–9 and changed a citation to "40 CFR 51, Subpart P (Regional Haze Rule)" following the SO_2 limit in the Permit (the Draft Permit had cited simply "Regional Haze" in the same location). Permit at 3, 10; *see* RTC at 12. The Petitioners argue that these changes, in combination with the permit shield, amount to the addition of an entirely new applicable requirement designed to avoid an applicable requirement.

Petition at 8. This characterization is incorrect. The SO_2 limit itself was already present in the Draft Permit and it already referenced "Regional Haze," albeit in a limited way. The only changes to the Permit challenged by the Petitioners involve citations of the Regional Haze Rule, which, as previously explained, had no substantive effect on the extent of the permit shield and did not avoid any requirement applicable to the Shawnee Plant under the Regional Haze Rule (since none exist), contrary to the Petitioners' claims. Refining the citation of the Regional Haze Rule, in response to public comments requesting additional information about the basis for the SO_2 limit, was clearly a logical outgrowth of the Draft Permit and public comment process. KDAQ was not, therefore, required to re-notice the Permit for a second round of public notice and comment, and the EPA denies the Petitioners' request for objection on this claim.

C. Claim 3: The Petitioners Claim That "The Proposed Permit Contains New Nitrogen Oxides Control Requirements Lacking Legal and Factual Basis and Required Deadlines."

Petition Claim: The Petitioners claim that the Draft Permit and Draft SOB failed to set forth the legal and factual basis for the installation of SCR controls in violation of 40 C.F.R. § 70.7(a)(5). *See* Petition at 9.

The Petitioners assert that the Permit "anticipates the addition of SCR on units 2–3 and 5–9." *Id.* at 9 (citing Permit at 58–59). The Petitioners state that KDAQ explained, in response to their comments on the Draft Permit, that these controls were "for the purpose of facilitating NO_X reductions to meet applicable NO_X budgets for interstate transport (Cross State Air Pollution Rule, or CSAPR, and EPA's Good Neighbor Rule)" and that KDAQ added this explanation to the revised SOB. *Id.* (quoting RTC at 13). The Petitioners characterize this addition to the SOB as evidence "reinforcing the fact that sufficient information was not available at the time of the public comment period." *Id.* Because such information was not available during the public comment period, the Petitioners argue, they were "unable to provide comment on the inclusion of an applicable requirement, including whether the requirement is sufficiently incorporated and there are sufficient provisions to assure compliance." *Id.* (citing 40 C.F.R. § 70.6(a)(1)).

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

As previously explained in the EPA's response to Claim 1, when a petition seeks the EPA's objection based on the unavailability of information during the public comment period, a petitioner must demonstrate that the unavailability of information deprived the public of the opportunity to meaningfully participate during the permitting process. In evaluating such claims, the EPA generally considers whether the unavailability of information resulted in, or may have resulted in, a flaw in the permit's content.

Here, the Petitioners fail to articulate a connection between their claims about the unavailability of information during the public comment period and any alleged deficiency in the Permit. The Petitioners do not allege any unresolved flaws in the Permit or permit record regarding the SCR controls, much less demonstrate that those flaws arose from the unavailability of information during the public comment period. The Petitioners claim they were unable to provide comment on the incorporation of an applicable requirement and whether the Permit sufficiently assures compliance

with the applicable requirement. However, the Petitioners raise no concerns related to those aspects of the SCR controls in the Petition.

Similar to the situation presented in Claim 1, The exchange between the Petitioners and KDAQ on this topic appears to have followed the proper sequence—KDAQ noticed a draft permit with a statement of basis, the Petitioners submitted comments requesting additional information about the basis of a permit term, KDAQ responded and supplied additional information in its RTC and revised SOB, and the Petitioners submitted a title V petition. The Petitioners have not demonstrated that by supplementing the permit record with information requested during the public comment period KDAQ violated any of the title V public participation requirements. The EPA, therefore, denies the Petitioners' request for objection on this claim.

D. Claim 4: The Petitioners Claim That "The Proposed Permit Lacks Adequate Monitoring Provisions for the SO_2 Limit."

Petition Claim: The Petitioners state that "[a]ll [t]itle V permits are required to contain adequate monitoring, recordkeeping, reporting, and other requirements to assure compliance with applicable requirements." *Id.* at 10 (citing 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.1(b)).

The Petitioners note that the Permit requires CEMS to assure compliance with the limit on SO_2 emissions discussed in Claims 1 and 2 and relate the following associated conditions:

> i) Each compliance period shall include only "valid operating hours" (*i.e.*, operating hours for which valid data are obtained for all the parameters used to determine hours [sic] SO_2 mass emission). Operating hours shall be excluded if either:
>
> A) The substitute data provisions of Part 75 are applied for any of the parameters used to determine the hourly SO_2 mass emissions; or
>
> B) An exceedance of the full-scale range of a monitoring system occurs for any of the parameters used to determine the hourly SO_2 mass emissions; and
>
> ii) Only unadjusted, quality-assured values for all the parameters used to determine hourly SO_2 mass emissions shall be used in the emissions calculations; and
>
> iii) The total SO_2 mass emissions shall be calculated for the initial and each subsequent 12-month rolling total compliance periods by summing the valid hourly SO_2 mass emissions values for all the valid operating hours in the compliance period for both common stacks.

Id. at 9 (quoting Permit at 10).

The Petitioners claim: "Because there is no limit on the number of required valid operating hours, the Proposed Permit lacks adequate monitoring, recordkeeping, and reporting requirements." *Id.* at 10. The Petitioners also claim that the Permit fails to specify what data should be used in any exceedance of the full-scale range of a monitoring system or what range is required for any parameter. *Id.* The Petitioners argue that the Permit effectively allows the SO_2 limit to "remain entirely un-monitored." *Id.* Additionally, the Petitioners state that KDAQ "does not appear to have responded directly to this point." *Id.* (citing RTC at 11–12).

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.

Here, the Permit sets forth the following compliance demonstration method for the 8,208 tpy limit on SO_2 emissions: "Compliance with the SO_2 regional haze emission limitation shall be determined using a continuous emission monitoring system (CEMS) for SO_2, installed, certified, operated, and maintained according to 40 C.F.R. part 75, along with the following requirements . . . ." the Permit then states the associated "valid operating hours" conditions quoted by the Petitioners. Permit at 10.

In its RTC, KDAQ explains the compliance assurance requirements for the SO_2 limit thus:

> The permit contains sufficient monitoring, recordkeeping, and reporting requirements to determine compliance with the sulfur dioxide (SO_2) limit. TVA has a continuous emissions monitoring system (CEMS) for SO_2 to continuously monitor and record emissions according to 40 CFR part 75. As an additional layer to ensure compliance, 40 CFR part 75 also specifies quality assurance and quality control tests to ensure the CEMS are performing properly. The hourly data and quarterly reports are publicly available at the Clean Air Markets Program Data website at https://campd.epa.gov/. In addition, TVA is required to maintain records and report the monthly and 12-month rolling total SO_2 mass emissions for both stacks on a semiannual basis.

RTC at 6.

The Petitioners do not acknowledge or address this response. *See* 40 C.F.R. § 70.12(a)(2)(vi). The Petitioners also do not consider any provisions of part 75—neither the quality assurance and quality control tests that KDAQ mentions in the RTC, nor other requirements under part 75 relevant to the operation and data collection of the SO_2 CEMS at the Shawnee Plant (*e.g.*, "Primary equipment hourly operating requirements" under 40 C.F.R. § 75.10(d) or "Minimum measurement capability requirements" under 40 C.F.R. § 75.10(f)). The Permit also contains other requirements related to SO_2 CEMS operation that the Petitioners fail to analyze.[13] These requirements are clearly relevant to the concerns about valid operating hours and parameter measurement ranges raised by the Petitioners.

[13] *See e.g.*, Permit at 15, Condition (i) requiring: "The permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable;" and Condition (k) requiring: "Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activates including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation from the monitoring requirements."

The Petitioners, therefore, have failed to address key elements of these issues. *See supra* n.8 and accompanying text.

Moreover, the Petitioners provide no analysis to explain why the Permit must include a "limit on the number of required valid operating hours," Petition at 10, or why it must specify what data must be used in an exceedance of the full-scale range of a monitoring system, or why it must specify what range is required for specific parameters, especially in light of the requirements mentioned above. The Petitioners thereby fail to demonstrate that "the new SO_2 limit could remain entirely un-monitored," *id.*, or that the Permit's monitoring, recordkeeping, and reporting requirements are insufficient to assure compliance in any other way. *See* 40 C.F.R. § 70.12(a)(2)(iii). The EPA, therefore, denies the Petitioners' request for objection on this claim.

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 deny the Petition as described in this Order.

Dated: July 10, 2025

Lee Zeldin
Administrator