# BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Petition No. IV-2023-09

In the Matter of

Century Aluminum of South Carolina, Inc.

Permit No. TV-0420-0015 v1.1

Issued by the South Carolina Department of Health and Environmental Control

# 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 June 9, 2023 (the Petition) from Sierra Club and the Environmental Integrity Project (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. TV-0420-0015 v1.1 (the Permit) issued by the South Carolina Department of Health and Environmental Control (SCDHEC) to the Century Aluminum of South Carolina, Inc. primary aluminum reduction facility (Century Aluminum) in Berkeley County, South Carolina. The operating permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and S.C. Reg. 61-62.70. 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 requesting that the EPA Administrator object to the Permit. Specifically, the EPA grants Claim 1 and grants in part and denies in part Claim 2.

#### II. STATUTORY AND REGULATORY FRAMEWORK

# A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to the EPA an operating permit program to meet the requirements of title V of the CAA and the EPA's implementing regulations at 40 C.F.R. part 70. The state of South Carolina submitted a title V program governing the issuance of operating permits in 1993. The EPA granted full approval of South Carolina's

title V operating permit program in 1995. 60 Fed. Reg. 32913 (June 26, 1995). This program, which became effective on July 26, 1995, is codified in S.C. Reg. 61-62.70.

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).

<sup>1</sup> 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).<sup>2</sup> Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.<sup>3</sup> 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

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<sup>&</sup>lt;sup>2</sup> See also New York Public Interest Research Group, Inc. v. Whitman, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (NYPIRG).

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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)).

<sup>&</sup>lt;sup>5</sup> See also Sierra Club v. Johnson, 541 F.3d at 1265–66; Citizens Against Ruining the Environment, 535 F.3d at 678.

persuasive.").<sup>6</sup> 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).<sup>7</sup> 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).<sup>8</sup>

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

<sup>&</sup>lt;sup>6</sup> 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).

<sup>&</sup>lt;sup>7</sup> 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).

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> 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, 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. The permitting authority should determine whether its response is a minor modification or a significant modification to the title V permit, as described in 40 C.F.R. § 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the modification is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 C.F.R. § 70.7(h) or the state's corresponding regulations.

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

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

## C. New Source Review

The major New Source Review (NSR) program encompasses two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major

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

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

The EPA has approved South Carolina's PSD, NNSR, and minor NSR programs as part of its SIP. *See* 40 C.F.R. § 52.2120 (identifying EPA-approved regulations in the South Carolina SIP). As relevant here, South Carolina's PSD provisions, as incorporated into South Carolina's EPA-approved SIP, are contained in S.C. Reg. 61-62.5, Std. 7.

### III. BACKGROUND

## A. The Century Aluminum Facility

Century Aluminum of South Carolina, Inc. owns and operates a primary aluminum reduction facility near Mt. Holly and Goose Creek, north of Charleston, in Berkeley County, South Carolina. The Century Aluminum facility produces high grade aluminum from aluminum oxide (alumina) using the Hall-Heroult electrolytic process. The aluminum manufacturing process consists of three basic steps: (1) the manufacture of carbon anodes from coke and pitch, (2) the reduction of alumina to produce molten aluminum, and (3) the processing of molten aluminum for end users. The facility emits various pollutants from different emission units and is subject to various CAA requirements, including title V and preconstruction permitting requirements. Relevant to the Petition are the facility's emissions of sulfur dioxide (SO<sub>2</sub>) from the green carbon plant, which produces green anodes from coke and pitch, as well as emissions of particulate matter (PM) from ridge vents, scrubbers, and dust collectors associated with multiple sets of potlines.

The EPA used EJScreen<sup>10</sup> to assess key demographic and environmental indicators within a five-kilometer radius of Century Aluminum. This analysis showed a total population of approximately 39,389 residents within a five-kilometer radius of the facility, of which approximately 41 percent are people of color and 29 percent are low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 13 environmental indicators. The following table identifies the Environmental Justice Indices for the five-kilometer radius surrounding the facility and their associated percentiles when compared to the rest of the State of South Carolina.

EJ Index	Percentile in State
Particulate Matter 2.5	32
Ozone	45
Diesel Particulate Matter	69
Air Toxics Cancer Risk	45
Air Toxics Respiratory Hazard	72
Toxic Releases to Air	84
Traffic Proximity	67
Lead Paint	24
Superfund Proximity	53
RMP Facility Proximity	47
Hazardous Waste Proximity	65
Underground Storage Tanks	60
Wastewater Discharge	46

# B. Permitting History

Century Aluminum first obtained a title V permit in 2001, which was last renewed in 2021 (the 2021 Title V Renewal Permit, included as Petition Ex. 6). On January 23, 2023, and January 27, 2023, Century Aluminum submitted two applications to revise its title V permit. The first application requested that the title V permit be administratively amended to incorporate the terms of a PSD permit issued on January 12, 2023, Permit No. 0420-0015-CY (the 2023 PSD Permit, included within Petition Ex. 10). The second application requested a minor modification to the title V permit related to conditions originally established in a 2002 preconstruction permit, Permit No. 0420-0015-CR (the 2002 Preconstruction Permit, included as Petition Ex. 5). SCDHEC processed both of these revisions at the same time, and prepared a Statement of Basis describing both sets of changes (the SOB, included as Petition Ex. 3). On February 23, 2023, SCDHEC submitted a Proposed Permit reflecting both proposed permit revisions to the EPA for its 45-day review. The EPA's 45-day review period ended on April 10, 2023, during which time the EPA did not object to the Proposed Permit. SCDHEC issued Century Aluminum a final title V permit, reflecting both revisions, on April 13, 2023 (the Permit, included as Petition Ex. 1).

<sup>&</sup>lt;sup>10</sup> 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/whatejscreen*.

## C. Timeliness of Petition

Pursuant to the CAA, if the EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). The EPA's 45-day review period expired on April 10, 2023. Thus, any petition seeking the EPA's objection to the Proposed Permit was due on or before June 9, 2023. The Petition was dated and received June 9, 2023, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

#### IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

Claim 1: The Petitioners Claim That "The Changes to the Coke Sulfur Content Permit Conditions Cannot Be Processed as a Minor Permit Modification."

**Petitioners' Claim:** The Petitioners claim that revisions to a sulfur content limit did not qualify for processing via title V minor modification procedures. *See* Petition at 9–21.

This claim involves changes to a single permit term—Condition C.15—which, among other things, imposes limits on the sulfur content of coke and pitch used to form carbon anodes. *See id.* at 4. The Petitioners explain that the relevant limits are derived from the 2002 Preconstruction Permit, which limited sulfur content in coke to 2.22% and pitch to 0.85%. *Id.* at 10. According to the Petitioners, these same limits were then incorporated into prior versions of the facility's title V permit, issued in 2004 and 2021. *Id.* at 16 n.37. The current permit modification revises the limit on sulfur content in coke to 3.0%; the limit on pitch is unchanged. *Id.* at 4 (citing Permit at 23).<sup>11</sup>

The Petitioners present two primary reasons why the change to the coke sulfur content limit cannot be processed as a minor modification to the title V permit. First, the Petitioners state that minor modification procedures cannot be used for permit revisions that "change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject." *Id.* at 10 (quoting 40 C.F.R. § 70.7(e)(2)(i)(A)(4) and S.C. Reg. 61-62.70.7(e)(2)(i)(A)(4)). The Petitioners assert that neither the South Carolina SIP nor any federal regulations imposed the sulfur content limit at issue, which instead originated from the 2002 Preconstruction Permit. *Id.* at 10. Moreover, the Petitioners specifically contend that the former 2.22% sulfur content limit was imposed in 2002 in order to allow the facility to avoid PSD permitting requirements for SO<sub>2</sub> that would have otherwise applied to the 2002 modification. *Id.* at 10. The Petitioners conclude that minor modification procedures cannot be used to change this "permit term for which there is no corresponding underlying

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<sup>&</sup>lt;sup>11</sup> Additionally, the revised Condition C.15 includes new language indicating that the sulfur and pitch content limits "shall be used to calculate SO<sub>2</sub> emissions" for purposes of demonstrating compliance with a facility-wide SO<sub>2</sub> emissions limit, along with a methodology for calculating blended coke sulfur content. Petition at 4 (citing Permit at 23).

<sup>&</sup>lt;sup>12</sup> The Petition attributes this language to 40 C.F.R. § 70.7I(2)(i)(A)(4) and S.C. Reg. 61-62.70.7I(2)(i)(A)(4), which do not exist. These citations appear to be typographical errors.

<sup>&</sup>lt;sup>13</sup> Specifically, the Petitioners indicate that a statement of basis accompanying the 2002 Preconstruction Permit indicated that the facility was "requesting to reduce the limit of their coke and pitch sulfur content from 2.95% and 1.2% to 2.22% and 0.85%, respectively, as a means to net out of PSD requirements for SO<sub>2</sub>." *Id.* at 10 (quoting Petition Ex. 12).

applicable requirement and that the source has assumed to avoid an applicable requirement." *Id.* at 11.

Second, the Petitioners state that a minor modification cannot be used for permit revisions that "violate any applicable requirement." Id. at 11 (quoting 40 C.F.R. § 70.7(e)(2)(i)(A)(1) and S.C. Reg. 61-62.70.7(e)(2)(i)(A)(1)). The Petitioners claim that the new 3.0% coke sulfur content limit violates "applicable requirements" related to two preconstruction permits and one SIP provision.

The Petitioners explain that "applicable requirements" include "any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the [CAA]." Id. (quoting 40 C.F.R. § 70.2 and S.C. Reg. 61-62.70.2(f)(2)). The Petitioners assert that the new coke sulfur content limit violates conditions from two preconstruction permits. Specifically, the Petitioners state that Condition II.D.9 of the 2002 Preconstruction Permit provides: "sulfur content of the coke used in forming the anodes shall not exceed 2.22% by weight based upon a monthly average." Id. Additionally, the Petitioners state that a 2016 preconstruction permit allowed coke sulfur content to increase from 2.22% to 3.0%, but only under limited operating scenarios, as reflected in additional enforceable permit terms (including a lower SO<sub>2</sub> emission limit and lower aluminum production limit). Id. at 12 (citing Petition Ex. 7 at 2, 4). The Petitioners assert that the new 3.0% coke sulfur content limit in the title V permit contains none of those same limitations. Id.14 In sum, the Petitioners assert that the new 3.0% coke sulfur content limit violates the terms of both the 2002 and 2016 preconstruction permits, and thus was ineligible for processing as a title V minor modification. Id. at 11–12. Relatedly, the Petitioners contend that SCDHEC cannot revise this preconstruction permit limit through the title V process at all, but instead must use the appropriate NSR permitting process to do so. Id. at 11 (citing In the Matter of Big River Steel, LLC, Order on Petition No. VI-2013-10 at 8-20 (Oct. 31, 2017) (Big River Steel Order)).

The Petitioners further allege that the new 3.0% coke sulfur content limit violates applicable requirements of the SIP. *Id.* at 12.15 Specifically, the Petitioners reproduce the following provision from the South Carolina SIP:

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of paragraphs (J) through (R) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

*Id.* (quoting S.C. Reg. 61-62.5, Std. 7, § (R)(4); citing 40 C.F.R. § 51.2120(c), 52.21(r)(4)). The Petitioners assert that replacing the original 2.22% coke sulfur content limit with the new 3.0% limit was just such a relaxation. *See id.* at 13–14 (citing Petition Exs. 4, 13). The Petitioners conclude: "Because the relaxed

<sup>&</sup>lt;sup>14</sup> Moreover, the Petitioners state that, in general, the terms of this 2016 preconstruction permit are not included in the title V permit. *See id.* at 5 n.13.

<sup>&</sup>lt;sup>15</sup> The Petitioners state that "applicable requirements" include "any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act." *Id.* at 12 (quoting 40 C.F.R. § 70.2 and S.C. Regulation 61-62.70.2(f)(1)).

coke sulfur content limit likely violates applicable PSD permitting requirements of the South Carolina SIP..., DHEC was not authorized to process the increased sulfur content through minor permit modification procedures pursuant to the limitations of 40 C.F.R. § 70.7(e)(2)(i)(A)(1)." Id. at 14.

Underlying each of the Petitioners' arguments is a disagreement with SCDHEC's characterization of the 2002 limit on coke sulfur content and the extent to which the title V minor modification revises and/or conflicts with this limit. The Petitioners contest SCDHEC's assertion that the revised permit term was simply "part of the methodology for demonstrating compliance with the 4,015.6 tpy SO<sub>2</sub> emission limit." *Id.* at 15 (quoting SOB at 1).<sup>16</sup>

Instead, the Petitioners argue that the former 2.22% sulfur content limit was an independently enforceable limitation. *Id.* For support, the Petitioners cite multiple documents. First, the Petitioners invoke the terms of the 2002 Preconstruction Permit that established the limit, which states: "The sulfur content of the coke used in forming the anodes shall not exceed 2.22% by weight based upon a monthly average." *Id.* (quoting 2002 Preconstruction Permit at 6). The Petitioners claim that nothing in this 2002 Preconstruction Permit indicates that the limitation on coke sulfur content was solely part of the methodology for demonstrating compliance with a 4,015.6 tpy SO<sub>2</sub> emission limit. *Id.* at 16. In fact, the Petitioners state that no such emission limit was established until a subsequent title V permitting action. *Id.* (citing 2021 Title V Renewal Permit at 32–33). Second, the Petitioners reproduce various statements within a 2004 Consent Order between SCDHEC and the facility, which addressed violations of the 2.22% sulfur content limit and characterized this limit as a "Federally enforceable limit to avoid PSD permitting," among other things. *Id.* at 16–17 (quoting Petition Ex. 14).<sup>17</sup> Third, the Petitioners repeat statements from SCDHEC's statement of basis accompanying a 2016 preconstruction permit, which characterized the existing 2.22% limit as a "PSD avoidance limit[]." *Id.* at 18 (quoting Petition Ex. 7). Overall, the Petitioners claim:

[T]he sulfur content limits on coke and pitch from the 2002 permit[] were not simply "part of the methodology" for compliance with the ton per year  $SO_2$  limits. Instead, the sulfur content limits on coke and pitch were the synthetic minor limits on  $SO_2$  from the Mt. Holly plant. DHEC cannot now rewrite the basis for those synthetic minor limits—at least not without modifying the 2002 Construction Permit.

Id. at 19.

16

 $<sup>^{16}</sup>$  In a footnote, the Petitioners argue: "Even if EPA were to accept DHEC's justification that the sulfur content limit was "part of the methodology" for determining compliance with the plant-wide  $SO_2$  limit—which it should not—DHEC's permit change would then have violated the prohibition against using minor permit processes where a modification involves significant changes to existing monitoring requirements." Petition at 19 n.47 (citing 40 C.F.R. § 70.7(e)(2)(i)(A)(2); S.C. Regulation 61-62.70.7(e)(2)(i)(A)(2)).

 $<sup>^{17}</sup>$  The Petitioners reproduce relevant portions of this Consent Order, which provided, in part: "Construction Permit 0420-0015-CR requires Alumax to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average. Alumax accepted this Federally enforceable limit to avoid PSD permitting and emission control requirements for  $SO_2$ ....[T]he Department concludes that Alumax has violated ... S.C. Code Ann. §48-1-110(d), in that it failed to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average, as required by its permit." Petition at 17 (quoting Petition Ex. 14 at 2–3).

The Petitioners also contest SCDHEC's suggestion that the 2002 Preconstruction Permit "granted flexibility" to use coke with a higher sulfur content. See id. at 15, 19–21 (quoting SOB at 1). The Petitioners claim that the 2002 Preconstruction Permit and several regulations do not provide this flexibility. The Petitioners acknowledge that the 2002 Preconstruction Permit states that "additional production is allowed as long as emission limits and conditions are met and no physical changes or changes in the method of operation that result in a significant net emissions increase of a regulated pollutant are invoiced, or other modification that would require further permitting." Id. at 20 (quoting 2002 Preconstruction Permit at 1) (emphasis in petition). The Petitioners argue:

This statement explicitly allows for an increase in aluminum production capacity—it does **not** allow for an increase in coke sulfur content. Further, the fact that this statement requires both emissions limits and "conditions" to not be exceeded indicates that this statement was not intended to allow an increase in sulfur content of coke. Nothing in the 2002 Construction Permit or accompanying permit record suggests that the sulfur content limit is "flexible."

*Id.* The Petitioners further claim that various changes to emission and production limits made in the 2016 preconstruction permit contradict SCDHEC's claim that the 2002 Preconstruction Permit itself granted flexibility to use different coke sulfur levels; if the 2002 permit contained this flexibility, certain 2016 permit changes would not have been necessary. *See id.* at 21.<sup>18</sup>

In conclusion, the Petitioners claim:

[T]he permit change to the coke sulfur content at Mt. Holly did not meet the criteria for minor permit modification procedures because it violated applicable requirements, and it changed a permit condition for which there is no corresponding underlying requirement and which the Mt. Holly plant assumed to avoid applicable PSD requirements.

*Id.* at 21 (citing 40 C.F.R. § 70.7(e)(2)(i)(1) & (4); S.C. Reg. 61-62.70.7(e)(2)(i)(1) & (4)).

**EPA's Response:** For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.<sup>19</sup>

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<sup>&</sup>lt;sup>18</sup> Because the 2002 Preconstruction Permit did not provide flexibility to use coke with a higher sulfur content, the Petitioners contend that any increase in coke sulfur content would be considered a "physical change or change in the method of operation," requiring additional preconstruction permitting and analysis (which SCDHEC has not conducted). *Id.* at 20–21 (citing S.C. Reg. 61-62.5, Std. 7, § (b)(30)(iii)(e); 40 C.F.R. § 52.21(b)(2)(iii)(e)). (Note that S.C. Reg. 61-62.5, Std. 7, § (b)(30)(iii)(e) does not exist; the Petitioners may have intended to cite § (B)(30)(c)(v).) Moreover, the Petitioners again claim that SCDHEC "would also be required to determine whether the relaxation of the coke sulfur content limit would have resulted in the 2002 project being considered a major modification for SO<sub>2</sub> and, if so, the increase in coke sulfur content would be required to obtain a PSD permit as though construction had not yet commenced." *Id.* at 21 (citing S.C. Reg. 61-62.5, Std. 7, § (R)(4); 40 C.F.R. § 52.21(r)(4)).

<sup>&</sup>lt;sup>19</sup> Because SCDHEC processed the present permit action as a minor modification, there was no public comment period. It was therefore impracticable for the Petitioners to raise these concerns during the public comment period, and the Petitioners are excepted from the requirement that all petition claims be based on issues raised in public comments. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.8(d), 70.12(a)(2)(v).

The EPA can object to a title V permit that is not issued according to part 70 requirements, including procedural requirements related to title V permit issuance. See 40 C.F.R. §§ 70.8(c)(1), (c)(3), 70.12(a)(2), (a)(2)(iii), (a)(2)(iv). For example, the EPA can object if a petitioner demonstrates that a title V permit revision was inappropriately processed using minor modification procedures.

To determine whether the change at issue was eligible for processing via title V minor modification, it is first necessary to address the Petitioners' and SCDHEC's competing factual characterizations of the change. The Petitioners contend that the current permit action revises an enforceable limitation on coke sulfur content established in the 2002 Preconstruction Permit in order to avoid PSD review. SCDHEC suggests that the revised coke sulfur content provisions are simply part of a clarified methodology to demonstrate compliance with existing SO<sub>2</sub> emission limits.

The 2002 Preconstruction Permit, as well as the most recent 2021 Title V Renewal Permit, provide, in relevant part: "The sulfur content of the coke used in forming the anodes shall not exceed 2.22% by weight based upon a monthly average." 2002 Preconstruction Permit at 6 (Condition II.D.9); 2021 Title V Renewal Permit at 23 (Condition C.15).

The present title V permit modification establishes the following (with changes and additions underlined):

The sulfur content of the blended coke used in forming the anodes shall not exceed 3.0% by weight, based upon a monthly average, and shall be used to calculate applicable SO<sub>2</sub> emissions. The monthly average sulfur content of the blended coke used in forming anodes will be determined using an ASTM standard, an alternative method approved by the Department, or by vendor Certificates of Analysis along with the following mass-balance algorithm:

Monthly avg Coke S, % =  $[(Coke A, mt \times Coke A \%S) + (Coke B, mt \times Coke B \%S)] + (Coke C, mt \times Coke C \%S + ...] \ Sum of Coke A, B, C, etc., mt$ 

\* \* \*

Permit at 22 (Condition C.15).20

SCDHEC's SOB associated with the minor modification explains:

The facility is also requesting Minor Modification to Clarify Condition C.15 of the Title V permit regarding % by weight sulfur content of blended coke and pitch used to form anodes. The facility is requesting to add mass balance algorithms for % weight sulfur content to calculate monthly average SO<sub>2</sub> emissions to meet facility-wide 4,015.6 tpy.

<sup>&</sup>lt;sup>20</sup> Condition C.15 of the Permit includes similar new text related to the sulfur content of pitch used to form anodes. Specifically, although the pitch sulfur content limit is unchanged (at 0.85% by weight), the Permit now includes additional information about how monthly pitch sulfur content is calculated.

The PSD construction permit CR (issued November 19, 2002) granted flexibility of using different % sulfur content in Coke, depending on varied production levels, to comply with applicable emissions limits, which remain unchanged.

PSD construction permit CR - This PSD project was less than significant threshold of 40 tpy ( $^{\sim}26$  tpy PTE) for SO<sub>2</sub> and resulted in a reduction of permitted SO<sub>2</sub> emissions of >1,100 tpy (the facility was permitted to emit 5,132 tpy SO<sub>2</sub> pre-project and 4,015.6 tpy SO<sub>2</sub> post-project).

The average sulfur content of pitch and coke is part of the methodology for demonstrating compliance with the 4,015.6 tpy  $SO_2$  emission limit (PSD construction permit CR). The 2002 construction permit sought an increase in the Al production limit from 234,274 tpy to the full production capacity of 256,150 tpy, or greater as long as emissions limits and conditions are not exceeded. The 2002 project was subjected to PSD review for [various other pollutants], but elected to limit the future potential  $SO_2$  emissions increase below 40 tpy. To show compliance with the  $SO_2$  limits established in the 2002 permit, an average coke sulfur content of 2.22% was used in the calculations described above.

The current minor modification request is to clarify that just as the permit allows Al production to exceed 256,150 tpy if average coke sulfur content is lower than 2.22%, conversely, if the average sulfur content is greater than 2.22%, [aluminum] production would necessarily be lower than 256,150 tpy to maintain compliance with the 4,015.6 tpy  $SO_2$  emission limit.

## SOB at 1.

Although SCDHEC is correct that the current permit revision uses coke sulfur content values as part of a broader methodology for calculating SO<sub>2</sub> emissions, that is only half the story. The more important—and disputed—issue is whether the new 3.0% coke sulfur content limit revised an enforceable 2.22% coke sulfur content limit from the 2002 Preconstruction Permit.

From the record before the EPA,<sup>21</sup> the Petitioners' interpretation of the change at issue is more accurate. SCDHEC's suggestion that the 2002 Preconstruction Permit "granted flexibility of using different % sulfur content in Coke, depending on varied production levels, to comply with applicable emissions limits," SOB at 1, is inconsistent with the plain language of the 2002 Preconstruction Permit. Again, the 2002 Preconstruction Permit expressly provides: "The sulfur content of the coke used in forming the anodes *shall not exceed* 2.22% by weight based upon a monthly average." 2002 Preconstruction Permit at 6 (Condition II.D.9) (emphasis added). By its terms, this is clearly a binding,

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<sup>&</sup>lt;sup>21</sup> Because SCDHEC processed this change as a minor modification, there was no public comment period. Consequently, the public did not have any prior opportunity to raise its concerns underlying this petition claim, and SCDHEC did not have an opportunity to directly respond on the record to those concerns.

enforceable limit.<sup>22</sup> Nothing in the 2002 Preconstruction Permit grants the flexibility SCDHEC suggests.<sup>23</sup> Tellingly, SCDHEC itself previously considered the 2002 Preconstruction Permit to establish a binding, enforceable limit on coke sulfur content, as it enforced violations of that same permit term. *See* Petition Ex. 14;<sup>24</sup> see also Petition at 16–19 (quoting various other SCDHEC statements characterizing the 2.22% coke sulfur content provision as an enforceable limit).

Overall, it is clear to the EPA that the current permit action changed the former 2.22% coke sulfur content limit to a 3.0% coke sulfur content limit (among other changes). The question, then, is whether SCDHEC was allowed to process this change via title V minor modification procedures.

In relevant part, the EPA's and SCDHEC's title V regulations provide:

- (A) Minor permit modification procedures may be used only for those permit modifications that:
  - (1) Do not violate any applicable requirement;[and]

\* \* \*

- (4) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - (A) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I; . . .

40 C.F.R. § 70.7(e)(2)(i)(A); see S.C. Reg. 61-62.70.7(e)(2)(i)(A).

The change to the coke sulfur content limit ran afoul of both these requirements, and thus was not eligible for processing as a minor modification.

First, this change "violated an[] applicable requirement." *Id.* As the Petitioners correctly observe, the terms and conditions of preconstruction permits issued under title I constitute "applicable requirements" for title V purposes. 40 C.F.R. § 70.2 (definition of "applicable requirement," paragraph (2)). The 2.22% coke sulfur content limit in the 2002 Preconstruction Permit is an applicable requirement for title V purposes. The Permit no longer includes this limit, but instead includes a

<sup>22</sup> Similarly, both the most recent 2021 Title V Renewal Permit and the current title V permit modification present the 2.22% and 3.0% coke sulfur content requirement as binding, enforceable limits that Century Aluminum "shall not exceed." 2021

Title V Renewal Permit at 23 (Condition C.15); Permit at 23 (Condition C.15).

<sup>23</sup> For example, although the 2002 Preconstruction Permit provided that "additional *production* is allowed as long as emission limits and conditions are met" (among other criteria), it did not suggest that similar flexibilities existed with

emission limits and conditions are met" (among other criteria), it did not suggest that similar flexibilities existed with respect to the "emission limits and conditions" themselves, including the coke sulfur content limit. 2002 Preconstruction Permit at 1 (emphasis added).

<sup>&</sup>lt;sup>24</sup> As previously noted, a SCDHEC Consent Order stated, in part: "Construction Permit 0420-0015-CR requires Alumax to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average. Alumax accepted this Federally enforceable limit to avoid PSD permitting and emission control requirements for SO<sub>2</sub>. . . . [T]he Department concludes that Alumax has violated . . . S.C. Code Ann. §48-1-110(d), in that it failed to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average, as required by its permit." Petition Ex. 14 at 2–3.

revised (and less stringent) 3.0% coke sulfur content limit. This revision violates the applicable requirement from the 2002 Preconstruction Permit to maintain coke sulfur content below 2.22%. This change was therefore not eligible for title V minor modification procedures. 40 C.F.R. § 70.7(e)(2)(i)(A)(1); S.C. Reg. 61-62.70.7(e)(2)(i)(A)(1). Thus, the EPA grants Claim 1 and objects to the Permit.

Relatedly, as the Petitioners correctly state, this change should not have been undertaken through a title V permit action at all. Unless and until title I permit terms are changed through the appropriate title I process, they remain "applicable requirements" for title V purposes. *See, e.g.*, 40 C.F.R. § 70.2; *Big River Steel Order* at 16, 19.<sup>25</sup> A title V permit that reduces the stringency of such an applicable requirement cannot be said to "assure compliance" with the applicable requirement. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1). This presents an additional basis for the EPA's objection.

Second, this change "establish[ed] or change[d] a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject," and more specifically "[a] federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I," i.e., PSD. 40 C.F.R. § 70.7(e)(2)(i)(A)(4); see S.C. Reg. 61-62.70.7(e)(2)(i)(A)(4). No underlying applicable requirement establishes the 3.0% coke sulfur content limit; this new limit was established in the present title V permit action. The Permit and permit record indicate that the previous 2.22% coke sulfur content limit was originally imposed to ensure that a modification authorized by the 2002 Preconstruction Permit did not trigger PSD for SO<sub>2</sub> and that the new 3.0% limit is intended to serve a similar function. See, e.g., 2021 Title V Renewal Permit at 23 (describing the 2.22% limit as one for "PSD (avoidance)"); Permit at 23 (same description for new 3.0% limit); see also Petition at 10, 17–19 (quoting various SCDHEC statements characterizing the limit in a similar manner). Such a PSD avoidance limit (sometimes called a "synthetic minor limit" or "PTE limit") cannot be established or changed using title V minor modification procedures. 40 C.F.R. § 70.7(e)(2)(i)(A)(4); see S.C. Reg. 61-62.70.7(e)(2)(i)(A)(4). This provides further grounds for the EPA's objection.

Because the EPA is granting this claim and objecting to the Permit for the aforementioned reasons, the EPA need not address alternative Petition arguments that would lead to the same result. Specifically,

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<sup>&</sup>lt;sup>25</sup> The EPA is not aware of any provision in South Carolina's EPA-approved SIP or title V regulations that would cause or allow the applicable terms of title I preconstruction permits to cease existing as "applicable requirements" for title V purposes, absent further action through a title I permitting vehicle. The EPA has long explained that title V permits do not supersede title I permits—which must remain in effect to authorize construction and/or operations—even after the terms of a title I permit are incorporated into a title V permit. *See, e.g.,* 69 Fed. Reg. 10167, 10170 (Mar. 4, 2004); 66 Fed. Reg. 64039, 64040 (Dec. 11, 2001); Letter from John S. Seitz, EPA, to Robert Hodanbosi & Charles Lagges, STAPPA/ALAPCO, Encl. A at 4 (May 20, 1999). If a state wishes to revise the terms of an underlying preconstruction permit—particularly to make them less stringent or more flexible—it must use the appropriate title I permitting avenues to do so. Once revised, the updated NSR permit terms will establish new applicable requirements that can be incorporated into the title V permit, generally without further review (other than to ensure the title V permit contains sufficient compliance assurance provisions). *See, e.g., Big River Steel Order* at 14–20.

the EPA need not address whether the permit changes constituted a significant change to monitoring, <sup>26</sup> whether they violated the terms of a 2016 preconstruction permit (which is not incorporated into the current title V permit), or whether they violated the SIP. It would be especially premature for the EPA to address whether the change at issue violated substantive requirements of the SIP governing PSD, such as the requirements in paragraph (r)(4). These issues may be further addressed by SCDHEC and the public in subsequent permitting actions that SCDHEC will have to undertake in response to the EPA's objection.

**Direction to SCDHEC:** SCDHEC must follow the appropriate part 70 procedures in order to process any changes to the title V permit relevant to coke sulfur content or other permit terms originally established in the 2002 Preconstruction Permit. If SCDHEC wishes to reconfigure the limits established in the 2002 Preconstruction Permit in order to provide more flexibility while ensuring that the changes associated with that 2002 permit do not trigger PSD, it should first do so using the title I permitting process, not the title V permitting process. SCDHEC could then use the appropriate title V permitting mechanisms to incorporate the terms of such a revised title I permit into the title V permit.<sup>27</sup>

Claim 2: The Petitioners Claim That "PSD Construction Permit No. 0420-0015-CY Cannot Be Incorporated into Mt. Holly's Title V Permit via an Administrative Permit Amendment Because DHEC Failed to Meet Applicable Public Notice Requirements."

**Petitioners' Claim:** Claim 2 addresses a different change to the title V permit than Claim 1—specifically, the title V permit's incorporation of the 2023 PSD Permit. Petition at 22. This claim features two discrete arguments or subclaims ("Argument 1" and "Argument 2").

In "Argument 1," the Petitioners claim that the public notice associated with the 2023 PSD Permit did not contain information required by the South Carolina SIP. *Id.* at 22. Specifically, the Petitioners note that the SIP (and the federal regulation upon which the SIP is based) requires that public notice for a PSD permit include "the degree of increment consumption that is expected from the source or modification." *Id.* at 23 (quoting S.C. Reg. 61-62.5, Std. 7, § (Q)(2)(c); citing 42 U.S.C. § 7475; 40 C.F.R. §§ 51.166(q)(2)(iii), 52.2120(c)); *see id.* at 24.<sup>28</sup>

The Petitioners allege that the public notice associated with the 2023 PSD Permit failed to meet this SIP requirement because it did not identify the degree of increment consumed from the source or modification. *Id.* at 23. According to the Petitioners, the public notice was "incorrect" or "inaccurate at

<sup>&</sup>lt;sup>26</sup> For example, the Petitioners include a footnote arguing that "[e]ven if EPA were to accept DHEC's justification" that the changes to coke sulfur content provisions were simply part of the methodology for demonstration compliance with emission limits, these changes would constitute significant changes to existing monitoring requirements, which are not eligible for minor modifications. Petition at 19 n.47 (citing 40 C.F.R. § 70.7(e)(2)(i)(A)(2); S.C. Reg. 61-62.70.7(e)(2)(i)(A)(2)). The EPA does not accept SCDHEC's characterization of the changes, so the EPA need not reach the Petitioners' alternative argument.

<sup>&</sup>lt;sup>27</sup> The EPA understands that for reasons unrelated to this Order (related to Regional Haze requirements under its SIP), SCDHEC is working on a draft title I permit that would include similar changes to the coke sulfur content limit, among other things. Once that process concludes and SCDHEC issues a final title I permit, it could be incorporated into the title V permit in order to resolve the EPA's objection in the present Order.

<sup>&</sup>lt;sup>28</sup> The Petitioners also observe that the EPA Environmental Appeals Board (EAB) has found a PSD permit to be deficient for failing to provide a complete description of proposed increment consumption in the public notice for a draft PSD permit. Petition at 23–24 (citing *In re Hadson Power 14--Buena Vista*, 4 E.A.D. 258, 271–72 (EAB 1992)).

best" to state that there would be *no* degree of increment consumed. *Id.* at 23, 24. The Petitioners assert that other documents in the permit record indicated that the facility would consume 75.5% of the 24-hour PM<sub>10</sub> increment and 24.6% of the annual PM<sub>10</sub> increment. *Id.* at 23–24.

The Petitioners contend that "EPA must object where a petitioner demonstrates that a permit process is not in compliance with applicable requirements." *Id.* at 23 (citing 40 C.F.R. §§ 70.8(c)(1), 70.12(a)(2)). The Petitioners characterize the SIP provision regarding the content of PSD notices as an "applicable requirement" for title V purposes, as applicable requirements include "any standard *or other requirement* provided for in the applicable" SIP. *Id.* at 23 (quoting 40 C.F.R. § 70.2) (emphasis in Petition); *see id.* at 22. Accordingly, "because the PSD permit process failed to comply with the applicable requirements of the South Carolina SIP," the "Petitioners request that EPA object to the incorporation of PSD Construction Permit CY into Mt. Holly's Title V Permit . . . via an administrative permit amendment." *Id.* at 24 (citing S.C. Reg. 61-62.5, Std. 7, § (Q)(2)(c); 40 C.F.R. § 52.2120(c)).

In "Argument 2," the Petitioners claim that SCDHEC's incorporation of the 2023 PSD permit via administrative amendment ran afoul of title V (part 70) procedural requirements. The Petitioners explain that states can only use the title V administrative amendment process to incorporate requirements from preconstruction permits if the preconstruction permit is issued under "a program [that] meets procedural requirements substantially equivalent to the requirements of [40 C.F.R.] §§ 70.7 and 70.8 that would be applicable to the change if it were subject to review as a permit modification . . . ." Id. at 25 (quoting 40 C.F.R. § 70.7(d)(1)(v); citing S.C. Reg. 61-62.70.7(d)(1)(v)).

The Petitioners claim that the public notice associated with the 2023 PSD Permit did not satisfy requirements "substantially equivalent" to part 70 requirements concerning public notice. *Id*. Specifically, the Petitioners address the part 70 requirement that the "notice shall identify . . . the activity or activities involved in the permit action; [and] the emissions change involved in any permit modification." *Id*. (quoting 40 C.F.R. § 70.7(h)(2); S.C. Reg. 61-62.70.7(h)(2)). The Petitioners address both parts of the quoted requirement.

First, the Petitioners assert that the notice did not properly identify the "emissions change involved" in the permit action because it did not identify the magnitude of the emissions changes being allowed. *Id*. The Petitioners state that the EPA has previously objected to a title V permit where the public notice did not specifically describe the magnitude of the emissions change. *Id*. at 26 (citing *In the Matter of Bio Energy, LLC*, Order on Petition No. I-2003-01, at 9–10 (Oct. 27, 2006) (*Bio Energy Order*)).

The Petitioners reproduce the relevant discussion from the public notice, which stated:

The facility has submitted a permit application to revise the existing filterable particulate matter (PM) [Best Available Control Technology, or BACT] emission limits for the Unit ID 04 Potline potroom groups to a new, single emission limit. Emissions generated by this facility as a result of the proposed project will include:

- Particulate Matter (PM);
- Particulate Matter less than 10 micrometers in diameter (PM<sub>10</sub>);
- Particulate Matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>);

Air dispersion modeling has indicated that the release of emissions from this facility will not cause or contribute to an exceedance of the [NAAQS]. No degree of increment consumption is expected.

There will be no Class I Areas impacted and no degree of increment consumption resulting from this proposed project.

Id. at 25 (quoting Petition Ex. 9 at 1).

According to the Petitioners: "Taken as a whole, and in the absence of information on the magnitude of emissions changes that were being allowed, the public notice gave the impression that *no* PM emission increase would occur." *Id.* at 26. Specifically, the notice "twice states that there will be 'no degree of increment consumption,'" and the notice suggests that "the sole purpose of this proposed modification was to adopt a new single BACT limit that reflected the sum total of the existing PM BACT limits for the potline potroom groups, in place of the existing individual limits." *Id.* 

However, the Petitioners assert that the 2023 PSD permit "does allow for significant increases in [PM], PM<sub>10</sub>, and PM<sub>2.5</sub> emissions." Id. The Petitioners assert the change involved more than a 100 ton per year increase in allowable emissions. Id. at 31.

Second, and relatedly, the Petitioners contend that the notice did not properly describe "the activity or activities involved in the permit action." *Id.* at 26 (quoting 40 C.F.R. § 70.7(h)(2)). The Petitioners argue that the notice was "highly misleading" to describe the permit action as revising the four potline groups' emission limits into a single limit. *Id.* The Petitioners assert that the notice did not accurately describe the manner in which the limits were combined. *See id.* Moreover, the Petitioners assert that the limits were not only combined, but also *increased* (from 19.65 lb/hr for each potline group to 28.73 lb/hr for each potline group—a nearly 50% increase). *Id.* at 26, 31.<sup>29</sup>

The Petitioners conclude that the lack of this information within the public notice itself presents grounds for the EPA's objection. *Id.* at 27.30 Specifically:

In sum, because the public notice for [the 2023 PSD Permit] did not identify any emissions change involved [in] the permit modification or the activities involved in the change, the Permit did not follow procedural requirements for public notice in 40 C.F.R. § 70.7(h)(2)

<sup>&</sup>lt;sup>29</sup> The Petitioners suggest that the limits were increased in order to make it less likely that the facility would exceed or violate the limits (which the Petitioners allege occurred repeatedly in the past). *See* Petition at 27, 27 n.60, 28. The Petitioners briefly contend that the state should not relax (*i.e.*, increase) BACT limits more than 20 years after they were established. *Id.* at 28.

<sup>&</sup>lt;sup>30</sup> Although the Petitioner's request for the EPA's objection focuses on the content of the public notice itself, the Petitioners also allege that information about the emissions change and activities at issue was not readily ascertainable from other documents in the permit record that accompanied the public notice. *Id.* at 27; *see id.* at 29–30, 31 (citing *In the Matter of Phillips 66 San Francisco Refinery*, Order on Petition No. IX-2018-4 at 7 (Aug. 8, 2018)). The Petitioners present this discussion to explain why the Petitioners did not provide comments on the draft 2023 PSD Permit, and also to support the Petitioners' overarching concerns that the public was deprived of meaningful participation opportunities. *See id.* at 28–29, 31.

and S.C. Regulation 61-62.70.7(h)(2) and is not eligible for administrative incorporation into the Title V permit for the Mt. Holly plant.

*Id.* at 28 (citing 40 C.F.R. § 70.7(d)(1)(v); S.C. Reg. 61-62.70.7(d)(1)(v)).

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

The EPA can object to a title V permit that does not comply with "applicable requirements" of the CAA (as that term is defined in EPA regulations) or requirements of part 70. See 42 U.S.C. § 7661d(b); 40 C.F.R. §§ 70.8(c)(1), 70.12(a)(2), (a)(2)(ii). As noted with respect to Claim 1, this can include procedural defects related to the issuance of a particular title V permit. See 40 C.F.R. §§ 70.8(c)(1), (c)(3), 70.12(a)(2), (a)(2)(iii), (a)(2)(iv).

The Petitioners' first argument in Claim 2 ("Argument 1") does not allege any defect that could form a basis for the EPA's objection to the present title V permit. As an initial matter, the EPA's authority to object under CAA § 505(b) only extends to the particular proposed title V permit before the agency for review. This part of Claim 2 does not allege that the title V permit, or the issuance of the title V permit, failed to satisfy any applicable CAA or part 70 requirements. Instead, the Petitioners allege that issuance of the 2023 PSD Permit did not comply with procedural requirements of the SIP relevant to the issuance of that PSD Permit. See Petition at 23–24. An alleged procedural defect in a separate permit action that does not result in substantive or procedural defects in the current title V permit action cannot present a basis for the EPA's objection to the current title V permit.

The Petitioners' argument that the procedural requirements of the SIP are also "applicable requirements" for purposes of the present title V permit are unpersuasive. Id. at 23. Notably, the Petitioners fail to acknowledge a key provision within the definition of this term, which indicates that "applicable requirements" only include requirements of the SIP "as they apply to emissions units in a part 70 source." 40 C.F.R. § 70.2. The SIP requirements at issue here govern the state permitting authority's issuance of PSD permits; those requirements do not directly apply to emission units in a part 70 source. Thus, they are not "applicable requirements" with which the title V permit must assure compliance. Again, the alleged violation of procedures associated exclusively with that prior NSR permit action do not provide an independent basis for the EPA's objection to the current title V permit.

The Petitioners do not allege that this violation of procedural SIP requirements resulted in a violation of any part 70 requirements. For example, the Petitioners offer no connection between these procedural SIP requirements and the part 70 requirements governing title V administrative amendments (which *are* implicated by the Petitioners' second argument, discussed in the following paragraphs).

being petitioned).

<sup>&</sup>lt;sup>31</sup> The references within CAA § 505(b) to "any permit," "the proposed permit," "a permit," "the permit," etc. apply to the title V permit that a permitting authority proposes to issue and transmits to the EPA under CAA § 505(a)(1). 42 U.S.C. § 7661d(a), (b)(1), (b)(2). See also 40 C.F.R. §§ 70.8(c)(1), (d), (similar language and cross-references as the statute), 70.12(a)(1) (requirement that petitioners identify the specific title V permit action on which the petition is based), 70.12(a)(2) (petition claims must be based on alleged deficiencies in "the permit process" associated with the title V permit

In summary, the Petitioners' arguments concerning the alleged violation of procedural requirements of the SIP that exclusively concern issuance of the 2023 PSD Permit do not present an independent basis for the EPA's objection to the current title V permit. Thus, the EPA denies the first part of Claim 2.

In the second part of Claim 2 ("Argument 2"), the Petitioners present a clearer connection between issuance of the 2023 PSD Permit and part 70 requirements governing the current title V permit action. As the Petitioners explain, the EPA's regulations currently allow states to use the title V administrative amendment procedures to incorporate the terms of NSR permits issued under an EPA-approved program that "meets procedural requirements substantially equivalent to the requirements of Sections 70.7 and 70.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in Section 70.6." 40 C.F.R. § 70.7(d)(1)(v) (emphasis added); see S.C. Regulation 61-62.70.7(d)(1)(v). The Petitioners claim that the 2023 PSD Permit cannot be incorporated into the title V permit via administrative amendment because the 2023 PSD Permit's public notice did not satisfy requirements substantially equivalent to part 70 requirements governing public notice in 40 C.F.R. § 70.7(h)(2). This issue is properly within the scope of the EPA's review of the current title V permit action.<sup>32</sup>

The notice associated with the 2023 PSD Permit states, in relevant part:

Century has applied to the SC DHEC, BAQ, for a [PSD] air construction permit to revise the existing PM (filterable) BACT emission limit at its existing facility.

\* \* \*

The facility has submitted a permit application to revise the existing filterable particulate matter (PM) BACT emission limits for the Unit ID 04 Potline potroom groups to a new, single emission limit. Emissions generated by this facility as a result of the proposed project will include:

Particulate Matter (PM);

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<sup>&</sup>lt;sup>32</sup> The public does not ordinarily have the opportunity to petition the EPA to object to title V administrative amendments because permitting authorities are not required to submit a "proposed permit" to the EPA for review before finalizing administrative amendments. (By contrast, permitting authorities must transmit a proposed permit to the EPA for all other types of title V permit actions, including initial permits, renewal permits, minor modifications, significant modifications, and permit reopenings.) However, here, SCDHEC did not finalize the changes ostensibly qualifying as an administrative amendment without the EPA's review. Instead, the state effectively processed these changes using minor modification procedures. Specifically, as the Petitioners point out, the Proposed Permit that SCDHEC transmitted to the EPA on February 23, 2023, included both the proposed minor modification change at issue in Claim 1 as well as the proposed "administrative amendment" change at issue in Claim 2. Neither of these changes were finalized until April 13, 2023, after the EPA's review of the Proposed Permit. Because the Proposed Permit reflects both sets of changes, both sets of changes are consequently within the scope of the EPA's (and the public's) review of the Proposed Permit in the present proceeding. See Petition at 23 n.54. Additionally, note that PSD permits cannot be incorporated into a title V permit via minor modification. See 40 C.F.R. 40 C.F.R. § 70.7(e)(2)(i)(A)(5). Thus, if the 2023 PSD Permit was ineligible for incorporation via administrative amendment, SCDHEC would have been required to process this change via significant permit modification. Therefore, questions about whether the 2023 PSD Permit qualified for incorporation via administrative amendment remain relevant to whether the EPA must object to the current permit action, regardless of the fact that SCDHEC included this change within the Proposed Permit submitted to the EPA.

- Particulate Matter less than 10 micrometers in diameter (PM<sub>10</sub>);
- Particulate Matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>);

Air dispersion modeling has indicated that the release of emissions from this facility will not cause or contribute to an exceedance of the [NAAQS]. No degree of increment consumption is expected.

There will be no Class I Areas impacted and no degree of increment consumption resulting from this proposed project.

### Petition Ex. 9 at 1.

The Petitioners have demonstrated that this public notice associated with the 2023 PSD Permit did not "identify . . . the activity or activities involved in the permit action [and] the emissions change involved in any permit modification." 40 C.F.R. § 70.7(h)(2); see Bio Energy Order at 9–10 (objecting to the issuance of a permit where a "notice did not specifically describe the change in emissions associated with this proposed permit modification, as required by 40 C.F.R. § 70.7(h)(2) . . . .").

Here, the notice provides no information about the emission change involved in this permit action. The notice does not indicate the magnitude, significance, relevance, or even direction of such changes (*i.e.*, increase or decrease). The notice does not even expressly acknowledge that the action would involve *any* change in emissions. The closest the notice comes is the following statement: "Emissions generated by this facility as a result of the proposed project will include: [PM, PM<sub>10</sub>, and PM<sub>2.5</sub>]." Petition Ex. 9 at 1. But again, that statement does nothing to suggest whether the permit action would involve any emission *changes*. Not only does the notice fail to include any explicit information about emissions changes, but it also implies that there would be no increases in emissions. Specifically, the notice communicates two points: (i) the permit action involves a consolidation of existing PM BACT limits into a new, single emission limit; and (ii) this permit change will not result in any degree of increment consumption. However, the permit action did not simply consolidate existing emission limits without increasing them. Instead, the permit action resulted in a nearly 50% increase in permitted emissions from each set of affected emission units: from 19.65 lb/hr to 28.73 lb/hr.<sup>33</sup>

Overall, the EPA finds that because of these omissions and potentially misleading statements, the notice associated with the 2023 PSD Permit did not "identify . . . the activity or activities involved in the permit action [and] the emissions change involved in any permit modification," as required by 40 C.F.R. § 70.7(h)(2). As a result, the public was deprived from the opportunity to meaningfully participate on that PSD permit action. More to the point, because issuance of the 2023 PSD Permit did not satisfy procedures substantially equivalent to those in § 70.7 (governing public notice), that PSD Permit was not eligible for incorporation into the title V permit via administrative amendment. 40 C.F.R. § 70.7(d)(1)(v); see S.C. Regulation 61-62.70.7(d)(1)(v). the EPA therefore grants this part of Claim 2 and objects to the Permit.

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<sup>&</sup>lt;sup>33</sup> As SCDHEC subsequently explained: "The newly combined PM BACT limit will increase from 18.15 lb/hr (each ridge vent or roof monitor) and 1.5 lb/hr (each scrubber/dust collector) to a single emission limit of 28.73 lb/hr for each Potline scrubber/dust collector and ridge vent set." SOB at 1. Note that this description comes from the SOB associated with the present title V permit action, and not the notice associated with the 2023 PSD Permit action.

**Direction to SCDHEC:** SCDHEC must follow the appropriate procedures in order to revise the title V permit to incorporate the terms of the 2023 PSD Permit. The state may be able to accomplish this in various ways, some of which could involve separate PSD permit actions with more meaningful opportunities for public participation.

# V. CONCLUSION

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

NOV 2 - 2023

Michael S. Regan Administrator