### BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

) )

)

)

IN THE MATTER OF
INTER POWER AHLCON PARTNERS LP Colver Power Plant Cambria County, PA Permit No. 11-00378
Issued by the Pennsylvania Department of Environmental Protection

PETITION NO. III-2020-13

ORDER RESPONDING TO PETITION REQUESTING OBJECTION TO THE ISSUANCE OF TITLE V OPERATING PERMIT

# **ORDER GRANTING A PETITION FOR OBJECTION TO PERMIT**

# I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated December 7, 2020 (the Petition) from Sierra Club (the Petitioner), 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 the proposed operating permit No. 11-00378 (the Proposed Permit) issued by the Pennsylvania Department of Environmental Protection (PADEP) to the Colver Power Plant (Colver or the facility) in Cambria County, Pennsylvania. The operating permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and 25 Pa. Code §§ 127.501-127.543. *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also referred to as a title V permit or part 70 permit.

Based on a review of the Petition and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and as explained in Section IV of this Order, the EPA grants the Petition requesting that the EPA Administrator object to the Permit.

## II. STATUTORY AND REGULATORY FRAMEWORK

## A. Title V Permits

Section 502(d)(l) of the CAA, 42 U.S.C. § 766la(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 Pennsylvania submitted a title V program governing the issuance of operating permits on May 18, 1995. The EPA granted full approval of Pennsylvania's title V operating permit program in 1996. *See* Clean Air Act Final Full Approval of Operating Permits Program; Final Approval of Operating Permit and Plan Approval Programs Under Section 112(l); Final Approval of State Implementation Plan Revision for the Issuance of Federally Enforceable State Plan Approvals and Operating Permits Under Section 110; Commonwealth of Pennsylvania, 61 Fed. Reg. 39597 (July 30, 1996)

(codified at 40 C.F.R. § 52.2020(c)). This program, which became effective on August 29, 1996, is codified in 25 Pa. Code §§ 127.501–127.543.

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

# **B.** Review of Issues in a Petition

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

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under part 70. 40 C.F.R. § 70.12(a)(2). Any arguments or claims the petitioner wishes the EPA to consider in support of each issue raised must generally be contained within the body of the petition.<sup>1</sup> *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>&</sup>lt;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)).<sup>4</sup> 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.<sup>5</sup> Certain aspects of the petitioner's demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to the EPA's proposed petitions rule. See 81 Fed. Reg. 57822, 57829-31 (August 24, 2016); see also In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4-7 (June 19, 2013) (Nucor II Order).

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

<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.

legal reasoning, evidence, and references is reasonable and 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 (January 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. Petitioners are required to address the permitting authority's final decision and final reasoning (including the state's response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi); *see MacClarence*, 596 F.3d at 1132–33.<sup>9</sup> Specifically, the petition must identify where the permitting authority responded to the public comment and explain how the permitting authority's response is inadequate to address (or does not address) the issue raised in the public comment. *Id*.

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

<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 (September 21, 2011) (denying a title V petition claim where petitioners did not cite any specific applicable requirement that lacked required monitoring); In the Matter of Portland Generating Station, Order on Petition at 7 (June 20, 2007) (Portland Generating Station Order).

<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 (April 20, 2007); Georgia Power Plants Order at 9–13; In the Matter of Chevron Products Co., Richmond, Calif. Facility, Order on Petition No. IX-2004–10 at 12, 24 (March 15, 2005). <sup>8</sup> See also In the Matter of Hu Honua Bioenergy, Order on Petition No. IX-2011-1 at 19–20 (February 7, 2014); Georgia Power Plants Order at 10.

<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 (December 14, 2012) (denying a title V petition issue where petitioners did not respond to the state's explanation in response to comments or explain why the state erred or why the permit was deficient); In the Matter of Kentucky Syngas, LLC, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue where petitioners did not acknowledge or reply to the state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient); In the Matter of Georgia Power Company, Order on Petitions at 9–13 (January 8, 2007) (Georgia Power Plants Order) (denying a title V petition issue where petitioners did not address a potential defense that the state had pointed out in the response to comments).

review of a petition on a proposed permit, those documents may also be considered when making a determination whether to grant or deny the petition. *Id*.

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

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

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

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

# III. BACKGROUND

# A. The Colver Facility

The Colver power plant, operated by Inter Power Ahlcon Partners LP in Cambria County, Pennsylvania, is a waste coal-fired electrical generation plant. The facility is mainly sourced by a circulating fluidized bed (CFB) waste coal-fired boiler, which powers a single electrical generator. Emissions from the CFB are controlled by limestone fed into the fluidized bed. Low grade virgin coal is also burned in the boiler, and natural gas is combusted during startup and emergencies. The facility's supporting equipment includes a propane-fired fuel dryer, a propanefired propane vaporizer, diesel engines, coal processing equipment, an ash handling system, and plant roads.

The facility is a major source of particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, and carbon dioxide equivalent, and is subject to title V of the CAA. It is a minor source for volatile organic compounds (VOCs). Emission units within the facility are also subject to various New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and other preconstruction permitting requirements.

The EPA conducted an analysis using EPA's EJScreen<sup>10</sup> to assess key demographic and environmental indicators within a five kilometer-radius of the Colver plant. This analysis showed a total population of approximately 1,850 residents within a five-kilometer radius of the facility, of which approximately 5 percent are people of color and 44 percent are considered low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 12 environmental indicators. Eight of the 12 Environmental Justice Indices in this five-kilometer area exceed the 50<sup>th</sup> percentile in the State, with five meeting or exceeding the 60<sup>th</sup> percentile.

# **B.** Permitting History

Inter Power Ahlcon Partners LP first obtained a title V permit for the Colver Power Plant on February 15, 2001, which was subsequently renewed. On March 26, 2018, Inter Power Ahlcon Partners LP submitted an application for a renewal title V permit. On August 26, 2020, PADEP submitted the Proposed Permit to the EPA for its 45-day review. The EPA's 45-day review period ended on October 9, 2020, during which time the EPA did not object to the Proposed Permit. PADEP issued the final title V renewal permit for the Colver plant on November 25, 2020.

# 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-

<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/what-ejscreen.* 

day review period to object. 42 U.S.C § 7661d(b)(2). The EPA's 45-day review period expired on October 9, 2020. Thus, any petition seeking the EPA's objection to the Proposed Permit was due on or before December 8, 2020. The Petition was received December 7, 2020, and, therefore, the EPA finds that the Petitioner timely filed the Petition.

## IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONER

## Claim: The Petitioner Claims That "The Colver Permit's Monitoring Regime Does Not Ensure that Emissions Restrictions Are Met"

Petitioner's Claim: The Petitioner claims that the Colver title V permit does not comply with CAA § 504(c), 42 U.S.C § 7661(c)(c), and the implementing regulations at 40 C.F.R. § 70.6(a)(3)(i) and 70.6(c)(1) because it does not contain sufficient monitoring, recordkeeping, and reporting to assure compliance with the hourly VOC emission limit of 11.2 lbs/hour contained in Section D for Source ID 031 (the CFB boiler), permit condition 006 (hereinafter referred to as "D.006"). Petition at 2-3. Specifically, the Petitioner contends that the permit's stack testing regime in permit condition 011 (hereinafter referred to as "D.011") of testing for VOCs every 2 years, or every 3 years if the facility qualifies as a Low Emitting EGU ("LEE"), is too infrequent to comply with hourly VOC emission limits. In addition, the Petitioner asserts that PADEP does not establish the hourly limits of carbon dioxide  $(CO_2)$  and oxygen  $(O_2)$  levels in the permit's parametric monitoring scheme that are needed to ensure compliance with the hourly VOC limit. Id. at 2-4. The Petitioner first asserts that Sierra Club v. E.P.A. held that an annual monitoring requirement for a daily emission limit was inadequate under the CAA. Id. at 2.11 The Petitioner then claims that the EPA's TVA Bull Run Order, Pacificorp Jim Bridger Order, and Homer City Order held, respectively, that biannual, quarterly, and weekly visual observations were inadequate to assure compliance with the applicable opacity limits. Id. at  $3^{12}$ 

The Petitioner acknowledges that PADEP explained in its RTC that the facility qualifies as a LEE under the EPA's Mercury Air Toxics Standards ("MATS"), 40 CFR Part 63 subpart UUUUU, which PADEP believes allows the facility to reduce the frequency of its traditional monitoring. *See Id.* at 3-4 (quoting the RTC at 7). The Petitioner claims that PADEP explained that any alleged shortcomings in the permit's testing methods were mitigated by the requirement that Colver monitor continuously for CO<sub>2</sub> and O<sub>2</sub> in permit condition #016 (hereinafter referred to as "D.016"). *Id.* In rebuttal, the Petitioner contends that PADEP does not "set hourly limits for oxygen or carbon dioxide concentrations tied to VOC emissions or set forth what concentrations of oxygen or carbon dioxide would demonstrate whether Colver is meeting or failing to meet its hourly VOC emission limit." *Id.* at 4. The Petitioner contends that measuring CO<sub>2</sub> or O<sub>2</sub> cannot assure compliance alone without depending on the relationship established in the stack testing, which the Petitioner already claims is too infrequent. *Id.* 

<sup>&</sup>lt;sup>11</sup> Citing to Sierra Club v. E.P.A., 536 F.3d 673. 675 (D.C. Cir. 2008).

<sup>&</sup>lt;sup>12</sup> Specifically, the Petitioner cited to *In the Matter of Tennessee Valley Authority - Bull Run*, Order on Petition No. IV-2015-14 at 8 (November 10, 2016) ("*Bull Run Order*"); *In the Matter of Pacificorp's Jim Bridger and Naughton Electric Utility Steam Generating Plants*, Order on Petition No. VIII-00-1 at 19 (November 16, 2001) ("*Pacificorp Order*"); *In the Matter of EME Homer City Generation LP*, Order on Petition Nos. III-2012-06, III-2012-07, III-2013-02 at 45 (July 30, 2014) ("*EME Homer City Order*").

In addition, the Petitioner claims that PADEP has failed to justify how qualifying for LEE status has any relationship to compliance with the VOC emissions limit. *Id.* at 4. The Petitioner asserts that the EPA's Mercury Air Toxics Standards ("MATS"), 40 CFR Part 63 subpart UUUUU, only specifies that LEE status can be obtained for mercury, hazardous air pollutants, particulate matter, HCl, HF and not for VOCs. *Id.* Therefore, the Petitioner concludes that reliance on LEE status to reduce the frequency of the VOC stack testing is not justified. *Id.* at 5.<sup>13</sup>

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

# PADEP's RTC

In response to public comments submitted by Sierra Club, PADEP stated:

Emission of Volatile Organic Compounds (VOC) from the CFB Boiler (Source ID 031) at Colver is limited to a maximum of 11.2 lb/hr and 47 tons/yr during any consecutive, 12-month period (Section D, Source ID 031, Condition #006, as issued and as proposed). These limits were determined as BAT during processing of the Plan Approval to authorize plant construction. Colver is a minor source of VOC emissions and has no downstream VOC emission control device<sup>2</sup>.

Emission of carbon monoxide (CO) from the CFB Boiler (Source ID 031) at Colver is limited to a maximum of 302 lb/hr and 1,258 tons/yr, during any consecutive, 12-month period under the attribute of 25 Pa. Code § 127.441 (Section D, Source ID 031, Condition #007, as issued and as proposed). These limits were also determined as BAT during processing of the Plan Approval to authorize plant construction. Colver is a major source of CO emissions and has no downstream CO emission control device.

 $^{2}$  While addressing this comment, it was also noticed that carbon monoxide (CO) has emission limits and no means to verify them in the proposed permit. Emission of CO from Colver exceeds the major source threshold. The CFB Boiler has no downstream control of CO.

RTC at 7. Next, PADEP explains the parametric monitoring for VOC emissions included in the title V permit:

Emissions of both VOC and CO from the boiler are the result of incomplete combustion. The basic parameters that determine the complete combustion are Time, Temperature, Turbulence, and Oxygen. All of these maximize completeness of combustion. Excess air for combustion is necessary to provide oxygen to ensure that the fuel, including contained or generated VOC or CO, is oxidized completely. The permit requires that oxygen, or carbon dioxide concentration which can be used to determine oxygen, of the combusted flue gas, be monitored continuously (Section D, Source ID 031, Condition #016, as issued and as proposed). Continuous measurement of sufficient oxygen, without major changes, can assure lower VOC and CO emissions.

<sup>&</sup>lt;sup>13</sup> Citing In the Matter of Northampton Generating Co. LP, Northampton Generating Plant, Petition No. III-2020-1 (EPA July 15, 2020) at 12

*Id.* PADEP then explains an update to the stack testing regime in the final title V permit:

However, stack testing for VOC and CO is necessary to quantify these emissions. Therefore, the permit has been changed to require VOC and CO testing at the frequency of two years, with the exception that as long as the EGU remains a LEE for particulate as a surrogate for non-mercury HAP metals under 40 CFR Part 63, subpart UUUUU, the frequency of testing for PM, VOC, and CO can be reduced to three years.

### Id.

### **Relevant Permit Terms and Conditions**

As relevant background for the EPA's analysis, this section identifies the permit terms and conditions related to the Petitioner's claim.

In relevant part, Permit Condition D(I)(006) states:

In accordance with operating permit #11-306-006: Emissions of volatile organic compounds (VOC) from the CFB boiler shall not exceed: a) 11.2 lbs/hr, and; b) 47 tons/year, during any consecutive, 12-month period.

Final Permit at 26 (Section D, Part I, Permit Condition #006)

In relevant part, Permit Condition D(II)(11)(1) states:

The permittee shall conduct source testing for particulate (Filterable only.), volatile organic compounds (VOC), and carbon monoxide (CO) from the stack of the Circulating Fluidized Bed Boiler (Source ID 031), at no less often than bi-annual intervals with no greater interval than 26-months between test programs. However, should the boiler qualify as a Low Emitting EGU (LEE) for filterable particulate under 40 CFR 63.10005(h), testing for particulate, VOC, and CO shall take place within every three (3) year period, with no greater than 38-months between test programs, for as long as the unit continues to qualify as a LEE for filterable particulate under 40 CFR Part 63, subpart UUUU. Should the unit cease to qualify as a LEE for filterable particulate under this subpart, the bi-annual testing cycle shall be re-established.

Final Permit at 27-28 (Section D, Part II, permit condition #011).

In relevant part, Permit Condition D(II)(015) states:

Owner/operator shall install, certify, maintain and operate continuous emission monitoring systems in accordance with 25 Pa. Code Chapter 139, the Department's Continuous Source Monitoring Manual, 40 CFR Part 75, and applicable requirements of 40 CFR 60, Subpart Da. At a minimum the systems shall measure and record the following from each of the CFB Boilers:

- Nitrogen Oxide emissions (as NO<sub>2</sub>) Sulfur Dioxide emissions
- % Oxygen or Carbon Dioxide

Final Permit at 30 (Section D, Part II, Permit Condition #015)<sup>14</sup>

### The EPA's Analysis

The Petitioner has demonstrated that the Colver permit and permit record are inadequate for the EPA to determine if the monitoring, recordkeeping, and reporting required in the permit assures compliance with the hourly VOC limit. Monitoring, recordkeeping and reporting sufficient to ensure compliance is required by title V of the CAA, 40 CFR Part 70, and Pennsylvania's approved title V program. CAA § 504(c); 42 U.S.C. § 7661c(c); see also, 40 C.F.R. §§ 70.6(a)(3)(i)(A)-(B), (c)(1); 25 Pa. Code § 27.511(a)(1)-(3). While PADEP updated the title V permit to require stack testing for VOC limits in D.011, the Petitioner has demonstrated that the record does not justify the frequency of stack testing. The Petitioner has demonstrated that stack testing every 2 to 3 years alone is not sufficient to assure compliance with an hourly limit, and PADEP has not explained what other monitoring, recordkeeping, and reporting is used to assure compliance with the hourly limits. While the RTC indicates that PADEP intended to use some parametric monitoring of O<sub>2</sub> and CO<sub>2</sub>, the Petitioner has demonstrated that the permit record does not establish a relationship between monitoring of O<sub>2</sub> and CO<sub>2</sub> and compliance with the hourly VOC emission limit. Specifically, the Petitioner has demonstrated that neither the permit nor permit record specify the acceptable range of O<sub>2</sub> or CO<sub>2</sub> that would indicate compliance with the hourly VOC limit, nor does the permit require the source to update that indicator range, if necessary, after each stack test. As explained in previous orders, if a facility relies on parametric monitoring to assure compliance with an emission limit, the values for these parameters should be included in the permit. See In the Matter of Consolidated Edison Co. of NY, Inc. Ravenswood Steam Plant, Order on Petition No. II-2002-08 at 21 (September 30, 2003) (Ravenswood Order); In the Matter of Owens-Brockway Glass Container Inc., Order on Petition No. X-2020-2 at 12 (May 10, 2021) (Owens-Brockway Order).

### **Direction to PADEP**

In responding to this order, PADEP should amend the permit and permit record to include monitoring, recordkeeping, and reporting that assures compliance with the hourly VOC emission limit in D.006. Specifically, PADEP should add monitoring to the permit, in addition to the stack testing, that assures ongoing compliance with the hourly VOC limit. In the RTC, PADEP seems to indicate that the permit requires continuous monitoring of O<sub>2</sub> and CO<sub>2</sub> as parametric monitoring to assure compliance with the hourly VOC limit. However, the title V permit does not clearly indicate that the source must monitor O<sub>2</sub> or CO<sub>2</sub> to assure compliance with the hourly VOC emission limit. If PADEP wants to rely on parametric monitoring of O<sub>2</sub> and CO<sub>2</sub> to demonstrate ongoing compliance with the hourly VOC limit, PADEP should modify the permit to include a permit term requiring the monitoring of O<sub>2</sub> and CO<sub>2</sub> to specifically determine compliance with the hourly VOC limit. Further, PADEP should modify the permit and permit record to indicate and justify the range of O<sub>2</sub> and CO<sub>2</sub> that assures compliance with the hourly

<sup>&</sup>lt;sup>14</sup> This condition is labeled as Permit Condition D(II)(016) in PADEP's Proposed Permit.

VOC limit. PADEP should also update the permit to require that the indicator range be updated, if necessary, based on the most recent stack test.

Once PADEP has established permit terms requiring parametric monitoring, PADEP should evaluate whether the 2- or 3-year stack testing requirement in combination with the parametric monitoring regime is sufficient to assure compliance with the hourly VOC limit and include justification for the monitoring scheme as a whole in the permit record.<sup>15</sup>

The EPA notes that the permit seems to allow for the VOC stack testing to take place on a 2-year basis or a 3-year basis if the source qualifies for LEE status under MATS, 40 CFR Part 63 subpart UUUUU. However, the record does not explain how LEE status under MATS has any effect on compliance with the permit's hourly VOC limit. While the record does not appear to contain any basis for relying on LEE status for more infrequent VOC monitoring, the EPA could understand why PADEP and Colver might want to synchronize their stack testing requirements. As long as PADEP can demonstrate that stack testing for VOC limits is appropriate on a 3-year basis, PADEP could reasonably require the VOC stack testing on the same schedule as the stack testing required under MATS.

### 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 the Petition as described in this Order.

Dated: JUN - 7 2022

hel & Hegan

Michael S. Regan Administrator

<sup>&</sup>lt;sup>15</sup> The EPA notes that while the Petitioner focuses on the monitoring regime for VOC emissions, PADEP's RTC indicates that the permit also contains an hourly limit for CO emissions, for which PADEP added 2- to 3-year stack testing to assure compliance. The EPA recommends that PADEP consider whether the permit also contains adequate parametric monitoring to assure compliance with the hourly CO limit.