# BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Petition No. III-2023-10

In the Matter of

Covanta Delaware Valley LP, Delaware Valley Resource Recovery

Permit No. 23-00004

Issued by the Pennsylvania Department of Environmental Protection

# 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 23, 2023 (the Petition) from the Environmental Integrity Project, Clean Air Council, and Sierra Club (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. 23-00004 (the Permit) issued by the Pennsylvania Department of Environmental Protection (PADEP) to the Covanta Delaware Valley Resource Recovery facility (Covanta or the facility) in Delaware 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 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 in part and denies in part Claim A and grants Claims B and C.

#### II. STATUTORY AND REGULATORY FRAMEWORK

#### A. Title V Permits

Section 502(d)(1) 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 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(I); 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 federally effective on August 29, 1996, is codified at the state level 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. 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 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.

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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

<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

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reference. Id.

petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); see also 40 C.F.R. § 70.12(a)(2)(v).

In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1). Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to 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 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 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

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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.

CAA § 505(b)(2). See MacClarence, 596 F.3d at 1131 ("[T]he Administrator's requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and persuasive."). 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). 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).

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

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<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>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); In the Matter of Georgia Power Company, Order on Petitions at 9–13 (January 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 (March 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 (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); 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).

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

If the EPA grants a title V petition, a permitting authority may address 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. 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 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 EPA's objection. As described in various title V petition orders, the scope of 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 Covanta Delaware Valley Facility

The Delaware Valley Resource Recovery facility, operated by Covanta Delaware Valley LP, is located at 10 Highland Avenue, Chester in Delaware County, Pennsylvania. The facility is a municipal waste incinerator with six rotary waterwall combustors, each with a capacity to burn 448 tons per day of municipal waste, producing steam for power generation. The facility is a major source under title V for emissions of particulate matter (PM), nitrogen oxides, carbon monoxide (CO), volatile organic compounds, and sulfur dioxide.

The EPA used EPA's EJScreen<sup>10</sup> to review key demographic and environmental indicators within a five-kilometer radius of the Covanta facility. This review showed a total population of approximately 60,798 residents within a five-kilometer radius of the facility, of which approximately 59 percent are people of color and 40 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 commonwealth of Pennsylvania.

EJ Index	Percentile in State
Particulate Matter 2.5	85
Ozone	88
Diesel Particulate Matter	87
Air Toxics Cancer Risk	83
Air Toxics Respiratory Hazard	93
Toxic Releases to Air	94
Traffic Proximity	88
Lead Paint	85
Superfund Proximity	91
RMP Facility Proximity	91
Hazardous Waste Proximity	89
Underground Storage Tanks	86
Wastewater Discharge	89

### B. Permitting History

PADEP first issued a title V permit for the Delaware Valley Resource Recovery facility in 2001, which was subsequently renewed. On December 23, 2020, Covanta submitted an application for the fourth renewal of the title V permit. PADEP published notice of a draft permit on August 21, 2021, subject to a

<sup>&</sup>lt;sup>10</sup> EJScreen 2.2 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*.

public comment period that ran until October 4, 2021. On March 10, 2023, PADEP submitted the Proposed Permit, along with its responses to public comments (RTC) and technical review document (TRD) to the EPA for its 45-day review. EPA's 45-day review period ended on April 24, 2023, during which time the EPA did not object to the Proposed Permit. PADEP issued the final title V renewal permit for the Covanta facility on March 10, 2023.

### 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). EPA's 45-day review period expired on April 24, 2023. Thus, any petition seeking EPA's objection to the Proposed Permit was due on or before June 23, 2023. The Petition was received June 23, 2023, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

## IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

Claim A: The Petitioners Claim That "The Renewal Permit Fails to Identify the Origin and Underlying Authority for Many of Its Terms and Conditions, and in Particular Fails to Identify Which Federal Regulations Apply to the Facility's Municipal Waste Combustor Units."

**Petitioners' Claim:** The Petitioners claim that the Permit fails to "specify and reference the origin of and authority for each term or condition" as required by 40 C.F.R. § 70.6(a)(1)(i) and that the permit record is unclear as to which federal requirements under 40 C.F.R. part 60 are applicable to the facility. See Petition at 6–11.

The Petitioners claim that the Permit attributes "nearly all of the conditions in Section E, including all of the emission limits and work practice requirements applicable to the combustors, to 25 Pa. Code § 127.512." *Id.* at 7. The Petitioners argue that this citation is inappropriate because "25 Pa. Code § 127.512 relates to Title V permitting in Pennsylvania generally and merely lists the required elements of a Title V operating permit—it does not constitute the origin of or authority for any permit term or requirement." *Id.* 

The Petitioners address PADEP's response to their comments on this issue, claiming that response is inadequate in that it simply states that the "header that is located above each condition is the origin and authority of the requirements." *Id.* at 9 (quoting RTC at 84). The Petitioners allege that the header above permit conditions # 001–015 and # 020–021 in Section E of the Permit only cites 25 Pa. Code § 127.512. *Id.* 

The Petitioners emphasize that the failure to identify the origin and authority of each permit term makes it "impossible to be certain" which limits in Section E derive from federal regulations under 40 C.F.R. part 60 and which may have been derived from synthetic minor limits taken to avoid New Source Review. *Id.* at 7.

In conjunction with the specific claim regarding the Permit's alleged failure to satisfy 40 C.F.R. § 70.6(a)(1)(i), the Petitioners also present what they describe as a confusing, sometimes contradictory,

permit record as to which (if any) subpart of 40 C.F.R. part 60 applies to the combustors. *See id.* at 7–11. The Petitioners claim that section 129 of the CAA requires that the combustors meet some set of requirements under 40 C.F.R. part 60 depending on when the units were constructed or last modified. *Id.* at 7–8 (citing 42 U.S.C. § 7429(a)(1)(B); 40 C.F.R. §§ 60.50b(a), 60.32b).

The Petitioners claim it is unclear from the permit record whether limits under 40 C.F.R. 60 subpart Eb apply to the combustors, despite comments that specifically requested such clarification. *See id.* at 8–11. The Petitioners claim that PADEP's response does not address their concerns raised in comments, stating only that "[d]uring the review of this renewal application, DEP updates Federal and State applicable requirements so that Title V Operating permit contains the most current as well as practically enforceable conditions." *Id.* at 9 (quoting RTC at 84).

The Petitioners note that the TRD states that the "combustors are subject to 40 C.F.R. 60 Subpart Eb as they are commenced after 1996." *Id.* at 10 (quoting TRD at 7). The Petitioners claim, however, that the limits in the Permit and the limits in PADEP's Section 129/111(d) State Plan for Large Municipal Waste Combustors (State Plan) are less stringent than subpart Eb would require. *Id.* at 10–11.

The Petitioners emphasize that the lack of adequate citation in the Permit exacerbates this confusion and "presents a significant barrier to determining what requirements apply to this Facility at all, let alone the enforcement of those requirements." *Id.* at 11.

**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.

Title V permits must "specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based." 40 C.F.R. § 70.6(a)(1)(i). As the EPA explained in the preamble to the 1992 rule that established the part 70 program, this requirement is critical to understanding the purpose and scope of a title V permit.

Title V requires that operating permits assure compliance with each applicable standard, regulation, or requirement under the Act, including the applicable implementation plan [502(b)(5)(A), 504(a), and 505(b)(1)]. Thus, the permitting authority and EPA should clearly understand and agree on what requirements under the Act apply to a particular source. Section 70.6(a)(1)(i) requires that the permit reference the authority for each term and condition of the permit. Including in the permit legal citations to the provisions of the Act is critical in defining the scope of any permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit.

57 Fed. Reg. 32250, 32275 (July 21, 1992).

In this case, as the Petitioners describe, permit conditions # 001–015 and # 020–021 in Section E of the Permit reference 25 Pa. Code §127.512 in the header above each permit condition. See Permit at 44–

55. PADEP's response to the Petitioners' comment on this issue states that the "header that is located above each condition is the origin and authority of the requirements." RTC at 84. For many of these permit conditions, 25 Pa. Code §127.512 is the only regulation cited in the Permit in association with the permit condition.

Several permit conditions in Section E, however, also refer in their text to other regulations that provide "additional authority" for the permit condition (*i.e.*, permit conditions # 001, # 003, # 010, # 012(b) and # 015). See Permit at 44–48. The Petitioners do not distinguish these permit conditions from others in Section E that lack such additional references. Nor do the Petitioners analyze these references to address whether or how they might identify "the origin of and authority for" the relevant permit conditions. The Petitioners also do not address permit condition # 021 in Section E, which appears to identify the authority for several permit conditions in Section E, stating: "[t]he conditions, marked with "\*\*" under this Group of Section E, are streamlined conditions which assure compliance with the State Plan with the effective date(s) specified in 40 C.F.R. §62.9642." *Id.* at 55. Permit conditions marked with "\*\*" include # 004(b), # 005(a)(1) (specifically the limit on "Mercury and Compounds"), and # 020(b). *See id.* at 45, 53–54.

Therefore, the EPA denies the Petitioners' request for an objection on this claim with regard to permit conditions # 001, # 003, 004(b), # 005(a)(1) (specifically the limit on "Mercury and Compounds"), # 010, # 012(b), # 015, and # 020(b) in Section E of the Permit, because the Petitioners have failed to address key elements of this issue and, thereby, have failed to demonstrate that the Permit does not satisfy 40 C.F.R. § 70.6(a)(1)(i). 40 C.F.R. § 70.12(a)(2)(iii). 11

With regard to the remaining permit conditions in Section E, for which 25 Pa. Code §127.512 is the only cited regulation, as the Petitioners describe, 25 Pa. Code §127.512 is Pennsylvania's regulation specifying the required contents for title V permits. 25 Pa. Code §127.512 does not provide the authority for any specific emission limitation. It is therefore insufficient, in and of itself, to identify "the origin of and authority for" these permit conditions. 40 C.F.R. § 70.6(a)(1)(i). EPA, therefore, grants the Petitioners' request for an objection on this claim with regard to permit conditions # 002, # 004(a), # 005 (except for the limit on "Mercury and Compounds" in # 005(a)(1)), # 006, # 007, # 008, # 009, # 011, # 012(a), (c)–(e), # 013, # 014, and # 020(a) in Section E of the Permit.

The EPA appreciates PADEP's efforts in the RTC to explain the origin of each emission limit in the Permit. See RTC at 17–19, 22, 30. PADEP states that the limits derive from "the most stringent emission standards among the State Plan, DEP BAT and regulatory requirements." RTC at 22. Table 1 of the RTC also helpfully summarizes various limits and compares the relative stringency of regulatory requirements. Id. at 30. Permit condition # 021 indicates that several limits have been streamlined to assure compliance with the State Plan. However, the relationship of permit condition # 021 to the other permit conditions in Section E (i.e., those not marked with "\*\*") is unclear. If a streamlined limit in the Permit is based on a state Best Available Technology (BAT) determination (as seems to be the case for e.g., opacity and CO limits in the Permit), the Permit must cite that authority and clearly identify any other applicable requirements with which the streamlined limit assures compliance. See White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program at 11–

<sup>&</sup>lt;sup>11</sup> See supra note 8 and accompanying text.

20 (March 5, 1996) (White Paper 2) (explaining the process for properly streamlining multiple applicable requirements for one unit).

Moreover, the Petitioners have demonstrated that the permit record is unclear as to the applicability of 40 C.F.R. § 60 subpart Eb, and PADEP's RTC does not clarify the issue. Critically, the permit record does not indicate whether the combustors were modified at any time after the applicability date of subpart Eb.

In 1995, in accordance with section 129 of the CAA, the EPA developed and adopted new source performance standards (NSPS) under section 111(b) and emission guidelines under section 111(d) for municipal waste combustors (MWCs). 60 Fed. Reg. 65387 (December 19, 1995). The NSPS (subpart Eb of 40 C.F.R. part 60) are directly enforceable federal regulations that apply to new MWCs for which construction or modification commenced after September 20, 1994. 40 C.F.R. § 60.50b(a). The emission guidelines (subpart Cb of 40 C.F.R. part 60) are implemented by state air pollution control agencies through sections 129/111(d) State Plans and apply to existing MWCs built before September 20, 1994. 40 C.F.R. § 60.32b(a).

Permit condition # 021 states that "the combustors are subject to the Pennsylvania Section 111(d)/129 State Plan for Large Municipal Waste Combustors (MWCs). This state plan was approved by the USEPA to implement 40 C.F.R. Part 60 subpart Cb requirements, as indicated in 40 C.F.R. § 62.9640." Permit at 55. In the RTC, however, PADEP seems to assert that the facility chose to comply with the State Plan in place of *both* subparts Cb *and* Eb:

A state plan for large MWC units in the Commonwealth of Pennsylvania was developed in accordance with Sections 111(d) and 129 of the Clean Air Act. The State Plan, as protective as the Subparts Cb and Eb requirements, was approved by the USEPA as indicated in 40 C.F.R. §62.9640 . . . In lieu of complying with the subparts Cb and Eb standards, the facility opted to comply with the applicable standards of DEP Municipal Waste Combustor State Plan (State Plan).

RTC at 17–19. It is unclear how this could be the case, since State Plans establish standards only in place of emissions guidelines under sections 129/111(d) (e.g., subpart Cb), not in place of NSPS under sections 129/111(b) (e.g., subpart Eb).

PADEP also states that "the combustors are subject to 40 C.F.R. 60 Subpart Eb as they are commenced after 1996." TRD at 7. This statement seems to conflict with another description of the facility: "the facility operates six (6) rotary waterwall combustors (Westinghouse Model RC170), commenced in 1991." *Id.* at 2.

The permit record is therefore inadequate for the EPA to determine whether the Permit accurately incorporates all applicable requirements, and the EPA grants the Petitioners' request for objection on this claim.

**Direction to PADEP:** PADEP must revise the Permit to clearly identify the "origin of and authority for" permit conditions # 002, # 004(a), # 005 (except for the limit on "Mercury and Compounds" in # 005(a)(1)), # 006, # 007, # 008, # 009, # 011, # 012(a), (c)–(e), # 013, # 014, and # 020(a) in Section E of

the Permit.<sup>12</sup> Any streamlined permit conditions must clearly identify all applicable requirements with which they assure compliance. PADEP must also revise the permit record to clarify the ambiguity surrounding the applicability of subpart Eb. If PADEP determines that subpart Eb is applicable, it must also amend the Permit to ensure that it accurately incorporates all applicable requirements.

Claim B: The Petitioners Claim That "The Renewal Permit Does Not Include Adequate Testing, Monitoring, or Reporting Requirements Sufficient to Assure Continuous Compliance with the Hourly Limit for Particulate Matter Applicable to the Municipal Waste Combustors, and DEP Has Not Adequately Explained Why CEMS Cannot be Utilized at the Facility."

**Petitioners' Claim:** The Petitioners claim that the Permit does not "set forth" monitoring requirements that assure compliance with an hourly PM limit applicable to the facility's combustors, and that the permit record does not clearly explain the rationale for the monitoring requirements currently in the Permit. See Petition at 11–18 (quoting 42 U.S.C. § 7661c(c); citing 40 C.F.R. §§ 70.6(c)(l), 70.7(a)(5); In the Matter of CITGO Refining and Chemicals Co., L.P., Order on Petition No. VI-2007-01 at 7–8 (May 28, 2009) (CITGO Order)).

The Petitioners note the hourly PM limit and associated monitoring (consisting of an annual stack test) in Condition # 010 of Section E. *Id.* at 12 (quoting Permit at 47). The Petitioners claim that the EPA has previously found that "annual stack testing alone is insufficient to assure compliance with an hourly limit." *Id.* at 13 (citing *In re Northeast Maryland Waste Disposal Authority*, Order on Petition No. III-2019-2 (Dec. 11, 2020), *In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station*, Order on Petition No. VI-2017-12 at 25–26 (October 15, 2021) (*Oak Grove Order*)). The Petitioners also note that the draft technical review document "identified flue gas temperature at the baghouse inlet as a parameter that would be continuously monitored to verify PM removal efficiency." *Id.* 

The Petitioners state that they requested in public comments that PADEP require the use of PM continuous emissions monitoring systems (CEMS). *Id.* at 14. The Petitioners reject as "not accurate" PADEP's reasoning not to require CEMS, in which PADEP states: "a 2000 field evaluation conducted by the EPA for PM CEMS had concluded that 'PM CEMS monitoring for emissions verses manual PM method did not correlate well.'" *Id.* at 15 (quoting RTC at 19). The Petitioners argue that the EPA "expressly approved the use of CEMS for the purpose of demonstrating compliance with federal emission limits for PM" for municipal waste combustors and that the EPA "recently proposed to require the use of PM CEMS for demonstrating compliance with filterable PM emission limits at coal-fired and IGCC electric-generating units." *Id.* at 17 (citing 40 C.F.R. § 60.58b(a)(10), <sup>13</sup> 88 Fed. Reg. 24,854, 24,874 (April 24, 2023)). The Petitioners, therefore, claim that PADEP has failed to evaluate CEMS as a compliance assurance option. *Id.* at 17–18.

11

<sup>&</sup>lt;sup>12</sup> The EPA recommends that PADEP review *all* of the permit conditions in Section E (in addition to those listed above) and ensure that specific, accurate, legal citations are included for each, as it was not always clear to the EPA how the regulations cited in the text of certain permit conditions (*e.g.*, permit condition # 015) provided the "origin of and authority for" the permit condition.

<sup>&</sup>lt;sup>13</sup> The Petitioners likely intended to cite 40 C.F.R. § 60.58b(c)(10).

The Petitioners note EPA's comments on the draft permit that recommended that PADEP "evaluate and explain how compliance with any federally enforceable PM limits for the sources listed above is ensured as a practical matter and on a continual basis (for those emission limits that are short-term in nature)," and stated:

EPA recommends evaluating incorporation of appropriate parametric monitoring, which could help to ensure that the PM control devices are operating as designed. EPA recommends that the analysis include the correlation between the monitoring of opacity (which is continuously monitored) and PM emissions, consider the monitoring of pressure drop, and consider the use of baghouse leak detection.

*Id.* at 14 (quoting RTC at 18–19). The Petitioners also note PADEP's response that explains PADEP considers continuous opacity monitoring to be a surrogate for PM CEMS and lists reasons for not requiring leak detection or pressure drop monitoring at baghouses. *Id.* at 15 (quoting RTC at 19).

The Petitioners claim that the permit record fails to explain how the opacity limit assures compliance with the PM limit *Id.* at 15–16 (citing *In the Matter of Owens-Brockway Glass Container, Inc.,* Order on Petition No. X-2020-2 at 14–15 (May 10, 2021) (*Owens-Brockway Order*)). The Petitioners argue that PADEP "has provided no information whatsoever in the permit record that would explain how compliance with the 10% opacity limit will assure compliance with the hourly PM limit." *Id* at 16. The Petitioners criticize PADEP's assertion that "PM has been correlated to opacity '[a]t various facilities in the United States . . . for various industries'" as vague and not specific to the Covanta facility or the limits in the Permit. *Id*. (quoting RTC at 19). Moreover, the Petitioners claim that the Permit "does not actually state anywhere that opacity monitoring either can or will be used to determine compliance with the hourly PM emission limit." *Id*.

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

The permit record is inadequate for the EPA to determine whether the Permit "sets forth" monitoring requirements that assure compliance with the hourly PM limit applicable to the facility's combustors. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); 40 C.F.R. § 70.8(c)(3)(ii).

Determining whether monitoring is adequate in a particular circumstance is generally a context-specific determination made on a case-by-case basis. *CITGO Order* at 7. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5). Title V does not require the use of CEMS "if alternative methods are available that provide sufficiently reliable and timely information for determining compliance." 42 U.S.C. § 7661c(b). As the Petitioners point out, the EPA has previously found that periodic stack testing alone is insufficient to assure compliance with short-term emission limits. *See e.g., Oak Grove Order* at 25–26; *Owens-Brockway Order* at 14–15. The EPA has also found that periodic stack testing in combination with other parametric monitoring or inspection and maintenance requirements may be sufficient to assure compliance with short-term emission limits. *See, e.g., In the Matter of Public Service of New Hampshire, Schiller Station,* Order on Petition No. VI-2014-04 at 15 (July 28, 2015); *In the Matter of Xcel Energy, Cherokee Station,* Order on Petition No. VIII-2010-XX at 11–12 (September 29, 2011).

Here, permit condition # 010 contains the hourly limit on PM emissions applicable to the facility's combustors and states that "[c]ompliance with the above limits shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source." Permit at 47. The permit record also indicates that monitoring flue gas temperature at the baghouse inlet, as required by permit condition # 013(b), "prevents potential damage to the bags caused by overheating, and therefore, ensures the desired performance of the baghouses." RTC at 19–20; TRD at 4; See Permit at 48.

PADEP also appears to rely on continuous opacity monitoring to assure compliance with the PM limit, stating: "Covanta must continuously monitor opacity readings to demonstrate its compliance status. This practice is equivalent to that, 'PM emission status is continuously monitored', as opacity reading is a surrogate indicator for PM emissions." RTC at 19. However, as the Petitioners correctly point out, the Permit does not state that continuous opacity monitoring assures compliance with the hourly PM limit. See Owens-Brockway Order at 14–15 (granting a petition where a permit did not identify opacity monitoring as supplemental monitoring for a PM limit); see also White Paper 2 at 11–20.

Additionally, the permit record does not sufficiently explain how continuous opacity monitoring assures compliance with the PM limit. PADEP's statement that "at various facilities in the United States, PM concentration has been correlated to opacity monitor readings, demonstrating that opacity monitoring provides qualitative and reliable PM emission information for various industries" is not specific to this facility and does not correlate the quantitative opacity and PM emission limits in the Permit. See Owens-Brockway Order at 14–15; In the Matter of Motiva Enterprises, Port Arthur Refinery, Order on Petition No. VI-2016-23 at 10 (May 31, 2018); In the Matter of Public Service Company of Colorado, dba Xcel Energy, Hayden Station Order on Petition No. VIII-2009-01 at 6–7 (March 24, 2010) (all granting claims where the permit record lacked information explaining how opacity monitoring assured compliance with PM limits). EPA, therefore, grants the Petitioners' request for an objection on this claim.

Direction to PADEP: PADEP must amend the permit record and, as necessary, the Permit, to ensure that the Permit assures compliance with the hourly PM limit applicable to the facility's combustors. PADEP could accomplish this in a number of ways, but the permit record must explain the technical basis for its facility-specific decision. For example, PADEP could determine that opacity monitoring provides information relevant to the functioning of PM control equipment and explain how it does so sufficient to comply with an hourly limit, or PADEP could use site-specific testing data to determine whether the opacity limit assures compliance with the PM limit. Note that the EPA is not specifically recommending either of these approaches nor suggesting that these are the only available options. If PADEP intends to rely on opacity monitoring to assure compliance with the PM limit, it must amend the Permit to so indicate.

Claim C: The Petitioners Claim That "DEP Must Revise the Renewal Permit to Include a Compliance Assurance Monitoring Plan for the Hourly PM Limits Applicable to the Combustors, in the Event That DEP Does Not Require CEMs."

**Petitioners' Claim:** The Petitioners claim that the Permit lacks a compliance assurance monitoring (CAM) plan related to the PM limit applicable to the facility's combustors in Condition # 010 of Section E of the Permit. See Petition at 18–21.

The Petitioners argue that the PM limit meets the applicability criteria for the requirement to develop a CAM plan in that (1) the limit is federally enforceable, (2) PM emissions are controlled by baghouses, and (3) uncontrolled PM emissions exceed the major source threshold of 100 tpy. Petition at 18–19 (quoting 40 C.F.R. § 64.2(a)). The Petitioners claim that the Permit nevertheless lacks a CAM plan for PM emissions. *Id.* 

The Petitioners note that the TRD states the combustors "are NOT subject to the CAM requirements as they are subject to the State Implementation Plan with emission limitations and/or standards as protective as the NSPS Subpart Cb requirements which were promulgated after November 1990." *Id.* at 20 (quoting TRD at 7). The Petitioners also claim that the RTC seems to indicate that PADEP considers continuous opacity monitoring, as a surrogate for PM CEMS, sufficient to satisfy the requirement for a CAM plan. *Id.* at 19–20 (quoting RTC at 84). The Petitioners argue that these statements create ambiguity around PADEP's position concerning CAM requirements, but that in either case, PADEP is mistaken. *Id.* 

First the Petitioners claim that the exemption from the requirement to develop a CAM plan, found in 40 C.F.R. § 64.2(b)(1), for emission limits "proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act" does not apply to the PM limit in the Permit because the facility is complying with "a different set of emissions limits proposed by the State." *Id*.

The Petitioners then reiterate their arguments from Claim B concerning PADEP's alleged failure to explain how opacity monitoring can be used as a surrogate for PM CEMS, and the lack of any permit term linking opacity monitoring to the PM limit. *Id* at 20–21.

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

The permit record is inadequate for the EPA to determine whether the Permit incorporates all applicable requirements related to CAM. 40 C.F.R. §§ 70.6(a)(1); 70.2 (definition of "applicable requirement"); and 70.8(c)(3)(ii).

As the Petitioners describe, the combustors seem to meet the applicability criteria for CAM found in 40 C.F.R. 64.2(a) in that they are subject to a limit on PM emissions, they use control devices—baghouses—to achieve compliance with the PM limit, and they have potential pre-control device emissions greater than the amount required for the facility to be classified as a major source—100 tons per year. *See* Permit at 47; TRD at 3–4; RTC at 84.

40 C.F.R. § 64.2(b)(1)(i) establishes an exemption from CAM requirements for emission limits "proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act." 40 C.F.R. § 64.2(b)(1)(vi) also establishes an exemption for limits for which a title V permit "specifies a continuous compliance determination method."

Here, PADEP states in the TRD that the combustors "are NOT subject to the CAM requirements as they are subject to the State Implementation Plan with emission limitations and/or standards as protective as the NSPS Subpart Cb requirements which were promulgated after November 1990." TRD at 7. The

Permit also states under Section H that "[t]he facility is not subject to CAM, because the controlled sources either have applicable federal regulations that were proposed after November 15, 1990, or the emissions are monitored by CEMS. Both of these exemptions are qualified by as defined in 40 CFR §63.2(b)(i)." Permit at 63. In response to the Petitioners' comments on this issue, PADEP also explains that Covanta "installed COMS to monitor their opacity which is surrogate for PM." RTC at 84.

With regard to whether the PM limit qualifies for the exemption in 40 C.F.R. § 64.2(b)(1)(i), PADEP states the combustors are subject to "federal regulations that were proposed after November 15, 1990." Permit at 63. However, this statement does not appear to be correct. Rather, the combustors appear to be subject to the 129/111(d) State Plan and/or streamlined permit terms that assure compliance with the State Plan. TRD at 7; see RTC at 17, 30. <sup>15</sup> In the preamble to the 1997 CAM rule, the EPA explained that while the exemption in 40 C.F.R. § 64.2(b)(1)(i) applies to "limitations or standards under the NSPS program that are proposed after November 15, 1990" the exemption explicitly "does not apply to State emission limits or standards developed under section 111(d) of the Act." 62 Fed. Reg. at 54915 (October 22, 1997). This exemption, therefore, does not appear to be applicable to the combustors. <sup>16</sup>

With regard to whether the PM limit qualifies for the exemption in 40 C.F.R. § 64.2(b)(1)(vi), the permit record does not explain how opacity monitoring could constitute a continuous compliance determination method for the PM limit. Such a method must provide "data either in units of the standard or correlated directly with the compliance limit." 40 C.F.R. § 64.1 (definition of "continuous compliance determination method"). Opacity monitoring does not provide data in units of PM, and, as explained in EPA's response to Claim B, the permit record does not directly correlate opacity monitoring to the PM limit.

Since it does not appear that either exemption from the CAM requirements cited in the Permit and permit record applies to the PM limit, the EPA grants the Petitioners' request for an objection on this claim.

**Direction to PADEP:** PADEP must review the permit record and determine whether CAM requirements associated with the PM limit are applicable to the facility's combustors. If PADEP determines that the combustors are exempt, PADEP must amend the permit record to clearly state the specific exemption under 40 C.F.R. § 64.2(b)(1) that applies in this case and explain why it applies. Information that PADEP may add to the permit record in the process of resolving EPA's objections in Claims A or B may be relevant to this analysis (e.g., a determination that subpart Eb is applicable to the combustors, or data that directly correlate opacity monitor readings with compliance with the PM limit). In the alternative, if PADEP determines that CAM requirements are applicable to the facility's combustors, PADEP must amend the Permit to ensure that it includes all applicable requirements related to CAM.

<sup>15</sup> Although, as explained in EPA's response to Claim A, the Permit does not clearly indicate whether this is the case—the Permit only references PADEP's BAT standard in association with the PM limit.

<sup>&</sup>lt;sup>14</sup> The intended citation was likely 40 C.F.R. § 64.2(b)(1)

<sup>&</sup>lt;sup>16</sup> As explained in EPA's response to Claim A, the permit record is currently unclear as to the applicability of 40 C.F.R. § 60 subpart Eb. In resolving EPA's objection, should PADEP determine that subpart Eb is applicable to the combustors, then the exemption from CAM requirements in 40 C.F.R. § 64.2(b)(1)(i) may indeed apply.

#### ٧. **CONCLUSION**

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

Dated:

Michael S. Regan