BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	PETITION NO. III-2020-1
	)	
NORTHAMPTON GENERATING CO. LP	)	ORDER RESPONDING TO
NORTHAMPTON PLANT	)	PETITION REQUESTING
NORTHAMPTON COUNTY, PENNSYLVANIA	)	OBJECTION TO THE ISSUANCE OF
PERMIT NO. 48-00021	)	TITLE V OPERATING PERMIT
	)	
ISSUED BY THE PENNSYLVANIA	)	
DEPARTMENT OF ENVIRONMENTAL PROTECTION	)	
	)	

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

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition on January 8, 2020 (the Petition) from Sierra Club and the Clean Air Council (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 the proposed operating permit No. 48-00021 (the Proposed Permit) issued by the Pennsylvania Department of Environmental Protection (PADEP) to the Northampton Plant (Northampton or the Facility) in Northampton County, Pennsylvania. The operating permit was issued pursuant to title V of the CAA, CAA §§ 501–507, 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 Proposed Permit, the permit record, and relevant statutory and regulatory authorities, and as explained further below, the EPA grants in part and denies in part the Petition requesting that the EPA Administrator object to the Proposed Permit. Specifically, the EPA partially grants and partially denies Claim I and denies Claim II.

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. CAA §§ 502(a), 503, 504(a), 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* CAA § 504(c), 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), 42 U.S.C. § 7661d(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. 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. CAA § 505(b)(1), 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. CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

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). CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d). 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. CAA § 505(b)(2), 42 U.S.C.

§ 7661d(b)(2); 40 C.F.R. § 70.8(c)(l).[1] Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.[2]

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)).[3] 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.[4] Certain aspects of the petitioner's demonstration burden are discussed below. A more detailed discussion can be found in *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 the petitioner has addressed the state or local permitting authority's decision and reasoning. The EPA expects the petitioner to address the permitting authority's final decision, and the permitting authority's final reasoning (including the state's response to comments), where these documents were available during the timeframe for filing the petition. *See MacClarence*, 596 F.3d at 1132–33.[5] Another factor the EPA examines is whether a petitioner

[1] *See also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).

[2] *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.

[3] *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)).

[4] *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

[5] *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)

has provided the relevant analyses and citations to support its claims. If a petitioner does not, the EPA is left to work out the basis for the petitioner's objection, contrary to Congress's express allocation of the burden of demonstration to the petitioner in CAA § 505(b)(2). *See MacClarence*, 596 F.3d at 1131 ("[T]he Administrator's requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and persuasive.").[6] Relatedly, the EPA has pointed out in numerous previous Orders that general assertions 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).[7] Also, the failure to address a key element of a particular issue presents further grounds for the EPA to determine that a petitioner has not demonstrated a flaw in the permit. *See, e.g., In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014) (*Homer City Order*).[8]

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) on a proposed permit generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. 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 of basis for the draft and proposed permits; the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; relevant supporting materials made available to the public according to 40 C.F.R. § 70.7(h)(2); and all other 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). 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 making a determination whether to grant or deny the petition.

If the EPA grants an objection in response to 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). However, as explained in the *Nucor II Order*, a new proposed permit in response to an objection will not always need to include new permit terms and conditions. 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

(*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).

[6] *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*).

[7] *See also Portland Generating Station Order* at 7 ("[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement]."); *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 8 (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).

[8] *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.

permitting authority to respond only by providing additional rationale to support its permitting decision. *Id*. at 14 n.10. In any case, whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, 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 opportunity to conduct a 45-day review per CAA § 505(b)(1) and 40 C.F.R. § 70.8(c), and an opportunity to petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) if the EPA does not object. The EPA has explained that treating a state's response to an EPA objection as triggering a new EPA review period and a new petition opportunity is consistent with the statutory and regulatory process for addressing objections by the EPA. *Nucor II Order* at 14–15. The EPA's view that the state's response to an EPA objection is generally treated as a new proposed permit does not alter the procedures for the permitting authority to make the changes to the permit terms or condition or permit record that are intended to resolve the EPA's objection, however. When the permitting authority modifies a permit in order to resolve an EPA objection, it must go through the appropriate procedures for that modification. For example, when the permitting authority's response to an objection is a change to the permit terms or conditions or a revision to the permit record, 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.

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 terms or conditions 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 Northampton Facility

Northampton Generating Co., LP, Northampton Cogeneration Plant operates an electric utility generation facility. The Facility generates electricity by producing high pressure steam in a Circulating Fluidized Bed (CFB) boiler which feeds a turbine generator that produces power. The CFB has a maximum capacity rating of 1,146 million British Thermal Units (MMBtu/hr). The CFB is equipped with a pulse-jet type baghouse to control particulate matter (PM) emissions and exhaust to a single dedicated stack.

The CFB is currently permitted to combust the following fuels: anthracite waste coal, coal (anthracite or bituminous), petroleum coke, paper processing residuals, virgin wood, high carbon ash, tire-derived fuel (TDF), and propane. Anthracite waste coal is the primary boiler fuel with #2 fuel oil used for startup and transient stabilization.

Additionally, the facility operates a propane vaporizer, diesel-powered emergency fire water pump, and an emergency generator. The facility also operates fuel handling and storage equipment, ash handling and storage equipment, and limestone handling and storage equipment.

B. Permitting History

The PADEP issued an initial title V operating permit for Northampton on March 15, 2000. The PADEP renewed this permit most recently on November 27, 2018. By letter dated September 10, 2019, Northampton submitted an application for a minor modification to its title V permit to reduce the frequency of monitoring for assuring compliance with various emissions limits for the CFB boiler. *See* Northampton Notification of Minor Air Permit Modification Submittal to Pennsylvania, at 3–4 (September 24, 2019) (Permit Application); Proposed Permit at 25–26. Specifically, the Permit Application sought a modification to reduce the stack testing from annually to once every five years to assure compliance with the arsenic, cadmium, hexavalent chromium, lead, mercury, nickel, zinc, volatile organic compounds (VOCs), and PM emission limits in for the CFB boiler. *See* Permit Application at 3–4; Proposed Permit at 25–26. On September 26, 2019, the PADEP initiated a 45-day EPA review period by submitting the Proposed Permit and a statement of basis (referred to as the "Review Memo" in Pennsylvania) to EPA Region 3. On October 5, 2019, the PADEP published notice of the draft permit and initiated a 30-day public comment period and opportunity to request a public hearing on the minor modification to the Northampton title V permit. By letter dated November 4, 2019, Sierra Club and the Clean Air Council submitted comments to the PADEP on the minor modification to the Northampton title V permit (Public Comments). On December 20, 2019, the PADEP responded to the comments from the Petitioners (RTC). The EPA's 45-day review period on the Proposed Permit ended on November 12, 2019, and the EPA did not object to the issuance of the Proposed Permit.

C. Timeliness of Petition

Pursuant to the CAA, if the EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). The EPA's 45-day review period expired on November 12, 2019. Thus, any petition seeking the EPA's objection to the Proposed Permit was due on or before January 13, 2020. The Petition was received on January 8, 2020, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

Claim I: The Petitioners Claim That "The Northampton Permit's Monitoring Regime Does Not Ensure That Emissions Restrictions Are Met."

Petitioners' Claim: The Petitioners claim that the Northampton title V permit does not comply with CAA § 504(c), 42 U.S.C. § 7661c(c), and the implementing regulations at 40 C.F.R. §§ 70.6(a)(3)(i) and 70.6(c)(1) because the monitoring is inadequate to assure compliance with certain emission limits contained in Section D for Source ID 101 (the CFB boiler), permit conditions 004, 006, and 007 (hereinafter referred to as "D.004," "D.006," and "D.007"). Petition at 3–4. Specifically, the Petitioners claim that the reduction in the frequency of monitoring from once per year stack testing to once every five years stack testing does not assure compliance with hourly emission limits for arsenic, cadmium, hexavalent chromium, lead, mercury, nickel, zinc, VOCs, and PM emissions. *Id.*

The Petitioners cite to *Sierra Club v. E.P.A.* and three EPA title V petition Orders.[9] *Id*. The Petitioners first assert that *Sierra Club v. EPA* held annual monitoring requirement for a daily emission limit was inadequate. Next, the Petitioners claim 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 4.

The Petition acknowledges that the PADEP explained in its RTC that the facility qualifies as a Low-Emitting Electrical Generating Unit ("LEE") under the EPA's Mercury Air Toxics Standards ("MATS"), 40 CFR Part 63, Subpart UUUUU, which the PADEP believes allows the facility to reduce the frequency of its traditional monitoring. *Id*. In rebuttal, the Petitioners contend that CAA § 504(c), 42 U.S.C. § 7661c(c), still requires additional monitoring as necessary to assure compliance with the permitted emission limits. *Id.* The Petitioners claim that "[a]t most, the modified permit requires annual testing of mercury emissions, testing of HAPs [hazardous air pollutants] and particulates once every three years, and testing of zinc and VOCs once every five years." *Id*.at 5. Furthermore, the Petitioners assert that the MATS monitoring provisions in the permit do not contain any monitoring for zinc or VOC emissions, and, therefore, the MATS monitoring provisions cannot assure compliance with the hourly zinc and VOC emissions limits. *Id.*

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

[9] Specifically, the Petitioners cited to *Sierra Club v. E.P.A.*, 536 F.3d 673, 675 (D.C. Cir. 2008); *Tennessee Valley Authority, Bull Run*, Order on Petition No. IV-2015-14, at 8 (November 10, 2016) (*TVA Bull Run Order*); *Pacificorp's Jim Bridger and Naughton Electric Utility Steam Generating Plants*, Order Petition No. VIII-00-I, at 19 (November 16, 2011) (*Pacificorp Jim Bridger Order*); *Homer City Order* at 44–45.

As relevant background for the EPA's analysis, the PADEP's RTC and the Relevant Permit Terms are described below.

The PADEP's RTC

In response to public comments submitted by Sierra Club and the Clean Air Council, the PADEP stated:

> The MATS include emission limits and testing requirements for mercury and other non-mercury metals that have been incorporated into Northampton Generating's Title V permit. Filterable particulate matter ("FPM") acts as a surrogate for non-mercury metals (*see* 40 CFR Part 63, Subpart UUUUU, Table 2 – An EGU must demonstrate compliance with applicable FPM limits or total non-mercury HAP metals *or* individual HAP metals) and can be used to determine compliance with applicable regulatory and permit limits like those in Northampton Generating's Title V operating permit.

RTC at 1. Next, the PADEP explained that Northampton qualifies for LEE status under MATS and stated:

> For mercury, a 30-day performance test is required at least once every 12 calendar months (1 year) to demonstrate continued LEE status. (40 CFR § 63.10000(c)(1)(i)(C)(2)(ii)) (*see also* 40 CFR § 63.10006(b)). For non-mercury HAP metals, a performance test at least once every 36 calendar months (3 years) is required to demonstrate continued LEE status. (40 CFR § 63.10000(c)(1)(i)(C)(2)(iii)) (*see also* 40 CFR § 63.10006(b)).
>
> …
>
> Northampton Generating has conducted performance testing and demonstrated compliance with applicable LEE requirements in 40 CFR Part 63, Subpart UUUUU, as well as the lower FPM limit of 0.0088 lbs./MMBtu in condition #006, SECTION D, pg. 25 of the Title V permit. This lower Title V permit limit was based on the application of Best Available Technology (BAT) requirements imposed by the Department and is 58.67% lower than 0.015 lb/MMBtu, which is 50% of the 3.0 lb/MMBtu FPM [filterable particulate matter] limit in Table 2. The 0.015 lb./MMBtu FPM limit is what must be achieved in order to be classified as LEE for non-mercury HAP metals.
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> …
>
> Based on testing requirements and emissions limits in the MATS, which are established to be protective of human health and the environment, combined with Northampton Generating's performance test results over several years, the facility's qualification for LEE status for both mercury and non-mercury metal

> HAPS, and its compliance with the Department's stringent 0.0088 lb/MMBtu FPM limit, the Department has determined that it is appropriate to grant Northampton Generating's request to change its monitoring requirements.

RTC at 2–3.

Overview of Permit Terms

As noted above, Petitioners assert that the Facility is subject to hourly emissions limits for arsenic, cadmium, hexavalent chromium, lead, mercury, nickel, zinc, total VOC, and particulates. The permit conditions related to these emission limits, except mercury, are spelled out below. For mercury, the Petitioners do not identify exactly what emission limits they are concerned with, but this section includes a general paragraph about the mercury related MATS provisions.

In relevant part, Permit Condition D.004 states:

> The concentration of Volatile Organic Compounds (expressed as VOC) in the effluent gases from CFB boiler shall not exceed 0.005 pounds per million BTU heat input and 5.74 pounds per hour on a 1-hour average, and 23.4 tons per year on a 12-month rolling sum basis.

Proposed Permit at 25 (Section D, permit condition #004).

In relevant part, Permit Condition D.006 states:

> The concentration of total filterable particulate matter [total particulate matter including particulate matter with an aerodynamic diameter of 10 micrometers or less (PM10) (excluding condensables)] in the effluent gases from CFB boiler shall not exceed the following rate:
>
> (1) 0.0088 pounds per million BTU heat input on an hourly average, and 10.1 pounds per hour, and 34.7 tons per year on a 12-month rolling sum basis as measured and replaced in accordance with the PADEP Source Testing Manual.

Proposed Permit at 25 (Section D, permit condition #006).

In relevant part, Permit Condition D.007 states:

> The operation of the CFB boiler, when fired by tire-derived fuel, shall at no time result in the emission of the following contaminants at rates exceeding the limits identified in pounds per hour and verified by stack testing as specified in Condition #015.

Arsenic -	0.000743 pounds/hour
Cadmium -	0.0106 pounds/hour
Hexavalent Chromium -	0.00265 pound/hour
Lead -	0.0027 pounds/hour
Nickel -	0.00875 pounds/hour
Zinc -	0.0606 pounds/hour

Proposed Permit at 25–26 (Section D, permit condition #007).

In relevant part, Permit Condition D.015 states:

> At a minimum, source tests for arsenic, cadmium, hexavalent chromium, lead, mercury, nickel, zinc, total VOCs, and particulates shall be conducted once during the permit term not to exceed five (5) years apart.

Proposed Permit at 35–36 (Section D, permit condition #015).

In addition to the above permit conditions, the PADEP and the Petitioners generally refer to the permit conditions related to the MATS conditions, which contain the mercury emission limits raised by the Petitioner. *See* Proposed Permit at 26–30 (Section D, permit condition #008); Proposed Permit at 30–33 (Section D, permit condition #009); Proposed Permit at 34 (Section D, permit condition #010); Proposed Permit at 34 (Section D, permit condition #011); Proposed Permit at 36–37 (Section D, permit condition #016); Proposed Permit at 37–38 (Section D, permit condition #018); Proposed Permit at 41–45 (Section D, permit condition #030); Proposed Permit at 45 (Section D, permit condition #031); Proposed Permit at 47–48 (Section D, permit condition #039); Proposed Permit at 50–51 (Section D, permit condition #046); Proposed Permit at 51 (Section D, permit condition #047); Proposed Permit at 53–55 (Section D, permit condition #056); Proposed Permit at 55–56 (Section D, permit condition #057); Proposed Permit at 56 (Section D, permit condition #058).

The EPA notes that there is an additional permit condition that was not addressed by the PADEP nor the Petitioners but might be relevant to the emission limits in permit conditions D.004, D.006, and D.007. Permit condition D.035 requires the source to keep hourly, daily, monthly, and yearly records of fuel. *See* Proposed Permit at 46 (Section D, permit condition #035).

The EPA's Analysis

As an initial matter, the EPA denies the portions of Claim I related to the sufficiency of monitoring for mercury emission limits raised by the Petitioners because the Petitioners' claims are general, conclusory, and unsupported, and the Petitioners accordingly have not met their burden of demonstrating noncompliance with the CAA.[10] In response to the Petitioners comments, the PADEP provided an extensive discussion, spanning over three pages, explaining why the monitoring, recordkeeping, and reporting in the Proposed

[10] *See supra* notes 6–8 and accompanying text.

Permit, including an annual, 30-day performance test, for mercury emissions under MATS was sufficient. RTC at 2–5. The PADEP also provided data showing that the source has consistently tested well below the mercury emissions limits since 2015 and reasoned that the source's wide margin of compliance supported the reduction in stack testing as a source qualifying for LEE status under MATS. RTC at 4. Although generally contending that the PADEP has to evaluate whether additional monitoring is needed under title V, the Petitioners have failed to acknowledge or rebut the PADEP's analysis and explanation why the monitoring, recordkeeping, and reporting in the permit is sufficient for mercury.[11] Moreover, the Petitioners acknowledge that the Proposed Permit requires annual performance tests for mercury under MATS, Petition at 6, and fail to provide any information or demonstration as to why such annual testing is insufficient. While the Petitioners cite to certain EPA Orders, all three Orders cited by the Petitioners relate to monitoring of opacity limits.[12] The Petitioners have failed to explain why monitoring for opacity and mercury must be the same or why the monitoring, recordkeeping, and reporting required by MATS for the mercury emission limits in this permit is insufficient to assure compliance. Therefore, the EPA denies Claim I with respect to the mercury emission limit only.

For the remainder of the claim related to the emissions limits in D.004, D.006, and D.007, the EPA grants the Petitioners' claim because the Petitioners have demonstrated that the permit and permit record are inadequate for the EPA to determine if the monitoring required in the permit satisfies compliance with the CAA title V monitoring requirements under Part 70 and Pennsylvania's approved title V program. The CAA requires: "Each permit issued under [title V] shall set forth . . . monitoring . . . requirements to assure compliance with the permit terms and conditions." CAA § 504(c); 42 U.S.C. § 7661c(c); *see also*, 40 C.F.R. § 70.6(a)(3)(i)(A)–(B), (c)(l); 25 Pa. Code § 127.511(a)(1)–(3). While the PADEP implied in the RTC that various MATS requirements in the Proposed Permit provide information related to the hourly emission limits in permit conditions D.004, D.006, and D.007, the EPA has found nothing in the Proposed Permit nor in the statement of basis that identifies any of the MATS monitoring, recordkeeping, or reporting conditions for the purpose of assuring compliance with the hourly emissions limits in permit conditions D.004, D.006, and D.007. Specifically, the Proposed Permit seems to identify only the five-year stack testing in permit condition D.015 as the monitoring for assuring compliance with the hourly emission limits in D.007 and the emission limits for VOC and PM in D.004 and D.006. *See* Proposed Permit at 25–26 (Section D, permit condition #007) ("(V)erified by stack testing as specified in Condition #015."); Proposed Permit at 35–36 (Section D, permit condition #015). Further, the permit record, including the RTC and statement of basis, do not contain any information demonstrating that compliance with the MATS emission limits would assure compliance with the emission limits in D.004, D.006, and D.007. If the MATS emission limits are more stringent than the limits contained in these permit conditions, or if the MATS monitoring, recordkeeping, and reporting would

[11] *See supra* note 5 and accompanying text.
[12] *See* Petition at 3–4 (citing *TVA Bull Run Order* at 8; *Pacificorp Jim Bridger Order* at 19; *Homer City Order* at 44–45).

otherwise assure compliance with the emissions limits in D.004, D.006, and D.007, then the PADEP should establish such relationships in the permit and permit record.[13] At present, the EPA cannot determine from the Proposed Permit or permit record what monitoring, recordkeeping and reporting requirements apply to the emission limits in D.004, D.006, and D.007, or whether such requirements assure compliance with those limits.

In addition, even if the MATS monitoring, recordkeeping, and reporting requirements were intended to assure compliance with the emission limits in D.004, D.006, and D.007, the Petitioners have further demonstrated that the permit record includes no explanation to support the conclusion that the MATS requirements might be sufficient to assure compliance with the VOC and zinc hourly emission limits in D.004 and D.007. In its RTC, the PADEP explained how MATS contained emission limits and testing requirements for mercury and other non-mercury HAP metals and how PM can act as a surrogate to assure compliance with those limits. RTC at 2. However, as the Petitioners correctly asserted, the PADEP did not explain how testing related to metal HAPs or PM could assure compliance with VOC and zinc, which are not regulated by MATS and are not metal HAPs or particulate matter.

Therefore, the Petitioners have demonstrated that the Proposed Permit and permit record are inadequate to explain what monitoring applies to D.004, D.006, and D.007.

Direction to the PADEP

As an initial matter, the EPA notes that the hourly emission limits for arsenic, cadmium, hexavalent chromium, lead, nickel, and zinc appear to be state-only requirements that should be labeled as such in the title V permit. All six of the hourly emission limits D.007 appear to have been established via Plan Approval 48-306-012 (also known as a construction permit). It is common for state-issued construction permits to include requirements from the EPA-approved state implementation plan (SIP), including new source review (NSR) requirements, as well as state-only requirements, such as those from a state toxic air pollutant program. Under the CAA, the SIP and NSR programs generally ensure attainment of the national ambient air quality standards and the six criteria pollutants. CAA §§ 160–169, 42 U.S.C. §§ 7470–7479 (prevention of significant deterioration); CAA §§ 171–193, 42 U.S.C. §§ 7501–7515 (nonattainment NSR); CAA § 110(a)(2)(C), 42 U.S.C. § 7410(a)(2)(C) (minor NSR). While the PM and VOC limits contained in Plan Approval 48-306-012 and permit condition D.007 need to be federally enforceable, the PADEP should evaluate whether the remaining six emission limits were established pursuant to federal CAA requirements. If the PADEP determines that these limits should not be federally enforceable, the Proposed Permit should be modified to label these limits as state-only enforceable.

For the emissions limits that the PADEP determines should be federally enforceable, the PADEP

[13] *See White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* (March 5, 1996) (*White Paper Number 2*) at 11–20 (explaining the process for properly streamlining multiple applicable requirements for one unit).

should evaluate whether the Proposed Permit contains adequate monitoring, recordkeeping, and reporting.[14] The PADEP appears to believe that compliance with the lb/MMbtu limits for MATS will assure compliance with at least some of the hourly emission limits in D.004, D.006, and D.007. If the PADEP intended to establish a correlation between the hourly emission limits in D.004, D.006, and D.007 with the lb/MMbtu limits in the MATS requirements, the permit record should provide information on how compliance with the lb/MMbtu limits will assure compliance with the hourly limits in D.004, D.006, and D.007 and the Proposed Permit itself should identify which MATS permit terms assure compliance with which emission limits in D.004, D.006, and D.007.[15] On the other hand, if the PADEP determines that the lb/MMbtu emission limits are not equivalent or more stringent than the hourly emission limits D.004, D.006, and D.007, then the PADEP might still be able to determine that the monitoring, recordkeeping, and reporting provisions related to MATS in the Proposed Permit can be used to demonstrate compliance with the hourly limits. If that is the case, the permit record should demonstrate which monitoring provisions in conjunction with the five-year stack testing assure compliance with the hourly emission limits and the Proposed Permit itself should identify those monitoring provisions for assuring compliance with permit conditions D.004, D.006, and D.007.

If the hourly VOC and zinc limits in D.004 and D.007 are determined to be federally enforceable requirements, the PADEP should further evaluate how the MATS requirements assure compliance with these limits. As the Petitioners pointed out, MATS does not regulate these pollutants, and the permit record, including the RTC, does not appear to explain how assuring compliance with the MATS limits demonstrates compliance with the VOC and zinc emission limits. If the PADEP determines that the MATS provisions do not assure compliance with the VOC and zinc emission limits and determines the five-year stack testing alone does not assure compliance, the PADEP should supplement the monitoring through title V as necessary.

Finally, the EPA notes that there may be existing monitoring, recordkeeping, and reporting conditions in the Proposed Permit that could be used in conjunction with new provisions to assure compliance with some of the hourly emission limits in D.004, D.006, D.007. For example, permit condition D.035 requires the source to keep hourly, daily, monthly, and yearly records of fuel, which could be supplemented with a requirement to calculate emissions in between stack tests to demonstrate compliance. *See* Proposed Permit at 46 (Section D, permit condition #036).

For the foregoing reasons, the EPA partially grants and partially denies the Petitioners' request for an objection on this claim.

[14] *See* CAA § 504(c); 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(a)(3)(i)(A)–(B), (c)(l); 25 Pa. Code § 127.511(a)(1)–(3).

[15] *See e.g., White Paper Number 2* at 8–9 ("Sources that opt for the streamlining of applicable requirements must demonstrate the adequacy of their proposed streamlined requirements."); 14–16 (outlining the process for comparing different emission limits and developing the permit terms to assure compliance with both underlying applicable emission limits); 11–20 (explaining the process for properly streamlining multiple applicable requirements for one unit).

Claim II: The Petitioners Claim That "DEP Erred in Allowing Northampton to Modify Its Permit Using the Less Stringent Minor Modification Process."

Petitioners' Claim: The Petitioners claim that the PADEP violated the Pennsylvania's approved title V program regulations because it should have used a significant modification process to reduce the frequency of monitoring in permit condition D.015 rather than minor permit modification process. Petition at 5–6. The Petitioners assert that Pennsylvania's regulations only allow minor modifications to be used for changes to existing monitoring when there is a "change in how monitoring is conducted, not in how frequently it occurs." Petition at 6. Therefore, the Petitioners contend that the PADEP's decisions to process this as a minor modification does not provide the public with the opportunity for "much more . . . public engagement and a much more rigorous review process" associated with the significant modification process. *Id.*

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

The PADEP's RTC

In response to public comments submitted by Sierra Club and the Clean Air Council, the PADEP stated:

> A Minor operating permit modification does not exclude a change in the frequency of performance testing as proposed by the Northampton Generating Co., LP/Northampton Cogen., in accordance with the provisions of 25 Pa. Code § 121.1, Definitions. In addition, the draft modification has been reviewed by EPA and has gone through the public participation process.

RTC at 4.

The EPA's Analysis

As noted above, Petitioners bear the burden to demonstrate that the Proposed Permit is not in compliance with the Act.[16] Here, the Petitioners have failed to meet their burden and have not demonstrated that the PADEP violated the CAA, Part 70, or Pennsylvania's approved title V program by processing the application as a minor modification. During the public comment period, the Petitioners raised this concern, and the PADEP explained that a change to the frequency of monitoring was not excluded by the State's definition of "minor operating permit modification." *See* RTC at 4; 25 Pa. Code. § 121.1. The definition of minor operating permit modification allows for a variety of changes "to a monitoring or recordkeeping method." 25 Pa. Code. § 121.1. The Petitioners have not demonstrated that the PADEP interpretation was unreasonable, invalid, or inappropriate. While the Petitioners summarily claim that using a minor modification here violates the CAA, the Petitioners have provided no citations to the CAA or the EPA's Part 70 regulations or attempted to demonstrate that Part 70 does not allow minor modification to be used in this situation. Part 70 permit modification procedures do not

[16] *See supra* note 2 and accompanying text.

specifically address decreases in the frequency of monitoring and do not expressly prohibit the use of minor modification procedures to reduce monitoring frequency. *See* 40 CFR § 70.7(e)(2). The Petitioners have failed to make any attempt to discuss the relevant provisions of the CAA or Part 70 and have failed to meet their demonstration burden on Claim II.

In addition, the Petitioners seem to be concerned that the minor modification process did not provide them with the same public participation opportunity as a significant modification would have. However, the Petitioners fail to acknowledge that the minor modification went through at least a 30-day public comment period with an opportunity to request a hearing. *See The Morning Call*, October 2, 2019 ("A 30-day comment period from the date of this publication will exist for the submission of comments. . . All persons submitting public comments or requesting a hearing will be notified of the decision to hold a hearing…"). The 30-day public comment period and an opportunity to request a public hearing fulfill the same public participation requirements of a significant modification. *See* 40 CFR § 70.7(e)(4)(ii), (h)(4); 25 Pa. Code § 127.521(e). In addition, the Petitioners availed themselves of the opportunity to comment (and did not request a hearing). Therefore, even assuming Petitioners had met their burden of showing that a minor modification process could not be used, the Petitioners have not demonstrated that this minor modification process for Northampton did not provide for substantially the same opportunity for public participation as would have been available if it were labeled a significant modification.

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

V. CONCLUSION

For the reasons set forth above 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 above.

Dated: July 15, 2020

Andrew R. Wheeler
Administrator