

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF)	PETITION No. III-2019-2
)	
NORTHEAST MARYLAND WASTE DISPOSAL AUTHORITY)	ORDER RESPONDING TO
MONTGOMERY Co. RESOURCE RECOVERY FACILITY)	PETITION REQUESTING
MONTGOMERY COUNTY, MARYLAND PERMIT No. 24-031-01718)	OBJECTION TO THE ISSUANCE OF TITLE V OPERATING PERMIT
)	
ISSUED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT)	

ORDER GRANTING A PETITION FOR OBJECTION TO PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated February 4, 2019 (the Petition) from the Environmental Integrity Project and Chesapeake Climate Action Network (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 final operating permit No. 24-031-1718 (the Permit) issued by the Maryland Department of the Environment (MDE) for the Montgomery County Resource Recovery Facility (MCRRF or the facility) in Montgomery County, Maryland. The operating permit was issued pursuant to title V of the CAA, CAA §§ 501–507, 42 U.S.C. §§ 7661–7661f, and Environment Article, Title 2, Annotated Code of Maryland, COMAR 26.11.02 and .03. *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also referred to as a title V permit or part 70 permit.

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

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to the EPA an operating permit program to meet the requirements of title V of the CAA and the EPA’s implementing regulations at 40 C.F.R. part 70. The state of Maryland submitted a title V program governing the issuance of operating permits on May 9, 1995, and July 15, 2002. The EPA granted full approval of Maryland’s title V operating permit program in 2003. 68 FR 1974

(January 15, 2003). This program, which became effective on February 14, 2003, is codified in COMAR 26.11.02 and .03.

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

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.

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 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

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) (*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).

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).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 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

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.

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 Montgomery County Resource Recovery Facility (MCRRF)

The MCRRF is a municipal solid waste resource recovery facility operated by Covanta Montgomery, Inc. on behalf of the Northeast Maryland Waste Disposal Authority. The facility is comprised of three identical furnaces, each capable of burning 600 tons per day of refuse on an annual average basis. The combustion gases from the furnace pass through the air pollution control system which includes a dry scrubber for primary acid gas control and a furnace dry lime injection system for additional acid gas control on an as needed basis.

B. Permitting History

The MDE proposed a draft renewal title V permit for public comment in July 2018. The proposed permit was sent to the EPA for review on July 24, 2018, and the final title V renewal permit was issued on January 1, 2019.

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 December 5, 2018. Thus, any petition seeking the EPA's objection to the Permit was due on or before February 4, 2019. The Petition was submitted on February 4, 2019, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

IV. DETERMINATIONS ON CLAIM RAISED BY THE PETITIONERS

The Petitioners Claim That “The MCRRF Permit Does Not Require Monitoring Sufficient to Assure Compliance with the Prevention of Significant Deterioration Limit for HCl”

The Petitioners claim generally that the Permit fails to set forth monitoring requirements that assure continuous compliance with the 1-hour Prevention of Significant Deterioration (PSD) emission limit for hydrogen chloride (HCl). The Petitioners presented three sub-claims in support of their assertion. Because these sub-claims include substantially overlapping issues that all relate to the adequacy of the HCl monitoring, we will address all issues together.

Petitioners' Claim: The Petitioners state that the Clean Air Act requires title V permits to include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. Petition at 4 (citing 42 U.S.C. §7661c(c)). The Petitioners assert that the frequency of monitoring must bear some relationship to the averaging time used to determine compliance. Petition at 5. The Petitioners state that this statutory duty to include adequate monitoring is emphasized in *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir., 2008), where the court stated “[w]here the applicable requirement does not require periodic testing, ‘[40 C.F.R. §] 70.6(a)(3)(i)(B) obliges the permitting authority to add to the permit ‘periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit.’” Petition at 5 (citing *Sierra Club v. EPA*, 536 F.3d 673, 675 (D.C. Cir. 2008)). The Petitioners stated that to illustrate this point, “the court expressed doubt that an annual test could assure compliance with an emission limit that had to be met on a daily basis.” Petition at 5.

The Petitioners note that the three municipal waste combustor units are subject to a PSD limit for HCl of 25 ppmv on a 1-hour average corrected to 7 percent O₂ (dry gas) or at least 95 percent removal efficiency, whichever is less restrictive. Petition at 5. The Petitioners assert that this limit must be met at all times based on Permit Condition 4.1.2 A(2) which states that “[t]he standards in Table A [which include the PSD HCl limit] shall apply at all times,” with certain exceptions, none of which apply to the PSD HCl limit. Petition at 6 n. 2. The Petitioners allege that the Permit “requires that compliance with the PSD HCl limit be determined based on annual stack testing.” Petitioners cite 40 C.F.R 70.6(a)(3)(i)(B), and state that “annual stack testing cannot assure continuous compliance with a limit that must be met on an hourly basis.” Petition at 6. Citing the statement found in *Sierra Club v. EPA* expressing doubt that annual testing can assure compliance with a daily emission limit, the Petitioners allege that “[i]n the present case,

the deficiency is even greater because MDE is allowing annual testing to show compliance with an *hourly* limit.” Petition at 6 (emphasis in original).

The Petitioners refer to their comments on the proposed Permit which stated that the annual stack testing required in the permit is insufficient to assure compliance with the 1-hour PSD HCl limit. The Petitioners also noted that the existing on-site Continuous Emissions Monitoring System (CEMS) for HCl, which is now used for informational purposes only, should be used to show compliance with the PSD HCl limit and that MDE’s rationale for using the HCl CEMS for informational purposes only appears to no longer be valid.⁹ Regardless of the CEMS, the Petitioners commented that annual stack testing is entirely insufficient to demonstrate compliance with the MCRRF’s 1-hour PSD-based emissions limit for HCl.

The Petitioners assert that MDE’s response to these comments is substantively unresponsive to Petitioners’ argument that stack testing is insufficient to assure compliance with the hourly PSD HCl limit. Instead, the Petitioners said MDE focused on Petitioners’ argument that data from the HCl CEMS should be used to determine compliance. The Petitioners disagree with MDE’s response that based on historical HCl data, it is clear the waste combustors operate at HCl levels that are significantly below compliance limits. Petitioners note that the data relied on by MDE includes three data points, each representing a 5-year average of the annual stack testing results for one of the units and that other HCl data, specifically annual stack test data from 2013 through 2017 for each unit, demonstrate that the HCl emissions from the waste combustors vary widely and reach much higher concentrations than those relied upon by MDE in their response. The Petitioners cite to MDE’s response which states that the HCl CEMS data can be used as an effective proxy for actual HCl emissions. Petition at 9. In response, the Petitioners state “[e]ven though the HCl CEMS data is reported on a 3-hour average, meaning that any 1-hour spikes are masked, the data still shows that the HCl emissions concentrations can swing sharply by a factor of three or more within a given day.” *Id.* In response to MDE’s assertion that the existing on-site HCl CEMS is an effective surrogate monitoring device for operational controls and the outlet CEMS data follow closely with the stack tests, the Petitioners note that none of these measures is required in the Permit. Petition at 10 (citing MDE Response to Comments at 3). The Petitioners assert that “[t]he use of HCl CEMS data as an indicator may not be considered in evaluating whether the Permit includes monitoring sufficient to assure compliance with the PSD HCl limit unless the permit is revised to require the referenced monitoring approach.” Petition at 11. The Petitioners assert that if the HCl CEMS data is to be used as an indicator, MDE must “establish a threshold for HCl CEMS data on a 1-hour basis” that is used to determine “more specific parameters [contained in the Permit] for when corrective action must be taken” *Id.*

EPA’s Response: For the following reasons, the EPA grants the Petitioners’ request for an objection on this claim because the EPA finds that the Petitioners have demonstrated that the Permit does not contain adequate monitoring requirements to ensure continuous compliance with the HCl emission limit.

⁹ While both the Petitioner and MDE refer to this monitor as a CEMS, because the monitor is currently not certified to meet the EPA standards, it does not qualify as a CEMS. See 40 C.F.R. § 63.2. Because the monitor is currently not certified, MDE does not treat any reading from the device that exceeds an emission limitation as a violation of that limitation or the requirements of the title V permit.

Relevant Permit Condition

The emission standard for HCl as required by Table A is 25 ppmv on a 1-hour average corrected to 7 percent O₂ or at least 95 percent removal efficiency whichever is less restrictive. The permit specifies that compliance with this standard is determined by the EPA reference method 26 stack test on an annual basis.

Legal Standard

The CAA requires that “[e]ach permit issued under [title V] shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. 7661c(c). As the EPA has previously explained:

To summarize, EPA’s part 70 monitoring rules (40 C.F.R. §§ 70.6(a)(3)(i)(A) and (B) and 70.6(c)(1)) are designed to satisfy the statutory requirement that “[e]ach permit issued under [title V] shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions.” CAA §504(c). As a general matter, authorities must take three steps to satisfy the monitoring requirements in EPA’s part 70 regulations. First, under 40 C.F.R. § 70.6(a)(3)(i)(A), permitting authorities must ensure that monitoring requirements contained in applicable requirements are properly incorporated into the title V permit. Second, if the applicable requirement contains no periodic monitoring, permitting authorities must add “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit.” 40 C.F.R. § 70.6(a)(3)(i)(B). Third, if there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance. 40 C.F.R. § 70.6(c)(1). EPA notes that periodic monitoring that meets the requirements of 40 C.F.R. § 70.6(a)(3)(i)(B) will be sufficient to satisfy the requirements of 40 C.F.R. § 70.6(c)(1) (i.e., will be sufficient to assure compliance with permit condition terms and conditions). In addition, in many cases, monitoring from applicable requirements will be sufficient to assure compliance with permit terms and conditions. For example monitoring established consistent with EPA’s Compliance Assurance Monitoring (CAM) rule (40 C.F.R. part 64) will be sufficient to assure compliance with permit terms and conditions, thus meeting the requirements of 40 C.F.R. § 70.6(c)(1).

In the Matter of CITGO Refining and Chemicals Co., L.P., West Plant, Corpus Christi, Tx., Order on Petition No. VI-2007-01 (May 28, 2009) (*CITGO Order*) At 6-7; *see Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008); *see also In the Matter of Public Service of New Hampshire*, Order on Petition No. VI-2014-04 (July 28, 2015) at 14; *In the Matter of EME Homer City Generation LP Indiana County, Penn.*, Order on Petition Nos. III-2012-06, III-2012-07, III-2013-02 (July 30, 2014) (*Homer City Order*) at 45.

In addition, the rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5). The determination whether

monitoring is adequate in a particular circumstance generally is a context-specific determination, made on a case-by-case basis. *Homer City Order* at 45; *CITGO Order* at 6-8.

EPA Analysis

The Petitioners have demonstrated that MDE's reliance on an annual stack test to assure compliance with an hourly HCl emission limit is insufficient. The flaw in the use of an annual stack test to assure compliance with an hourly limit is not remedied by MDE's references to countermeasures not required by the permit or the use of a 3-hour block average of results from an uncertified HCl monitor. Therefore, the Petitioners have demonstrated that there is a flaw in the Permit because there is insufficient monitoring in the Permit to assure compliance with the 1-hour HCl limit.

In this instance, the applicable requirement—the 1-hour HCl emission limit from a PSD permit—does have monitoring associated with it, namely an annual stack test. This requirement has been incorporated into the Permit pursuant to 40 C.F.R. § 70.6(a)(3)(i)(A). Therefore, the question is whether this monitoring satisfies the third prong of the *CITGO Order* test set forth above: is the requirement for an annual stack test sufficient to assure compliance with the applicable requirement (the 1-hour HCl emission limit), in accordance with 40 C.F.R. § 70.6(c)(1)? The Petitioners have demonstrated that the answer to that question is no and, therefore, the EPA is granting their petition to object to the Permit.

An annual stack test alone is insufficient to assure compliance with a 1-hour HCl emission limit.

The Petitioners have demonstrated that the only enforceable monitoring requirement for HCl emissions in the Permit is an *annual* stack test, and that this is insufficient to assure compliance with a 1-hour HCl emission limit.

In their public comments, the Petitioners argued that MDE's use of an annual stack test to demonstrate compliance with a 1-hour HCl emission limit was inadequate because the Permittee must be required to show that it meets the standard at all times. The Petitioners argued that a single annual stack test by itself is simply not sufficient to evaluate whether the 1-hour HCl emission limit will be met at all times. In response, MDE was clear that “compliance with the HCl emissions limit is accomplished through emission stack testing . . .” RTC at 3.

The Petitioners argue that the “the frequency of monitoring must bear some relationship to the averaging time used to determine compliance.” Petition at 5. The EPA agrees and finds that the Petitioners have demonstrated that the annual stack test required by the Permit, by itself, is insufficient to assure compliance with the hourly HCl emission limit.

The suggested countermeasures are not required by the permit and cannot remedy the flaw in the use of annual stack test to assure compliance with an hourly emission limit.

In response to the Petitioners' comments, MDE asserted that “HCl CEMS are still an effective surrogate monitoring device for operational controls.” Additionally, MDE stated that,

“[T]he Permittee uses the HCl monitors to support facility operations. The HCl analyzers have demonstrated to be a reasonable approach for ensuring continuous compliance with the HCl permit limit. The monitors provide real-time data that allows the operators to quickly respond to elevated HCl readings. Available response actions include increasing reagent flow rates (i.e., increased lime usage results in lower acid gas emissions, including both sulfur dioxide (SO₂) and HCl), the lighting of auxiliary burners, and adjusting air flows and MSW feed rates.”

MDE Response to Comments at 4-5.

These purported countermeasures do not remedy the flaw of using an annual stack test to assure compliance with an hourly emission limit. The Petitioners have demonstrated that the Permit lacks specific instructions on how readings from the uncertified HCl monitor might be used to ensure continuous compliance with the 1-hour HCl emissions limit. It is not clear that high readings from the uncertified HCl monitor—including any that exceed the emission limit of 25 ppmv—would amount to a permit violation. Indeed, the Permit itself explains that these readings are for “informational purposes only.” See Permit Condition 4.14.A(12). Instead, these monitoring results appear simply to present the Permittee with information that *may* be used to *guide* its behavior. However, nothing in the permit suggests *how* these results guide the Permittee’s behavior. Therefore, the Petitioners have demonstrated that the only enforceable monitoring requirement of the Permit for the 1-hour HCl emission limit is the annual stack test. Moreover, as noted above, Petitioners have demonstrated that the annual stack test alone is insufficient to assure compliance with the 1-hour HCl emission limit because “the frequency of monitoring must bear some relationship to the averaging time used to determine compliance.” Petition at 5; *id.* at 6.

The Petitioners have demonstrated that if MDE is using other enforceable means to monitor and assure compliance with the hourly HCl emission limit, the Permit does not clearly identify those means. The Petitioners have, therefore, demonstrated that the record does not adequately justify why annual stack testing alone is sufficient to assure compliance with the hourly HCl emission limit. See 40 C.F.R. §70.7(a)(5).

The use of a 3-hour block average to assure compliance with a 1-hour HCl emission limit is insufficient.

The Petitioners have demonstrated that MDE’s use of a 3-hour block average reading from an uncertified HCl monitor is insufficient to assure compliance with the 1-hour emission limit, and this would be so even if the 3-hour block average readings yielded enforceable results. Therefore, the use of the 3-hour block average monitoring results does not remedy the flaw of using an annual stack test to assure compliance with an hourly emission limit.

To support its theory that the combination of monitoring a 3-hour block average of HCl emissions from an uncertified HCl monitor in conjunction with unspecified, and therefore unenforceable, operating requirements is adequate, MDE claimed that: “upon review of historical HCl data, it is clear that the [municipal waste combustors] operate at HCl levels that are significantly below compliance limits.” RTC at 4.

The Petitioners have demonstrated that MDE's reliance on the data presented is misplaced and does not support MDE's decision. The Petitioners explain that the data MDE relied upon to come to its conclusion is based on three data points (one for each waste combustor), each of which represents a 5-year average of the *annual* hourly stack tests. Petition at 8. The Petitioners assert that averaging 5 years of annual stack tests obscures the variability of the stack tests themselves which ranged from 8.63 ppm to 20.9 ppm and that the highest result from these stack tests was only 16 percent below the 1-hour HCl limit. Petition at 8-9. The Petitioners have demonstrated that MDE's reliance on this data to show that HCl levels "are *significantly* below compliance limits" is misplaced and does not support MDE's conclusion that the monitoring included in the Permit is sufficient to assure compliance with the 1-hour HCl emission limit. (emphasis added).

Petitioners have also demonstrated that MDE's responses to comments would not justify use of 3-hour block average monitoring to assure compliance with a 1-hour HCl emission limit even if the 3-hour block average monitoring was not used for "informational purposes only" and that results from the monitor exceeding 25 ppmv were to constitute permit violations. The Petitioners point to MDE's statement that the HCl monitor is "an effective surrogate monitoring device for operational controls . . . [and] [t]he outlet CEMS [data] follow closely with the stack tests." Petition at 9 n.6. In reaction to this assertion from MDE, the Petitioners explain that the 3-hour block emissions data from the HCl monitor shows emissions have ranged widely over the course of a single day and has been reported as high as 24 ppm. Petition at 9. In addition to the variability in HCl emissions the Petitioners have shown by examining these 3-hour block averages, the Petitioners point out that the 3-hour block average can obscure spikes in the 1-hour average of HCl emissions. Given the demonstrated variability in HCl emissions and how close some of the reported 3-hour block averages are to the 1-hour emission limit, the Petitioners have demonstrated that, on this record, a 3-hour block average of reported HCl emissions data is insufficient to assure compliance with the 1-hour HCl emission limit, even if it were enforceable, because it can mask spikes in HCl concentrations that may violate the 1-hour emission limit. Therefore, the use of a 3-hour block average from the uncertified HCl monitors does not remedy the flaw in using an annual stack test to assure compliance with an hourly emission limit.

EPA's Direction: MDE should respond to this objection by revising the Permit to ensure that adequate monitoring is included to ensure continuous compliance with the 1-hour HCl emission limit.

The EPA notes that, in lieu of using a certified HCl CEMS,¹⁰ the Permit already contains monitoring requirements for other permit terms and conditions that may be useful surrogates for determining compliance with the 1-hour HCl emission limit. For instance, MDE states within the Operating Permit Fact Sheet that "in addition to the annual compliance stack test, the Department will use data collected from the SO₂ CEMS and an uncertified HCl CEMS to assess whether or not additional testing or monitoring will be required to assure continuous compliance

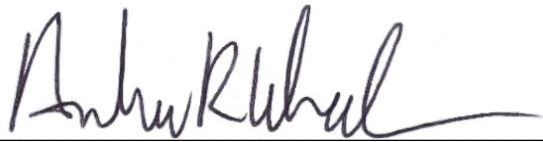
¹⁰ The EPA notes that continued use of a 3-hour block average, even if using a certified HCl CEMS, is likely inappropriate for demonstrating compliance with a 1-hour standard. For example, a reading of 24 ppm from the HCl CEMS on a 3-hour block average could mean that one or even two hours during that block could exceed a reading of 25 ppm, yet these violations would be obscured or hidden by sufficiently low emissions during other times in the 3-hour block period.

with the HCl emission standards.” The Permit already requires the Permittee to calculate 1-hour arithmetic average of SO₂ emissions using the CEMS. *See* Condition 4.14A(9). If MDE can establish that the SO₂ emissions monitored by the SO₂ CEMS correlate with HCl emissions, it may be possible for MDE to establish such a correlation in the Permit and use the SO₂ CEMS to assure compliance with the 1-hour HCl emission limit as well. However, this is not MDE’s only option for revising the Permit to assure compliance with the 1-hour HCl emission limit.

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 the Petition as described above.

Dated: 12/11/2020



Andrew R. Wheeler
Administrator