UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR

IN THE MATTER OF	)	PETITION FOR OBJECTION
Clean Air Act Title V Operating Permit No. 23-00004	)	Permit Number 23-00004
Issued to Covanta Delaware Valley LP	)	
Issued by the Pennsylvania Department of Environmental Protection	)	

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF TITLE V PERMIT NO. 23-00004 FOR COVANTA DELAWARE VALLEY LP'S DELAWARE VALLEY RESOURCE RECOVERY FACILITY

Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), the Environmental Integrity Project, Clean Air Council, and Sierra Club (collectively, "Petitioners") respectfully petition the Administrator of the U.S. Environmental Protection Agency ("Administrator" or "EPA") to object to the Title V Operating Permit #23-00004 ("Renewal Permit") issued by the Pennsylvania Department of Environmental Protection ("DEP") on March 10, 2023 to the Delaware Valley Resource Recovery Facility ("Facility") owned and operated by Covanta Delaware Valley LP, ("Covanta") in Delaware County, Pennsylvania. As required, Petitioners are filing this Petition with the Administrator via the Central Data Exchange and providing copies via certified U.S. mail to DEP and Covanta.

As discussed further below, EPA must object to the Renewal Permit both because it does not include the minimum elements required for all Title V operating permits and because it does not include monitoring and reporting requirements sufficient to assure compliance with all applicable requirements of the Clean Air Act. Specifically, the Renewal Permit (1) inexplicably fails to identify or even reference the origin and underlying authority for many of its terms and

conditions, including failing to identify which federal regulations apply to the Facility's municipal waste combustor units; and (2) does not include adequate testing, monitoring, or reporting requirements sufficient to assure continuous compliance with the hourly limit for particulate matter ("PM") applicable to the municipal waste combustors, which includes an unexplained failure to include a compliance assurance monitoring plan for PM.

Petitioners note that both Petitioners and EPA Region III specifically raised these deficiencies during the public comment period on the draft permit. DEP's failure to adequately address these concerns in the final Renewal Permit is particularly concerning given that both EPA and DEP recognize the City of Chester as an Environmental Justice area with a large proportion of vulnerable residents and a well-documented, long-standing history of disproportionate environmental impacts.

I. PETITIONERS

The Environmental Integrity Project ("EIP") is a non-profit, non-partisan watchdog organization founded to advocate for the effective enforcement of environmental laws, with a specific focus on the Clean Air Act and large stationary sources of air pollution such as the Facility. EIP has three goals: (1) to illustrate through objective facts and figures how the failure to enforce and implement environmental laws increases pollution and harms public health; (2) to hold federal and state agencies, as well as individual corporations accountable for failing to enforce or comply with environmental laws; and (3) to help local communities obtain protections guaranteed by environmental laws. EIP is headquartered in Washington, D.C., and has additional offices and programs in Austin, Texas.

Clean Air Council ("the Council") is a non-profit environmental health organization headquartered at 135 South 19th Street, Suite 300, Philadelphia, Pennsylvania, 19103. The

Council has been working to protect everyone's right to a healthy environment for over 50 years. The Council has members throughout the Commonwealth who support its mission.

Sierra Club is the oldest and largest grassroots environmental organization in the United States, with over 716,000 members nationally. Sierra Club is a nonprofit, membership organization incorporated in California, with its national headquarters located in Oakland. Sierra Club's mission is to explore, enjoy, and protect the wild places of the Earth; to practice and promote the responsible use of the Earth's resources and ecosystems; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

II. FACILITY DESCRIPTION AND PERMITTING HISTORY

Covanta Delaware Valley is a municipal waste incinerator, sometimes referred to as a "waste-to-energy" facility, located in the City of Chester, Delaware County, Pennsylvania. The Facility operates six rotary waterwall combustors, which each have a capacity to burn 448 tons of municipal waste per day in order to generate electricity for internal use and sale on the electric grid. The Facility is a major source of air pollution as defined under the Clean Air Act, and one of the largest emitters in Delaware County. *See generally* Exhibit 1, Petitioners' Comments on Proposed Renewal Permit (Oct. 4, 2021) ("Petitioners' Comments") at 9-18. As Petitioners outlined in their comments, the area surrounding the Facility has a well-documented history of both significant pollution clustering and a high incidence of respiratory and other health issues, including cancer risks and incidence of asthma rates much higher than both national and statewide rates. Petitioners' Comments at 18-21. The data for the City of Chester in which the Facility is located is especially alarming and shows significantly elevated rates of lung and ovarian cancer, mortality from heart disease, and mortality from cerebrovascular disease, as well

as adult asthma rates over twice the national average (26.7% v. 12.7%) and asthma rates in children nearly three times the national average (38.5% v. 13.6%). Both EPA and DEP have recognized the area surrounding the Facility as an Environmental Justice area with a large proportion of vulnerable population and history of disproportionate environmental impacts.

On December 22, 2020, Covanta submitted an application for renewal of Title V Operating Permit No. 23-00004. On September 2, 2021, DEP published notice of its intent to issue the Renewal Permit, with the 30-day public comment period ending on October 4, 2021.[1] Petitioners timely submitted comments on the draft permit on October 4, 2021, which raised the same concerns stated in this Petition. *See* Exhibit 1. EPA Region III also submitted comments on the draft permit, which identified many of the same concerns raised by Petitioners' Comments. *See* Exhibit 2, Comment and Response Document on Draft Title V Operating Permit TVOP-23-00004 (Feb. 23, 2023) ("RTC") pp. 11-15. EPA's comments directed DEP to provide EPA with a copy of the proposed permit, revised statement of basis, and response to significant comments received from all commenters for review after the conclusion of the public comment period, and stated that the date EPA received the requested documents would be the first day of EPA's 45-day review period. *Id.* at 13. EPA's website indicates that EPA's 45-day review period ended on April 24, 2023, and that consequently the 60-day period for public petitions ends on June 23, 2023. Accordingly, this Petition is timely filed.

III. STANDARD OF REVIEW FOR TITLE V PETITIONS

Title V permits, which must list and assure compliance with all federally enforceable requirements that apply to each major source of air pollution, are the primary method for enforcing and assuring compliance with the Clean Air Act's pollution control requirements for

[1] The original deadline of October 2, 2021, fell on a Saturday.

major sources. 57 Fed. Reg. 32,250, 32,258 (July 21, 1992). One of the primary purposes of Title V 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. Increased source accountability and better enforcement should result." *Id*. at 32251.

It is the Title V permitting authority's responsibility to ensure that a proposed permit "set[s] forth" conditions sufficient "to assure compliance with all applicable requirements" of the Clean Air Act. *In the Matter of Sandy Creek Services, LLC, Sandy Creek Energy Station, McLennan County, TX,* Order on Petition No. III-2018-1 (June 30, 2021) ("Sandy Creek Order") at 12 (quoting 42 U.S.C. § 7661c(c)). The permitting authority's rationale for any proposed permit conditions must be clear and documented in the permit record, 40 C.F.R. § 70.7(a)(5), and "permitting authorities have a responsibility to respond to significant comments" received on a proposed permit. *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 7.

EPA must object to any Title V permit that fails to include or assure compliance with all applicable requirements of the Clean Air Act. 40 C.F.R. § 70.8(c). "Applicable requirements" include any requirements of a federally enforceable SIP and any preconstruction requirements that are incorporated into the Title V permit. *In the Matter of Pac. Coast Bldg. Prods., Inc., Permit No. A00011, Clark County, NV* (Dec. 10, 1999) at 7 ("applicable requirements include the requirement to obtain preconstruction permits that comply with preconstruction review requirements under the Act, EPA regulations, and State Implementation Plans."). If EPA does not object to a Title V permit, "any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d). The Administrator "shall issue an objection" if the petitioner

demonstrates "that the permit is not in compliance with the requirements of [the Clean Air Act], including the requirements of the applicable implementation plan." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1). The Administrator "shall grant or deny such petition within 60 days after the petition is filed." 42 U.S.C. § 7661d(b)(2).

IV. GROUNDS FOR OBJECTION

A. 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.

1. Applicable Requirements

Among other requirements, each Title V permit must "include enforceable emission limitations and standards… and such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan." 42 U.S.C. § 7661c(a). EPA's Title V regulations require that each permit "shall 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). Further, permitting authorities have a responsibility to respond to significant comments. *See, e.g., In the Matter of Onyx Environmental Services,* Petition V-2005-1 (February 1, 2006), cited in *In the Matter of Kerr-McGee, LLC, Frederick Gathering Station,* Petition-VIII-2007 (February 7, 2008) ("it is a general principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments").

2. Specific Grounds for Objection

Section E (Source Group Restrictions) of the Renewal Permit identifies the emission limits, standards, work practice requirements, and monitoring, reporting, and recordkeeping

requirements applicable to the Facility's municipal waste combustors. The Renewal 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 ("Operating permit terms and conditions."). *See, e.g.*, Section E, Conditions #001 – 015, # 020 – 021. As Petitioners noted in their comments, 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.

3. Issue Raised in Public Comment

Petitioners expressly raised this issue in Comments III.1 and III.2, Ex. 1 at 39-45. Comment III.1 stated the same points above and specifically requested that DEP revise the draft permit to specifically identify the origin and authority for each of its terms or conditions. *Id*. at 39-40. Comment III.2 further noted that while the underlying regulatory authority for many of the conditions identified in Section E appeared to be federal regulations under 40 C.F.R. Part 60, and a few conditions appear to have been derived from prior synthetic minor limits previously taken to avoid New Source Review, it was impossible to be certain due to DEP's failure to identify any underlying regulatory authority aside from 25 Pa. Code § 127.512. *Id.* at 40-45.

Comment III.2 also noted that none of the emission limits applicable to the combustors were identified as deriving from regulations issued under 40 C.F.R. Part 60, and that the draft review memo accompanying the draft permit indicated that DEP's position appeared to be that no New Source Performance Standards ("NSPS") or Emission Guidelines applied to the combustors—and that DEP's basis for this conclusion was unclear from the permit record. *Id.* at 42. As noted in Comment III.2, this cannot be the case. Section 129 of the Clean Air Act requires the EPA to issue standards for all "solid waste incineration units with capacity greater than 250

tons per day combusting municipal waste." 42 U.S.C. § 7429(a)(1)(B). Municipal waste combustors with this capacity are all subject to either NSPS or Emission Guidelines, depending on when the units were constructed and last modified. *See e.g.*, 40 C.F.R. § 60.50b(a), 40 C.F.R. § 60.32b. Since all six units at the Facility are large MWCs, they must meet a set of requirements under 40 C.F.R. Part 60.

Comment III.2 also highlighted that though DEP's draft review memo concluded that the combustors were not subject to 40 C.F.R. 60 Subpart Eb, DEP had not provided an explanation for why Subpart Eb was inapplicable, and specifically requested that DEP explain whether or not the Facility has been modified at any time such that the provisions of Subpart Eb would apply. Finally, Comment III.2 noted that DEP's conclusion that the combustors were not subject to the requirements of 40 C.F.R. 60 Subpart Cb appeared to be plainly mistaken, and contradicted prior DEP records stating that the Facility was subject to Subpart Cb. *Id.* at 43-45.

As previously noted, EPA Region III also submitted comments on the draft permit identifying this same issue, and specifically requested that DEP "discuss and clearly state the underlying regulatory authority" for the PM, mercury, dioxin, furans, and other toxic emissions limits established for the rotary combustors by Conditions #002, #005, #007, and #010. RTC at 13-14 (Comments A.1 & B.1). EPA further explained:

> For instance, if they originate from a state-only authority such as DEP Best Available Technology (BAT), a citation to the corresponding section of the Pennsylvania Code (Pa. Code) referencing BAT and the plan approval establishing those emission limits should be included in the permit. Or, for instance, if the emission restrictions originate from a federal requirement such as Best Available Control Technology (BACT) or a New Source Performance Standard (NSPS), the permit should reference the appropriate Code of Federal Regulations and, if applicable, Pa. Code citation. If conditions are state-only requirements, we recommend that permit state that these limits are "state-only.

EPA Comment A.1, RTC at 13.

EPA's letter to DEP accompanying its comments specifically noted that it was requesting DEP to further explain and clarify the underlying regulatory authorities for these limits because this "analysis will better enable EPA and the public to understand the applicable requirements of the facility and to determine if there are any additional regulatory requirements that would apply to the facility." RTC at 12.

4. Analysis of DEP's Response

DEP's responses to Petitioners' Comments III.1 and III.2 are identified as responses to Comment F1 (III.1) and Comment F2 (III.2) on page 84 of the RTC document. DEP's response to Comment III.1 simply states that the "header that is located above each condition is the origin and authority of the requirements." RTC at 84. This response does not address Petitioners' Comment. The header above Conditions #001 – 015 and # 020 – 021 is simply 25 Pa. Code § 127.512—which as already explained is merely a citation to the general permit program provisions and does not constitute the origin of or authority for any permit term or requirement. DEP's response to Comment III.2 vaguely states that: "During 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." RTC at 84. DEP's response provides no further clarification, and it is not apparent to Petitioners how this response addresses the concern raised by their comment.

DEP's failure to appropriately address these concerns is equal parts confusing and concerning. The requirement to clearly specify the origin and underlying authority for each permit term or condition is not a meaningless formality—it is central to the overarching purpose of the Title V program, which was "designed to facilitate compliance and enforcement by consolidating into a single document all of a facility's obligations under the [Clean Air] Act."

Util. Air Regulatory Grp. v. EPA, 573 U.S. 302, 309 (2014). Congress intended for Title V to "substantially strengthen enforcement of the Clean Air Act" by "clarify[ing] and mak[ing] more readily enforceable a source's pollution control requirements." S. Rep. No. 101-228 at 347, 348 (1990), *as reprinted in* A Legislative History of the Clean Air Act Amendments of 1990 (1993), at 8687, 8688. As EPA explained when promulgating its Title V regulations, a permit should "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." Operating Permit Program, Final Rule, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992). EPA Region III's comments similarly noted that the purpose of requesting this clarification is to ensure that EPA and the public can actually understand the applicable requirements of the facility and determine if there are any additional regulatory requirements that would apply to the facility.

As currently drafted, the origin or authority for many of the Renewal Permit's terms or conditions is unclear—a problem that is exacerbated, rather than clarified, by DEP's permit record. For example, Petitioners' Comment III.2.A noted that the NSPS at 40 C.F.R. 60 Subpart Eb establishes emission limits for dioxin/furan, lead, PM, and cadmium that are far more stringent than the limits established by the Department's Section 111(d)/129 State Plan for Large Municipal Waste Combustors (MWCs), and that DEP had not provided an adequate explanation for its conclusion that Subpart Eb did not apply to the Facility. Petitioners' Comments at 41-42. The regulatory analysis section in the final technical review memorandum accompanying the Renewal Permit now states that the "combustors are subject to 40 C. F. R. 60 Subpart Eb as they are commenced after 1996." Exhibit 3, Final Review Memo for Permit No. 23-00004 (March 10, 2023) ("Final Review Memo") at 7. However, the Renewal Permit itself **does not** reference Subpart Eb, and the emission limits actually proposed in Section E, Condition # 002 are the less

stringent emission limits established by the State Plan. As the header for Condition # 002 once again cites only to the general 25 Pa. Code § 127.512, it is impossible to discern from the record whether DEP believes the Subpart Eb limits do not apply to this Facility, or (given the Final Review Memo's statement that Subpart Eb does apply) whether the less stringent emission limits from the State Plan were left in Condition # 002 due to oversight.

The lack of clarity regarding what the applicable underlying legal authority is for the emission limits in question presents a significant barrier to determining what requirements apply to this Facility at all, let alone the enforcement of those requirements. While the requirement to specify and reference the origin of and authority for each term or condition is an important one, it is not an onerous one—and Petitioners do not understand why the Department has failed to revise the Renewal Permit to correct this clear deficiency.

B. 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.

1. Applicable Requirements

"Each permit issued under [Title V] shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). It is DEP's responsibility "to ensure that the [T]itle v permit 'set[s] forth' monitoring to assure compliance with all applicable requirements." Sandy Creek Order at 12 (quoting 42 U.S.C. § 7661c(c)). Further, any emission limit in a Title V permit must be enforceable as both a legal and practical matter. In order for a limit to be enforceable as a practical matter, a proposed permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit. *See, e.g.*, *In the Matter of Hu Honua Bioenergy Facility, Pepeekeo, HI*, Order on Petition No. IX-2011-1 (Feb. 7, 2014) at

10. This requires that any proposed emission limits "be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold… whether by restricting emissions directly or through restricting specific operating parameters," and supported by monitoring, recordkeeping, and reporting requirements "sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action." *In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC*, Order on Petition No. II-2001-05 (Apr. 8, 2002) at 7.

"In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record." CITGO Order at 7-8 (granting petition because permitting authority "did not articulate a rationale for its conclusions that the monitoring requirements… are sufficient to assure compliance"); *see also* 40 C.F.R. § 70 .7(a)(5). Further, "permitting authorities have a responsibility to respond to significant comments." CITGO Order at 7; *In the Matter of Onyx Environmental Services*, Petition V-2005-1 (February 1, 2006).

2. Specific Grounds for Objection

Section E, Condition # 010(a) establishes a limit of 5.8 lbs per hour for "total particulate matter (filterable PM) emissions" from each of the Facility's six municipal waste combustor units. Condition # 010(b) states that compliance with this limit "shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source." The Testing Requirements in Section E, Condition # 015(c)(i), state that "[if] the emissions of PM… from any one of the combustors equal to or exceed 80% of the emissions limitations, that combustor(s) shall be tested semiannually," and that "[t]esting frequency can revert back to annually when the tested emissions are less than 80% of the emission limitations

for a consecutive period of 24-months." The draft review memo accompanying the draft permit also identified flue gas temperature at the baghouse inlet as a parameter that would be continuously monitored to verify PM removal efficiency. Exhibit 4, Draft Review Memo for Permit No. 23-00004 (Aug. 2021) ("Draft Review Memo") at 4.

All federally enforceable terms of a title V permit must be supported by sufficient monitoring, 42 U.S.C. § 766lc(c), 40 C.F.R. § 70.6(c)(l). As Petitioners explained in their comments, EPA has stated that annual stack testing alone is insufficient to assure compliance with an hourly limit. *In re Northeast Maryland Waste Disposal Authority*, Order on Petition No. III-2019-2 (Dec. 11, 2020) ("NMWDA Order") at 9. In the NMWDA Order, EPA specifically found that annual stack testing by itself was insufficient to assure compliance with an hourly limit for hydrochloric acid at Covanta's incinerator in Montgomery County, Maryland. *Id.* Further, EPA's order strongly suggested that even monitoring on a 3-hour block basis is likely inadequate to assure continuous compliance with an hourly standard. *Id*. at 10-11; note 10 ("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."). Further EPA orders issued since Petitioners submitted their comments in October 2021 have reiterated that a requirement to stack test annually alone is insufficient to assure compliance with an hourly emission limit, and EPA has repeatedly directed permitting authorities to consider a multi-pronged monitoring approach of periodic stack testing accompanied by other clearly identified permit terms such as parametric monitoring. *In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station,* Order on Petition No. VI-20 17-12 at 25-26 (October 15, 2021) (objecting to permit which did not provide for any other monitoring that could be used, in conjunction with annual stack testing, to adequately assure continuous compliance with hourly emission limits for H_2SO_4,

HCl, HF, VOC, and total PM/PM_{10}). EPA has also found that a supplemental opacity monitoring requirement for a PM limit is insufficient if the permit and permit record lack an explanation for how opacity value assures compliance with the PM limit. *In the Matter of Owens-Brockway Glass Container, Inc.*, Order on Petition No. X-2020-2 at 14-15 (May 10, 2021).

3. Issue Raised in Public Comment

Petitioners expressly raised this issue in Comment III.3. Ex. 1 at 45-47. Comment III.3 stated the same points above and specifically requested that DEP supplement the Renewal Permit with monitoring requirements sufficient to assure compliance with the hourly PM limit. *Id*. at 47. Specifically, Comment III.3 noted that EPA's most recent regulations for municipal waste combustors had approved the use of continuous emissions monitoring systems ("CEMS") for the purpose of demonstrating compliance with federal emission limits for PM and asserted that DEP should require the use of PM CEMS here to demonstrate compliance with the hourly PM limit. *Id.*; *see also* 40 C.F.R. §60.58b(a)(10).

EPA's Comments on the draft permit identified similar concerns. EPA's Comment A.2 specifically requested that DEP "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)." RTC at 14. EPA Comment A.2 also stated that "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.* EPA Comment A.2.1 also

requested that DEP specifically explain how inlet temperature monitoring ensures the desired performance of the baghouses at the six combustors. *Id*.

4. Analysis of DEP's Response

DEP's response to Petitioners' Comment III.3, identified as Response to Comment F3 on page 84 of the RTC document, states simply that "Covanta has Continuous Emissions Monitoring System for opacity which serves as a surrogate for particulate matter emissions."

DEP's response to EPA's Comment A.2 stated that "[a]t various facilities in the United States, PM concentration has been correlated to opacity monitoring provides qualitative and reliable PM emission information for various industries." Response A.2, RTC at 19. DEP's response notes that Section E, Condition # 006 restricts visible emissions from the combustor stacks from exceeding an opacity level of 10% for a period of more than three minutes in any one hour, that Covanta is required to monitor opacity on a continual basis using CEMS to demonstrate compliance with this limit, and that this "practice is equivalent to that, 'PM emission status is continuously monitored'." *Id*. Response A.2 further asserts that a 2000 field evaluation conducted by EPA for PM CEMS had concluded that "PM CEMS monitoring for emissions verses [sic] manual PM method did not correlate well," and that while monitoring baghouse pressure drop and using baghouse leak detection device are "good tools for checking PM control device performance… these parameters have limited sensitivity to PM emissions and do not correct well with actual PM emissions." *Id.* Consequently, DEP concluded that continuous monitoring of opacity is "state-of-art technology presently for PM emission monitoring (or as a PM surrogate indicator)." *Id.* DEP's response is plainly inadequate for numerous reasons.

First, as noted above EPA has found that a supplemental opacity monitoring requirement for a PM limit is insufficient if the permit and permit record lack an explanation for how opacity

value assures compliance with the PM limit. *In the Matter of Owens-Brockway Glass Container, Inc.,* Order on Petition No. X-2020-2 at 14-15 (May 10, 2021). DEP 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. This is precisely what DEP is required to show under the Clean Air Act, and EPA's Comment A.1 had specifically recommended that DEP's analysis include the correlation between the monitoring of opacity and PM emissions. RTC at 14. In response, DEP states vaguely that PM has been correlated to opacity "[a]t various facilities in the United States… for various industries." *Id*. While this may be the case, the question is whether DEP has demonstrated opacity can appropriately be used as a surrogate for PM at **this specific** Facility—and it is concerning that DEP has not provided any evidence of a correlation at all, let alone a correlation sufficient (as it claims) to make monitoring opacity "equivalent" to continuous monitoring of PM emissions. Petitioners further note that compliance with the opacity limit alone would unlikely suffice to assure compliance with the hourly PM limit, even assuming DEP had presented any evidence suggesting a correlation, given that Condition # 006 expressly allows Covanta to exceed the 10% opacity limit for up to 3 minutes every hour.

Second, the Renewal Permit does not actually state anywhere that opacity monitoring either can or will be used to determine compliance with the hourly PM emission limit. As noted above, the hourly PM emission limit is contained in Section E, Condition # 010(a), while the opacity limit is listed separately in Condition # 006. Condition # 010(a) does not contain any reference to opacity monitoring, and in fact, the Renewal Permit does not contain any term or condition indicating that opacity can or will be used as a surrogate for PM. Thus, even assuming opacity monitoring **could** be used to assure compliance with the PM limit, the Renewal Permit as currently drafted does not provide any actual mechanism for doing so as a practical matter.

Finally, DEP cites a 2000 field evaluation conducted by EPA as the grounds for its conclusion that PM CEMS monitoring for emissions would be inappropriate to use for demonstrating compliance with the hourly PM limit. Response A.2, RTC at 19. This is not accurate. Petitioners note that as a part of its Mercury and Air Toxics Standards ("MATS") technology review under Clean Air Act Section 112(d)(6), EPA has 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. *See* 88 Fed. Reg. 24,854, 24,874 (April 24, 2023). EPA explains that while the use of PM CEMS may result in measurement uncertainties when applied to certain industries or facilities, the consistency and uniformity of the fuel used at coal-fired EGUs and the consistency of PM particle characteristics emitted allow for a sufficiently stable correlation to manual PM to allow CEMS to be used as a reliable method of compliance demonstration at such facilities. *Id.* at 24,873. While incinerators have a fuel stream that is less uniform than coal, they are functionally very similar otherwise, especially with respect to pollution controls. And as Petitioners' Comments pointed out, EPA's most recent regulations for municipal waste combustors have in fact expressly approved the use of CEMS for the purpose of demonstrating compliance with federal emission limits for PM. 40 C.F.R. § 60.58b(a)(10).

It is DEP's responsibility "to ensure that the title v permit 'set[s] forth' monitoring to assure compliance with all applicable requirements." Sandy Creek Order at 12 (quoting 42 U.S.C. § 7661c(c)). "In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record," and "permitting authorities have a responsibility to respond to significant comments." CITGO Order at 7-8. Petitioners believe it is clear that DEP has failed to demonstrate that compliance with the opacity limit is sufficient to assure continuous compliance with the hourly PM limit, especially given that DEP has not explained how opacity

will assure compliance with the PM limit and the Renewal Permit does not even require opacity monitoring as a method of monitoring compliance with the PM emission limit. While Petitioners acknowledge that the use of PM CEMS is merely an option, and not an absolute requirement, at a minimum DEP must actually evaluate it as an option and, if it determines it is not appropriate for use, provide the rationale for its conclusion. Based on the inadequacy of DEP's response, Petitioners believe it is clear DEP has failed to do so here.

C. 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.

1. Applicable Requirements

EPA's regulations state that a Compliance Assurance Monitoring ("CAM") plan must be developed for an emissions unit that satisfies all of the following criteria:

(1) The unit is subject to a federally enforceable emission limit or standard;
(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
(3) The emission unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

40 C.F.R. § 64.2(a).

This provision further specifies that for the purpose of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in 40 C.F.R. § 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account. *Id*. 40 C.F.R. § 64.2(b) provides, in relevant part, a narrow exemption from CAM requirements for emission limitations or standards "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).

2. Specific Grounds for Objection

Section E, Condition # 010(a) establishes a federally enforceable limit of 5.8 lbs per hour for "total particulate matter (filterable PM) emissions" from each of the Facility's six municipal waste combustor units, with compliance demonstrated through annual stack testing. The Facility uses a baghouse as a control device for PM removal. Draft Review Memo at 3. DEP acknowledges that uncontrolled PM emissions exceed the major source threshold of 100 tons per year. Response to Comment F.4, RTC at 84. Consequently, the combustors satisfy all three criteria for the requirement to develop a CAM plan for PM emissions. The Renewal Permit, however, does not include a CAM plan for PM emissions.

3. Issue Raised in Public Comment

Petitioners expressly raised this issue in Comment III.4, which stated the same points as above. Petitioners' Comments at 47-49. Petitioners' Comments further noted that neither the requirement to stack test annually nor the parametric monitoring provisions for PM satisfied the definition of a continuous compliance determination method under 40 C.F.R. § 64.1, and stated that DEP should require a CAM plan for PM emissions in the event that it did not require the use of CEMs for compliance demonstration with the hourly PM limits.

4. Analysis of DEP's Response

DEP's response to Petitioners' Comment III.4, which is identified as Response to Comment F4 on page 84 of the RTC document, states the following:

> The CAM establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected for pollutant whose uncontrolled emissions are above the threshold. For Covanta,

> the uncontrolled PM emissions are above the threshold of 100 tons. They have installed COMS to monitor their opacity which is surrogate for PM.

RTC at 84.

Further, the Final Review Memo now states 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." Final Review Memo at 7.

As an initial matter, Petitioners note that it is unclear from the above whether DEP's position is that the Facility is exempt from the CAM requirement for PM under 40 C. F. R. § 64.2(b)(1), as stated in the Final Review Memo, or that the opacity monitoring itself satisfies the CAM requirement, as DEP's Response to Comment F4 appears to suggest. Regardless of which it is, DEP's rationale is mistaken. First, 40 C. F. R. § 64.2(b)(1) specifically states an exemption for emission limits or standards "proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act"—there is no suggestion in the plain wording of this exemption that it applies here, especially if it is the case, as DEP asserts elsewhere, that this Facility has "opted to comply" with a different set of emissions limits proposed by the State. DEP cannot have its cake and eat it too.

Second, as discussed at length previously, DEP has not provided any evidence in the record demonstrating that opacity can appropriately be used as a surrogate for PM at this Facility, despite EPA's express recommendation that DEP revise its analysis to include the correlation between the opacity monitoring and PM emissions. EPA Comment A.2, RTC at 14. And again, the Renewal Permit does not include any term or condition either explaining how opacity monitoring can or will be used as a method of assuring continuous compliance with the

hourly PM emission limit, or even actually requiring opacity monitoring as a method of monitoring compliance with the PM emission limit.

V. CONCLUSION

For the reasons discussed above, EPA must object to the Renewal Permit. As clearly raised in Petitioner's Comments, the Renewal Permit fails to identify or even reference the origin and underlying authority for many of its terms and conditions, and does not include adequate testing, monitoring, or reporting requirements sufficient to assure continuous compliance with the hourly PM limit applicable to the municipal waste combustors. Accordingly, Petitioners respectfully request that EPA object to the issuance of the Renewal Permit and require that DEP:

(1) Revise the permit to ensure that it specifies and references the origin of and authority for each of its terms and conditions;

(2) Revise the permit to include adequate testing, monitoring, or reporting requirements sufficient to assure compliance with the hourly PM limit applicable to the municipal waste combustors and to supplement the permit record to clearly provide the Department's rationale for the selected monitoring requirements; and

(3) Revise the permit to include a Compliance Assurance Monitoring plan for the hourly PM limit applicable to the combustors, in the event that DEP does not require CEMs for compliance demonstration with this limit.

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Respectfully submitted,

s/ Sanghyun Lee _____

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On behalf of the Environmental Integrity Project, Clean Air Council, and Sierra Club