

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

IN THE MATTER OF THE PROPOSED RENEWAL)
TITLE V/STATE OPERATING)
PERMIT NO. 54-00005 FOR)
)
WHEELABRATOR FRACKVILLE ENERGY, INC.)
SCHUYLKILL COUNTY, PENNSYLVANIA)
)
ISSUED BY THE PENNSYLVANIA)
DEPARTMENT OF ENVIRONMENTAL PROTECTION)
_____)

**PETITION TO THE EPA ADMINISTRATOR TO OBJECT TO ISSUANCE OF THE
PROPOSED TITLE V OPERATING PERMIT RENEWAL FOR THE
WHEELABRATOR FRACKVILLE ENERGY, INC. POWER PLANT**

Pursuant to Section 505 of the Clean Air Act, the Sierra Club and Environmental Integrity Project (“EIP”) hereby petition the Administrator of the United States Environmental Protection Agency (“EPA”) to object to the proposed Title V operating permit renewal No. 54-00005 (hereinafter “Proposed Permit”) issued by the Pennsylvania Department of Environmental Protection (“DEP”) for the Wheelabrator Frackville Energy, Inc. power generating facility (hereinafter “Wheelabrator”) in Schuylkill County, Pennsylvania. The Proposed Permit is not in compliance with applicable requirements under the Clean Air Act (“CAA”); therefore, objection by EPA is proper. *See* 42 U.S.C. § 7661d(b).

Specifically, the permit lacks appropriate testing and monitoring conditions and terms necessary to assure compliance with the applicable requirement set forth in Wheelabrator’s Title V permit limiting particulate matter (“PM”) emissions from the Plant’s circulating-fluidized bed (“CFB”) boiler to 0.012 pounds per million BTU heat input (“lbs/MMBtu”). This objection was timely raised in Sierra Club and EIP’s comments on DEP’s proposed Title V permit renewal for Wheelabrator, submitted on June 20, 2016. *See* Sierra Club and EIP Comments Concerning the Wheelabrator Frackville Cogeneration Facility Title V/State Operating Permit (TVOP 54-00005) (hereinafter “Sierra Club and EIP Comments”), attached hereto as Exhibit 1. DEP has not offered any reasonable justification for its failure to impose more frequent PM emissions monitoring provisions for the Plant’s CFB boiler than those contemplated in the Proposed Permit. Accordingly, as discussed in greater detail below, EPA should object to issuance of the Proposed Permit.

I. The Proposed Permit Includes Impermissibly Lax Compliance Requirements for Particulate Matter Emissions from Wheelabrator’s CFB Boiler, Permit Section D.II., Source 031, Condition #007

Wheelabrator’s Proposed Permit fails to require monitoring of PM emissions from its CFB boiler adequate to assure compliance with the permit’s applicable emission limit. Specifically, the Title V permit lacks monitoring for PM sufficient to assure compliance with the continuous 0.012 lbs/MMBtu PM emission limitation set forth in Permit Section D.I., Source 031, Condition #002. *See* Proposed Permit at 23. Permit Section D.II., Source 031, Condition #007 requires source testing to determine the post-control emissions of total PM from Wheelabrator’s CFB boiler within 180 days after issuance of the permit and bi-annually thereafter. *See* Proposed Permit at 24. The permit contains no other testing, monitoring, recordkeeping, or reporting requirements on this unit for PM and, on its face, contains no other monitoring requirements for determining compliance with the 0.012 lbs/MMBtu PM emission limit for the unit.

II. The Proposed Permit Fails to Satisfy Part 70 Requirements

CAA section 504(c), and implementing regulations in 40 C.F.R. 70.6(a)(3)(i) and 70.6(c)(1), require all Title V permits to contain compliance certification, testing, monitoring, reporting, and recordkeeping requirements to assure compliance with permit terms and conditions.¹ Particularly, the frequency of emissions monitoring must reflect the averaging time used to determine compliance. *See Sierra Club v. EPA*, 536 F.3d 673, 675 (D.C. Cir. 2008) (a yearly monitoring requirement would not likely adequately address a daily maximum emission limit); *see also* U.S. EPA, Objection to Proposed Title V Operating Permit for TriGen-Colorado Energy Corporation (Sept. 13, 2000) (“a one-time test does not satisfy the periodic monitoring requirements” under the CAA for PM), available at <https://www.epa.gov/sites/production/files/2015-07/documents/trigen.pdf>. EPA’s regulations in Part 70 consist of both “periodic” and “umbrella” monitoring rules and describe the steps permitting authorities must take to fulfill the monitoring requirement under CAA section 504(c). *See* 40 C.F.R. §§ 70.6(a)(3)(i)(A), 70.6(a)(3)(i)(B), 70.6(c)(1); *see also Sierra Club*, 536 F.3d at 678 (setting forth the steps and reiterating the necessity to supplement monitoring requirements: “[w]e read Title V to mean that someone must fix these inadequate monitoring requirements.”); *see also In re United States Steel Corp.*, Petition No. V-2009-03, 2011 WL 3533368, at *6-7 (EPA Jan. 31, 2011) (hereinafter “*U.S. Steel*”), available at https://www.epa.gov/sites/production/files/2015-08/documents/uss_response2009.pdf. The periodic monitoring rule provides that where an applicable requirement does not, itself, “require periodic testing or instrumental or noninstrumental monitoring,” the permit-writer must develop

¹ Relevant Pennsylvania regulations are in accord: Title V permits issued by DEP must contain “compliance certification, testing, monitoring, reporting and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.” 25 Pa. Code § 127.513(1); *see also* 25 Pa. Code § 127.511(a)(2) (“monitoring requirements shall assure use of terms, test methods, units, averaging periods and other statistical conventions are consistent with the applicable requirement”).

terms directing “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); *see also Sierra Club*, 536 F.3d at 675. The “umbrella” monitoring rule found at 40 C.F.R. § 70.6(c)(1) backstops this requirement by making clear that permit writers must also correct “a periodic monitoring requirement inadequate to the task of assuring compliance” with an emission limit in a Title V permit. *See Sierra Club*, 536 F.3d at 675. This “gap-filler” makes doubly clear that adequate monitoring is required. *See id.* at 680. EPA has affirmed that these requirements are quite rigorous, making clear that permitting authorities must develop and “supplement monitoring to assure . . . compliance” on the basis of an extensive record. *U.S. Steel* at 7.

In addition, 40 C.F.R. § 70.7(a)(5), requires the permitting agency to “provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).” Accordingly, “the rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record (e.g., in the statement of basis).” *Id.* This statement must be provided by the permitting authority to EPA and any other person who requests it. 40 C.F.R. § 70.7(a)(5). As explained below, the Proposed Permit fails to meet these Part 70 requirements.

III. The Compliance Requirements for Particulate Matter Emissions from the Plant’s CFB Boiler Are Inadequate

In accordance with the CAA and its implementing regulations, DEP was required to satisfy the monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i)(A) and (B) and (c)(1) with regard to the applicable PM emission limit for Wheelabrator’s CFB boiler, and to provided its rationale for the PM-related testing and monitoring requirements set forth in the permit in its statement of basis, in accordance with 40 C.F.R. § 70.7(a)(5). Here, DEP failed to do both.

First, the monitoring frequency required by Wheelabrator’s Proposed Permit is inadequate to assure compliance with the continuous 0.012 lbs/MMBtu limit. Proposed Permit Section D.II., Source 031, Condition #007 states that, “[w]ithin 180 days after issuance of this permit (or a letter or a notice), the permittee shall conduct source testing on the exhaust of Source ID 031 to determine the post-control emissions of total particulate matter.” Proposed Permit at 24. In addition, “[e]very two (2) years, the permittee shall conduct source testing to determine the post-control emissions of total particulate matter.” *Id.* Such infrequent monitoring of PM emissions fails to satisfy the requirements of 40 C.F.R. part 70.6 because monitoring PM from the Plant’s CFB boiler only once every two years is inadequate to assure compliance with the continuous 0.012 lbs/MMBtu emission limit of Permit Section D.I., Source 031, Condition #002. The Proposed Permit’s PM emission limitation for the Plant’s CFB boiler must be accompanied by periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of Wheelabrator’s compliance with its Title V permit.

Second, DEP failed to set forth its rationale for these monitoring requirements (or lack thereof) in a statement of basis describing why the chosen monitoring method is adequate to assure compliance with the unit's PM emissions limit. In particular, DEP failed to provide an analysis to demonstrate how bi-annual stack testing required in the Proposed Permit is adequate to assure compliance with the continuous lbs/MMBtu PM limit.² Nor did DEP otherwise demonstrate that the Permit's testing and monitoring requirements are sufficient to yield reliable data from the relevant time period that is representative of compliance with the Permit's lbs/MMBtu PM limit for the Plant's CFB boiler.

Because the Proposed Permit does not contain requirements that assure compliance with the CFB boiler's PM emission limit, EPA should object to the permit and require the incorporation of more stringent testing and monitoring requirements for the unit's PM emissions, in accordance with 42 U.S.C. § 7661c(c) and 40 C.F.R. §§ 70.6(a)(3), (c)(1). In addition, DEP must be required to document its rationale for how the permit's monitoring requirement(s) assure compliance with the applicable requirement, in accordance with 40 C.F.R. § 70.7(a)(5).

IV. Continuous, Direct Monitoring of Particulate Matter Emissions from the Plant's CFB Boiler Is Necessary

The determination of adequate monitoring in a Title V permit is context-specific. *U.S. Steel* at 7. As a starting point for this determination, EPA has stated that a permitting authority should consider the following factors: (1) variability of emissions from the unit in question; (2) likelihood of violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring, process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities. *Id.*

As it stands now, the Proposed Permit's infrequent and intermittent compliance stack testing requirements will neither assure nor demonstrate compliance with the Plant's PM limitations, which are applicable on a continuous basis. Considering the afore-mentioned factors (1) and (3) together, the variability of emissions, especially as they relate to add-on controls used by Wheelabrator, strongly support more frequent stack testing and continuous PM monitoring from the Plant's CFB boiler. Wheelabrator employs a fabric filter baghouse as the means of controlling PM emissions from this unit. *See* Proposed Permit at 23. This control method, combined with the inherent variability of both the fuel burned in the Plant's CFB boiler and the properties of flyash particles, as well as potential factors affecting baghouse performance, create a potentially significant degree of variability in Wheelabrator's PM emissions. As a result, it is highly unlikely

² During the 30-day public comment period for the Proposed Permit, Sierra Club requested a copy of the permit and fact sheet/review memo (i.e. statement of basis) from DEP via e-mail, however DEP did not provide the required statement of basis to Sierra Club, claiming that it was "still in draft form and not a completed work product." *See* e-mail correspondence between Isabelle Riu, Sierra Club Legal Assistant, and David F. Matcho, DEP Air Quality Engineer (June 3 – June 16, 2016), attached hereto as Exhibit 2.

that an occasional measurement (e.g. bi-annual stack test) will accurately capture such variability and assure compliance with the unit's PM emission limit. Only by continuously monitoring PM emissions from Wheelabrator will compliance with the applicable lbs/MMBtu particulate limit found in Permit Section D.I., Source 031, Condition #002 be assured. For Wheelabrator's CFB boiler, installation and continuous operation of a PM continuous parameter monitoring systems ("CPMS") is the proper means of accurately monitoring such emissions, especially since, under factor (5) above, PM CPMS are increasingly employed for similar units at other facilities comparable to Wheelabrator. To assure compliance where emissions are variable, continuous direct monitoring is the only adequate monitoring option.

In addition, stack tests are mere snapshots in time which do not indicate system performance during periods outside of the tests. As EPA is well aware, stack tests are scheduled well ahead of time. Sources equipped with add-on pollution controls such as baghouses, like Wheelabrator, have the opportunity to take advantage of that advance notice to perform work on their controls prior to testing in order to ensure favorable stack test results. Moreover, during stack tests, the Plant will presumably run its pollution control technology at full capacity to ensure the greatest emissions reductions, whereas normal operations may involve running those controls at reduced capacity. Hence, stack tests may not tell the public or regulatory agencies whether the source will be in compliance during the following multi-year period when the controls may once again be operating at a substandard level. Thus, the extreme infrequency of this already subpar testing method simply cannot assure compliance with the Plant's continuous PM emission limit.

V. This Issue Was Raised in Public Comments

Sierra Club and EIP raised this issue on page 6 of their June 20, 2016 comment letter submission on the proposed Title V permit renewal for Wheelabrator, noticed by DEP for a thirty-day public comment period on May 21, 2016. *See* Sierra Club and EIP Comments at 6.

VI. The State Has Failed to Respond to Petitioners' Comments on the Proposed Permit

To date, DEP has not yet provided a Response to Comments document to Sierra Club and EIP responding to Petitioners' comments regarding this deficiency under the Clean Air Act.

VII. Conclusion

For the reasons set forth above, Sierra Club and EIP respectfully request that the Administrator of the U.S. EPA grant this Petition to Object.

Respectfully submitted,

/s/ Kathryn Amirpashaie

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