SIERRA CLUB
FOUNDED 1892

Lisa P. Jackson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail code: 1101A
Washington, D.C. 20460

Kathleen Cox
U.S. Environmental Protection Agency
Region III
Air Protection Division
1650 Arch Street (3AP01)
Philadelphia, PA 19103-2029

September 6, 2012

VIA FEDEX OVERNIGHT

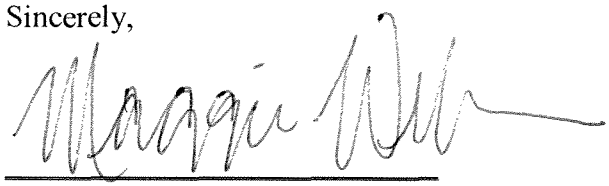
Re: Petition to Object to the Proposed Title V Permit for EME Homer City, LP's Homer City Generating Station, Issued by the Pennsylvania Department of Environmental Protection, ID No. 32-00055

Dear Administrator Jackson and Manager Cox:

Enclosed please find a copy of the Sierra Club's Petition to Object to the Proposed Title V Permit for EME Homer City LP's Homer City Generating Station, issued on May 25, 2012, by the Pennsylvania Department of Environmental Protection, No. 32-00055. Also enclosed is a disc containing an electronic copy of the petition, and all exhibits and modeling files cited therein.

Please let me know if there is anything further I can provide.

Sincerely,



Maggie Wendler
The Sierra Club
50 F Street NW, 8th Floor
Washington, D.C. 20001
(202) 548-4590
maggie.wendler@sierraclub.org

Zachary Fabish
The Sierra Club
50 F Street NW, 8th Floor
Washington, D.C. 20001
(202) 675-7917
zachary.fabish@sierraclub.org

CC VIA FEDEX OVERNIGHT (with attachments)

Barbara Hatch
Air Quality Environmental Engineer Manager
DEP Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

Gary Cline
Environmental Manager
EME Homer City, LP
1750 Power Plant Road
Homer City, PA 15748-8009

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROECTION AGENCY

IN THE MATTER OF THE PROPOSED TITLE V PERMIT FOR	)	
EME HOMER CITY GENERATION, LP	)	ID NO. 32-00055
HOMER CITY GENERATING STATION PROPOSED TITLE V/STATE OPERATING PERMIT IN INDIANA COUNTY, PA	)	
ISSUED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONEMTNAL PROTECTION	)	

PETITION TO OBJECT TO THE PROPOSED TITLE V PERMIT FOR EME HOMER CITY, LP'S HOMER CITY GENERATING STATION ISSUED BY THE PENNSYVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

PETITION TO OBJECT TO THE PROPOSED TITLE V PERMIT FOR EME HOMER CITY, LP'S HOMER CITY GENERATING STATION

As per Section 505 of the Clean Air Act ("CAA"), the Sierra Club hereby respectfully petitions the Environmental Protection Agency ("EPA") to object to the proposed Title V permit for EME Homer City, LP's Homer City Generating Station in Indiana County, Pennsylvania ("the Homer City Plant" or "the Plant"), issued by Pennsylvania Department of Environmental Protection ("PaDEP"). The permit as issued contains provisions that are not in compliance with applicable requirements under the CAA, and accordingly objection by the EPA is proper. 42 U.S.C. § 7661d(b). Specifically, (1) the permit fails to include the prohibition against air pollution found in Pennsylvania's State Implementation Plan ("SIP"); (2) the permit fails to include emission limits and averaging periods sufficient to prevent the Homer City Plant from causing impermissible air pollution in the form of harmful concentrations of sulfur dioxide ("SO_2") in violation of the state-adopted, federally-enforceable acid rain provisions and the Pennsylvania SIP; (3) the permit fails to require sufficient emissions limits and monitoring requirements to ensure compliance with particulate matter ("PM") standards; and (4) the permit impermissibly claims to apply a permit shield to unidentified future projects. These objections, as well as other issues with the proposed Homer City permit, were timely raised in Sierra Club's comments to PaDEP.[1]

Accordingly, the EPA should object to the permit's issuance by PaDEP.

INTRODUCTION

I. Factual and Procedural Background

The Homer City Plant is a coal-fired power plant located in Indiana County, approximately 45 miles northeast of Pittsburgh, Pennsylvania. The Plant consists of three units that have capacity ratings of 620 mega-watts ("MW"), 614 MW, and 650 MW, respectively, totaling a net generation capacity of 1,884 MW. Homer City Generating Station Title V Operating Permit Renewal Application, 2-3 (July 2008) (hereinafter "the Renewal Application"), attached hereto as Exhibit 2. Units 1 and 2 began operation in 1969, while Unit 3 came online in 1977. *Id.* Units 1 and 2 are currently subject to a Plan Approval issued by PaDEP on April 2, 2012 for the installation and temporary operation of dry flue gas desulfurization ("FGD") systems (or "dry scrubbers"). *See* PaDEP Plan Approval No. 32-00055H (April 2, 2014) (hereinafter "the Plan Approval"), attached hereto as Exhibit 3.

[1] Additional issues with the proposed Homer City permit include the following: the permit lacks adequate provisions to ensure consistency with the averaging period and monitoring requirements necessary under the one-hour nitrogen dioxide ("NO_2") NAAQS; the permit fails to include a complete inventory list and maps section; the permit contains numerous inadequacies in monitoring requirements; the permit does not include language allowing for the use of any credible evidence to demonstrate non-compliance; and the permit contains various additional miscellaneous problems which are in violation of federal and state requirements. These constitute independent grounds for objection to the Proposed Permit; the Sierra Club accordingly incorporates the discussion of these issues in our comments by reference. Sierra Club Comments on Homer City Draft Title V Permit (June 25, 2012) (hereinafter "Sierra Club Comments"), attached hereto as Exhibit 1.

The Homer City Plant emitted a reported 83,595.5 tons of sulfur dioxide, 9022.2 tons of nitrogen oxides, and 9,337,062.2 tons of carbon dioxide in 2011.[2] The Plant was the largest emitter of sulfur dioxide in the United States in 2010, emitting 112,951 tons.[3] In light of Homer City's extremely high sulfur dioxide emissions, air modeling expert Camille Sears, on behalf of the Sierra Club, conducted an air dispersion modeling study in January 2012 which employed EPA's AERMOD program to measure the Plant's allowable (based on permitted heat inputs and sulfur dioxide emission factor in pounds per million Btu) and actual (based on maximum hourly emissions obtained from EPA's Clean Air Markets Data and Maps database) emissions to determine the Plant's impact on the 1-hour SO_2 NAAQS. *See* Camille Sears, *Air Dispersion Modeling Analysis for Verifying Compliance with the One-Hour SO_2 NAAQS: EME- Homer City Generation* (January 27, 2012) (hereinafter the "Homer City Modeling Report"), attached hereto as Exhibit 6.[4] Discussed in further detail below, the model predicted that the Plant was violating current national ambient air quality standards for sulfur dioxide and would continue to do so, unless Units 1 and 2 reduced their sulfur dioxide emissions by 97.5%. *Id.* at 13. Ms. Sears found that even considering the proposed reductions in SO_2 emissions accompanying a planned flue gas desulfurization project for these units, the Homer City Plant would continue to violate the sulfur dioxide standards, as the emission limits contemplated in the project's Plan Approval were still far too high. *Id.* at 8-9; *see also* Plan Approval at 18.

The Homer City Plant's current Title V permit was issued on January 30, 2004, and expired on January 30, 2009. Title V/State Operating Permit No. 32-00055 (issued January 30, 2004, amended December 1, 2004) (hereinafter "the Current Permit"), attached hereto as Exhibit 7. On July 31, 2008, prior to the January expiration date, PaDEP received from EME an application for renewal of the Plant's Title V permit and found it to be complete on August 5, 2008. Pa Dep't of Envtl. Prot., *Review of Title V Operating Permit Renewal Application EME Homer City Generation, LP*, 1 (May 24, 2012) (hereinafter "the Review Memo"), attached hereto as Exhibit 8. After its expiration, the 2004 Title V permit was administratively continued for over three years. On April 6, 2012, the Sierra Club, along with other organizations, filed an administrative appeal with the Pennsylvania Environmental Hearing Board, objecting to PaDEP's failure to timely issue Title V permits for nine coal-fired power plants in Pennsylvania, including the Homer City Plant. *See* Notice of Appeal, *Sierra Club v. Commonwealth of Pennsylvania Department of Environmental Protection* (Pa Envtl. Hearing Bd. April 6, 2012), attached hereto as Exhibit 9. Subsequently, PaDEP issued a draft renewal permit for the nine plants, including the Homer City Plant, for notice and comment on May 25, 2012. *See* Draft Title V/State Operating Permit No. 32-00055 (May 29, 2012) (hereinafter "the Proposed Permit" or "the Homer City Permit"), attached hereto as Exhibit 10.

On June 25, 2012, the Sierra Club submitted timely comments on the Proposed Permit. *See* Sierra Club Comments. Among other issues raised in the comments, the Sierra Club argued that the Proposed Permit failed to comply with requirements under the CAA and the Pennsylvania SIP. In particular, the Sierra Club argued that due to impermissibly lenient proposed SO_2 limits, the Proposed Permit failed to ensure that the Homer City Plant would not

[2] EPA Air Markets Program Data, Data Query re Homer City's Total Emissions for 2010 and 2011, copy attached hereto as Exhibit 4.

[3] EPA Air Markets Program Data, Top Emitters of SO_2 in 2010, copy attached hereto as Exhibit 5.

[4] The Sierra Club has included the modeling files which supported this report as an attachment to this petition.

cause air pollution, nor would it ensure compliance with an applicable acid rain provision; both the pollution prohibition and the acid rain provision are applicable requirements with which the Title V permit must assure compliance. *See* 42 U.S.C. §§ 7661a(a) and 7661c(a); 40 C.F.R. § 70.6(a)(1); 25 Pa. Code §§ 121.1 and 121.7. The Sierra Club also argued that the permit failed to require adequate monitoring of Homer City's PM emissions and opacity levels sufficient to ensure compliance with the Proposed Permit's proposed limitations for those pollutants.

EPA's 45-day review period of the Homer City Proposed Permit began on May 29, 2012, and ended on July 12, 2012; the 60-day public petition period will end on September 10, 2012, making this petition timely.

II. Legal Background

A. The CAA's Title V Program

1. Title V Permits must incorporate terms sufficient to ensure compliance with applicable requirements

All major stationary sources of air pollution are required to apply for operating permits under Title V of the CAA. *See* 42 U.S.C. § 7661a(a) ("[I]t shall be unlawful . . . to operate . . . a major source . . . except in compliance with a permit issued by a permitting authority under this subchapter."). *See also* 35 Pa. Stat. Ann. § 4006. Title V permits must provide for all federal and state regulations in one legally-enforceable document, thereby ensuring that all CAA requirements are applied to the facility and that the facility is in compliance with those requirements. *See* 42 U.S.C. §§ 7661a(a) and 7661c(a); *see also* 40 C.F.R. § 70.6(a)(1).

The CAA provides that permits issued under a Title V program, "shall 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); *see also* 40 C.F.R. § 70.6(a)(1) (requiring that all Title V permits contain all "those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance."). Thus, the term "all applicable requirements" includes standards and/or requirements found in the State Implementation Plan ("SIP"). *See also* 40 C.F.R. § 70.2(1) (defining "applicable requirements" to mean "[a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA"). Indeed, EPA may not even approve a Title V program unless it is persuaded that the permitting authority will "assure that upon issuance or renewal permits incorporate emissions limitations and other requirements in an applicable implantation plan." 42 U.S.C. § 7661a(b)(5)(C).

2. Title V Permits must provide for sufficient monitoring to ensure compliance with emissions limits

In addition to emission limitations and standards, each Title V permit must contain sufficient monitoring, record-keeping, reporting, and inspection and entry requirements to assure compliance with those limits. *See* 42 U.S.C. § 7661c(c); 40 C.F.R § 70.6(a)(1), 40 C.F.R.

§ 70.6(a)(3). Monitoring requirements must "assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 25 Pa. Code § 127.511(a)(2); *see also* 40 C.F.R. § 70.6(a)(3)(i)(B); 40 C.F.R. § 70.6(c)(1) (requiring "compliance certification, testing, monitoring, reporting, and recordkeeping requirements *sufficient to assure compliance with the terms and conditions of the permit*") (emphasis added). Further, permits must contain "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); 40 C.F.R. § 70.6(c)(2)(iv) (requiring that substances and parameters are to be sampled and monitored at reasonable intervals so as to assure compliance with the permit or applicable requirements).

These monitoring restrictions consist of both "periodic" and "umbrella" monitoring rules. As the D.C. Circuit in *Sierra Club v. EPA* described, Part 70 regulations require three steps to establish periodic monitoring requirements in each Title V permit issued:

(1) where monitoring requirements are already contained in existing regulations or permits, the permitting authority must incorporate those requirements into the permit;

(2) where no previously established monitoring requirements exist for an emission limit, the permitting authority must add "periodic monitoring sufficient to yield reliable date from the relevant time period that are representative of the source's compliance with the permit;" and

(3) where monitoring requirements exits that correspond to an emission limit, but that monitoring is not sufficient to assure compliance with the permit limit, the permit writer must remedy that deficiency by supplementing inadequate monitoring to make the requirement sufficient to assure compliance.

Sierra Club v. EPA, 536 F.3d 673, 675 (D.C. Cir. 2008). The *Sierra Club* court reiterated the necessity to supplement monitoring requirements: "[w]e read Title V to mean that someone must fix these inadequate monitoring requirements." 536 F.3d at 678.

EPA has since affirmed, in a post-*Sierra Club* Title V petition ruling, that these requirements are quite rigorous, making clear that permit writers must develop and "supplement monitoring to assure . . . compliance" on the basis of an extensive record. *In re United States Steel Corp.*, Petition No. V-2009-03, 2011 WL 3533368, at *5 (E.P.A., Jan. 31, 2011) ("The rationale for the monitoring requirements must be clear and documented in the permit record," and adequate monitoring is determined by careful, content-specific inquiry into the nature and variability of the emissions at issue).

In addition to setting forth adequate monitoring requirements for emission limits, the permitting authority is required to set forth its rationale in a statement of basis describing why the chosen monitoring regime is adequate to assure compliance with the emission limit. 40 C.F.R. § 70.7(a)(5); *U.S. Steel*, 2011 WL 3533368, at *7. The determination of what monitoring is adequate is a context-specific exercise. *U.S. Steel*, at *7. EPA has described the permit writer's monitoring analysis as *beginning* by "assessing whether the monitoring required in the applicable requirement is sufficient to assure compliance with the permit terms and conditions."

Id. Appropriate factors for the permit writer to consider include: (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.*

Applying these factors, EPA found that stack testing for particulate matter emissions once every five years was insufficient to assure compliance. *Id.* at 31. Similarly, the *Sierra Club* court indicated that frequency of emissions monitoring must reflect the averaging time used to determine compliance. *Sierra Club*, 536 F.3d at 765 (a yearly monitoring requirement would not likely adequately address a daily maximum emission limit); *see also* U.S. E.P.A., *Objection to Proposed Title V Operating Permit for TriGen-Colorado Energy Corporation* 5 (Sept. 13, 2000) ("a one-time test does not satisfy the periodic monitoring requirements" under the CAA for PM), *available at* http://www.epa.gov/region7/air/title5/t5memos/trigen.pdf.

Relevant Pennsylvania regulations are in accord: the permit, as a whole, 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).

3. A Title V Permit Must Include a Compliance Schedule for Requirements for which the Source is Not in Compliance at the Time of Permit Issuance

A Title V permit must include a compliance schedule for "requirements for which the source is not in compliance at the time of the permit issuance." 40 C.F.R. § 70.5(c)(8)(iii)(C); *id.* at § 70.6(c)(3) (requiring draft permits to contain a "schedule of compliance consistent with § 70.5(c)(8)"); *see also* 42 U.S.C. § 7661c(a) ("Each permit issued under this subchapter shall include . . . a schedule of compliance"). Accordingly, permits must contain "a description of the compliance status of the source," "a narrative description of how the source will achieve compliance" with requirements for which it is in noncompliance, and a "schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance." 40 C.F.R. § 70.5(c)(8); *id.* at § 70.6(c)(3). The schedule itself must "include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance." 40 C.F.R. § 70.5(c)(8)(ii)(C); *id.* at § 70.6(c)(3). Additionally, compliance schedules are intended to be rigorous: they "shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject." *Id.* As such, Title V permits must spell out enforceable, specific steps to be taken by sources with histories of noncompliance in order to return those sources to compliance.

4. Permit Shields Included in Title V Permits Must Only be Applied to Specifically Identified Applicable Requirements

Under 40 C.F.R. § 70.6, a permit shield may be included in a permit. As such, "compliance with the conditions of the permit shall be deemed compliance with any applicable

requirements as of the date of permit issuance"; however, the shield is only available if "[s]uch applicable requirements are included and are specifically identified in the permit. . . ." 40 C.F.R. § 70.6(f)(1)(i). Similarly, Pennsylvania regulations also require that the provisions covered by the permit shield be "specifically identified." 25 Pa. Code § 127.516 (a)(2).

In *United States v. East KY Power Co-op., Inc.*, the district court held that, pursuant to 40 C.F.R. § 70.6(f)(1), a permit shield deems compliance with the permit to be compliance with any applicable requirements *only to the extent that those requirements are "specifically identified" in the Title V permit*. 498 F.Supp.2d 1010, 1013, 1018 (E.D.K.Y. 2007) (emphasis added). The *EKPC* decision reflects EPA's long held position that is evidenced by the plain language of EPA's regulations and the CAA. For example, in a Title V Petition Response, EPA stated that 40 C.F.R. § 70.6(f)

> makes clear that the permit shield extends only to requirements which are included specifically in a title V permit, either as an applicable requirement or in a nonapplicability determination. Furthermore, a permit shield cannot preclude enforcement for violations of a standard unless the permit contains a *specific* determination that the source is not subject to the standard.

U.S. EPA, Petition Response, *In the Matter of Midwest Generation, LLC Waukegan Generating Station*, Petition number V-2004-5 (Sept. 22, 2005) (emphasis added) (denying petition as to permit shield, because shield did not include nonapplicability determination for either NSR or opacity requirements), *available at* http://www.epa.gov/region7/air/title5/petitiondb/petitions/midwest_generation_waukegan_decision2006.pdf).

Additionally, EPA has several times denied petitions that allege that a permit shield could preclude the imposition of certain penalties. In so doing, EPA pointed out that

> [t]he permit shield stipulates that compliance with the conditions of the permit is deemed to be compliance with those applicable requirements that are *specifically identified* in the permit or those requirements that the State *specifically identifies* as not applicable. Therefore, the permit shield does not exonerate a facility that fails to have any required construction permits. If a violation is later discovered, the permittee would have to apply for the proper construction permits, and the title V permit would be reopened to include the necessary applicable requirements.

U.S. EPA, Petition Response, *In re Keyspan Generation Far Rockaway Station,* Petition number II-2002-06, 16 (Sept. 24, 2004) *available at* http://www.epa.gov/region7/air/title5/petitiondb/petitions/keyspan_decision2002.pdf (denying petition as to permit shield) (internal citations omitted); *see also* U.S. EPA, Petition Response, *In the Matter of Tanagraphics, Inc.,* Petition number II-2000-05, *available at* http://www.epa.gov/region07/air/title5/petitiondb/petitions/tanagraphics_decision2000.pdf) (same argument, same result).

Additionally, changes to a source that do not undergo public review may not be covered by a permit shield. "Like CAA section 502(b)(10) changes, most administrative permit amendments, and [minor permit modifications] which do not undergo prior public review [see sections 70.4(b)(12)(i)(B), 70.7(d)(4) and 70.7(e)(1)(vi)], the part 70 permit shield may not extend to an [on-site implementation log] or source determinations made pursuant to the change management approach that have failed to undergo prior EPA and public review." U.S. EPA, National Emission Standards for Hazardous Air Pollutants Source Categories: Pharmaceuticals Production, 63 Fed. Reg. 50,280, 50,313 (Sept. 21, 1998).

Finally, EPA has also stated that changes made pursuant to an alternative operating scenario are not covered by the permit shield.

> Failure to anticipate and include a particular change under an [Alternative Operating Scenario] does not in and of itself bar the source from implementing the change if it can satisfy the requirements of the off-permit provisions in part 70, such as those set forth at 40 CFR 70.4(b)(12) and (b)(14). The permit shield does not extend to changes made pursuant to these provisions. *See, e.g.*, 40 CFR 70.4(b)(12)(i)(B), (b)(12)(ii)(B), (b)(14)(iii).

U.S. EPA, Operating Permit Programs and Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR); Flexible Air Permitting Rule, 72 Fed. Reg. 52,206, 52,216, n. 22 (Sept. 12, 2007).

5. EPA's Review of Proposed Permits

Each state-administered permitting authority must transmit to EPA a copy of the proposed Title V permit for a 45-day review period, during which the Administrator of the EPA "shall . . . object" to the permit's issuance if it "contains provisions that are determined by the Administrator as not in compliance with the applicable requirements" of the CAA and "the requirements of an applicable implementation plan." 42 U.S.C. § 7661d(b)(1). If the EPA does not object during this period, within 60 days after the period's expiration, any person may petition the Administrator for issuance of an objection. *Id.* at § 7661d(b)(2). The Administrator must grant or deny such petition within 60 days after the petition is filed. *Id.*

B. Federal Regulation of Sulfur Dioxide

Under the CAA, EPA is required to promulgate National Ambient Air Quality Standards ("NAAQS") for SO_2 and other pollutants to protect the public health and welfare. 42 U.S.C. § 7409. As per Section 109 of the CAA, national primary ambient air quality standards are standards requisite to protect the public health, allowing an adequate margin of safety. 42 U.S.C. § 7409(b). In June of 2010, EPA issued a new SO_2 NAAQS standard, recognizing that the prior 24-hour and annual SO_2 standards did not adequately protect the public against adverse respiratory effects associated with short term (5 minutes to 24 hours) SO_2 exposure. 35 Fed. Reg. 35,520 (June 22, 2010).

The new 2010 SO_2 NAAQS standard is a 1-hour standard set at 196 micrograms per cubic meter ("$\mu g/m^3$") (or 75 parts per billion "ppb"). 40 C.F.R. § 50.17(a). The standard was established in the form of the 99th percentile of the annual distribution of the daily maximum one-hour average concentrations. *Id.* at § 50.17(b). Due to both the shorter averaging time and the numerical difference, the new one-hour SO_2 NAAQS is far more stringent than the prior SO_2 NAAQS. This was determined to be necessary as, EPA determined, Thus, when setting the new one-hour SO_2 NAAQS, EPA determined "exposure to SO_2 in even very short time periods—such as five minutes—causes decrements in lung function, aggravation of asthma, and respiratory and cardiovascular morbidity. *See* U.S. EPA, *Integrated Science Assessment for Sulfur Oxides—Health Criteria* ch. 5 tbls. 5-1, 5-2 (2008), attached hereto as Exhibit 11; 75 Fed. Reg. at 35,525; *see also* U.S. EPA, *Our Nation's Air: Status and Trends Through 2008* 4 (2010) (noting that the health effects of sulfur dioxide exposure include aggravation of asthma and chest tightness), *available at* http://www.epa.gov/airtrends/2010/report/airpollution.pdf.

As such, the new NAAQS is projected to have enormous beneficial effects for public health. EPA has estimated that 2,300-5,900 premature deaths and 54,000 asthma attacks a year will be prevented by the new standard. U.S. EPA, *Final Regulatory Impact Analysis (RIA) for the SO_2 National Ambient Air Quality Standards (NAAQS)* tbl. 5.14 (2010), *available at* http://www.epa.gov/ttnecas1/ria.html. In other terms, levels of SO_2 air pollution above the standard in the NAAQS are expected to cause thousands of premature deaths and tens of thousands of asthma attacks every year.

C. Federal Regulation of Particulate Matter

Particulate matter ("PM") is treated under the CAA as two distinct air pollutants: PM_{10} (PM that is equal to or less than 10 micrometers in diameter) and $PM_{2.5}$ (2.5 micrometers in diameter and smaller). *See* National Ambient Air Quality Standards, *available at* http://www.epa.gov/air/criteria.html. Not only do these two pollutants have different physical and behavioral characteristics, *see* U.S. EPA, Clean Air Fine Particle Implementation Rule, 72 Fed. Reg. 20,586, 20,599 (April 25, 2007) ("$PM_{2.5}$ . . . differs from PM_{10} in terms of atmospheric dispersion characteristics, chemical composition, and contribution from regional transport"), more importantly, PM_{10} and $PM_{2.5}$ pose different levels of risk to human health. While PM_{10} particles are small enough to be inhaled and accumulate in the respiratory system, $PM_{2.5}$ particles, because of their extremely small size, can penetrate deep into the lungs, enter the bloodstream, and cross the blood-brain barrier. *See* U.S. EPA, *Basic Information on Fine Particle (2.5) Designations*, *available at* http://www.epa.gov/pmdesignations/basicinfo.htm. As a result, $PM_{2.5}$ pollution is even more dangerous and can cause even more severe and long-term adverse health effects than PM_{10}. *See* L.K Fonken et al., *Air Pollution Impairs Cognition, Provokes Depressive-Like Behaviors and Alters Hippocampal Cytokine Expression and Morphology*, Molecular Psychiatry 16, 988 (2011), *available at* https://ckm.osu.edu/sitetool/sites/neuroscience/documents/AirPollution.pdf.

Because of the separate needs to control PM_{10} and $PM_{2.5}$ emissions, EPA strengthened the 24-hour $PM_{2.5}$ standard in 2006 to 35 $\mu g/m^3$, while leaving the 24-hour PM_{10} standard of 150 $\mu g/m^3$ in place. U.S. EPA, National Ambient Air Quality Standards for Particulate Matter, 71 Fed. Reg. 61,144 (October 17, 2006). The agency also revoked the annual PM_{10} standard, but

retained a daily standard of 150 ug/m3. *Id.* EPA also announced in the 2007 implementation rule that the agency will no longer accept the use of PM_{10} emissions information as a surrogate for $PM_{2.5}$ emissions information with regard to Title V permits. 72 Fed. Reg. at 20,659. EPA explained its decision as follows:

> Under the Title V regulations, sources have an obligation to include in their Title V permit applications all emissions for which the source is major and all emissions of regulated air pollutants. The definition of regulated air pollutant in 40 C.F.R. 70.2 includes any pollutant for which a NAAQS has been promulgated, which would include both PM_{10} and $PM_{2.5}$. To date, some permitted entities have been using PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions. *Upon promulgation of this rule, EPA will no longer accept the use of PM_{10} as a surrogate for $PM_{2.5}$.* Thus, *sources will be required to include their $PM_{2.5}$ emissions in the Title V permit applications*, in any corrections or supplements to these applications, *and in applications submitted upon modification and renewal.*

Id. (citing 40 C.F.R. §§ 70.5(c)(3)(i), 70.5(b), and 70.7(a)(1)(i); 40 C.F.R. §§ 71.5(c)(3)(i), 71.5(b), and 71.7(a)(1)(i)) (emphasis added). Thus, consistent with the EPA's treatment of emissions information for particulate matter, a Title V permit must include separate and distinct limitations and monitoring requirements for $PM_{2.5}$ emissions.

Additionally, there are two different types of direct PM emissions: filterable (composed of solids) and condensable PM (vapor or gas that condenses to liquid or solid at stack exit). $PM_{2.5}$ is largely comprised of condensable PM, rather than filterable. *See* U.S. EPA, *Point Source Inventory Development* 5-2, 5-3, *available at* http://www.epa.gov/apti/course419b/studentmanual/sm_chapter_5.pdf. As such, Title V permits must contain adequate monitoring provisions to ensure that both types of PM are reflected in a source's emission reports.

D. Pennsylvania's State Implementation Plan, the Prohibition Against Harmful Air Pollution, and the Acid Rain Program

As mentioned previously, federal regulations require that Title V permits ensure compliance with "all applicable requirements" which include provisions found in a SIP. *See* 40 C.F.R. § 70.1; 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.2(1). The Pennsylvania SIP contains a similar definition of "applicable requirements" which includes standards or requirements that "have been promulgated or approved by EPA under the Clean Air Act or the regulations adopted under the Clean Air Act through rulemaking at the time of [permit] issuance, but have future-effective compliance dates," and standards "provided for in (Pennsylvania's) SIP approved by the EPA. . . ." 25 Pa. Code § 121.1 ("applicable requirements" (i)-(ii)). This definition is found in the federally-enforceable SIP. 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 121.1 as part of the SIP).

The federally-approved Pennsylvania SIP contains a requirement that "*[n]o person shall* cause, suffer, or *permit air pollution*" in Pennsylvania. 25 Pa. Code § 121.7 (emphasis added); *see also* 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 121.7 as part of the SIP). Pennsylvania

regulations—again, incorporated into the federally approved SIP—define "air pollution" as follows:

> Air pollution—The presence in the outdoor atmosphere of *any form of contaminant*, including, but not limited to, the discharging from stacks, chimneys, openings, buildings, structures, open fires, vehicles, processes or any other source of any smoke, soot, fly ash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, vapors, odors, toxic, hazardous or radioactive substances, waste or other matter in a place, manner or *concentration inimical or which may be inimical to public health, safety or welfare or which is or may be injurious to human*, plant or animal *life* or to property or which unreasonably interferes with the comfortable enjoyment of life or property.

25 Pa. Code § 121.1 (emphasis added); 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 121.1 as part of the SIP).[5] As this provision is found in the SIP, it is therefore an "applicable requirement" under federal and Pennsylvania law. *See* 40 C.F.R. § 70.2(1); 25 Pa Code § 121.1.

EPA has recently affirmed that where prohibitions on air pollution are part of a SIP, they are enforceable requirements. *See Letter re Ohio Admin. Code and Title V Permits, from Genevieve Damico, Chief, Air Permits Section EPA Region 5 to Michael Ahern, Manager, Permit Issuance, Ohio EPA* (Apr. 25, 2012), attached hereto as Exhibit 12. EPA wrote that "if nuisance provisions apply to a stationary source either because it is subject to the provisions in the [state] SIP or because a permit issued pursuant to a SIP-approved program contains the requirements, *the terms must be included in the federally enforceable side of the source's Title V permit.*" *Id.* at 1 (emphasis added).[6]

Additionally under the SIP, Title V permits must also include standards or requirements "of the acid rain program under Title IV of the Clean Air Act . . . or the regulations thereunder" as these are also included in the definition of "applicable requirements." 25 Pa. Code § 121.1. Again, this provision is found in the federally-enforceable SIP. 40 C.F.R. § 52.2020. Specifically, federal acid rain regulations require that

> [n]o provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under § 72.7 or § 72.8 shall be construed as . . . exempting or excluding the owners and operators . . . of an affected source or affected unit from compliance with any other provision of the [Clean Air] Act, *including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans.*

---

[5] EPA approved these portions of Pennsylvania's SIP, without specific comment, decades ago. 37 Fed. Reg. 10,842, 10,889 (May 31, 1972).

[6] Region 5 has also at least once issued a notice of violation under Illinois's nuisance provision, *see* U.S. EPA Region 5, Notice of Violation, *In re H. Kramer & Co.*, EPA-5-11-IL-11 (Apr. 20, 2011) (informing a polluter that it had violated the provision because its emissions caused violations of a NAAQS standard), attached hereto as Exhibit 13.

40 C.F.R. § 72.9(h)(1) (emphasis added); *accord* 25 Pa. Code § 127.531(f)(2); *see also* 42 U.S.C. § 7651g(d)(3) (mandating that states issue permits that satisfy the requirements of both Title V and Title IV); U.S. EPA, Clean Air Act Final Full Approval of Operating Permits Program, 61 Fed. Reg. 39,597, 39,598 (July 30, 1996) (noting the requirement that "Pennsylvania's Title V program be operated in accordance with the requirements of Title IV and its implementing regulations," including 25 Pa. Code § 127.531). Thus, a Title V permit must ensure compliance with these federal regulations under Title IV as they are "applicable requirements."

GROUNDS FOR OBJECTION TO THE HOMER CITY PLANT'S PROPOSED PERMIT

The Sierra Club hereby petitions EPA to object to the Homer City Proposed Permit on four separate grounds.[7] First, the Proposed Permit fails to include the prohibition against air pollution found in Pennsylvania's SIP. *See* Sierra Club Comments at 11-13. Second, the Proposed Permit fails to include emission limits and averaging periods sufficient to prevent the Homer City Plant from causing impermissible air pollution in the form of harmful concentrations of SO_2 in violation of the state-adopted, federally-enforceable acid rain provisions and the Pennsylvania SIP. *See* Sierra Club Comments at 13-16. Third, the Proposed Permit fails to require sufficient emissions limits and monitoring requirements to ensure compliance with PM standards. *See* Sierra Club Comments at 19-25. Fourth, the Proposed Permit impermissibly claims to apply a permit shield to unidentified future projects. *See* Sierra Club Comments at 27-29. Each of these grounds for objection will be further discussed in turn below.

I. The Proposed Permit Fails to Include the Prohibition Against Air Pollution found in Pennsylvania's SIP

As discussed, Title V permits must provide for all federal and state regulations in one legally-enforceable document, thereby ensuring that all CAA requirements are applied to the facility and that the facility is in compliance with those requirements. *See* 42 U.S.C. §§ 7661a(a) and 7661c(a); *see also* 40 C.F.R. § 70.6(a)(1). Permits issued under Pennsylvania's operating permit program are considered federally enforceable and must contain "emission limits and standards, including those operational requirements and limitations *that assure compliance with the applicable requirements at the time of permit issuance.*" 40 C.F.R. § 70.6(a)(1) (emphasis added). The term "all applicable requirements" as defined in the Pennsylvania SIP includes standards or requirements that "have been promulgated or approved by EPA under the Clean Air Act or the regulations adopted under the Clean Air Act through rulemaking at the time of [permit] issuance, but have future-effective compliance dates," and standards "provided for in (Pennsylvania's) SIP approved by the EPA . . . ." 25 Pa. Code § 121.1 ("applicable requirements" (i)-(ii)); *see also* 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 121.1 as part of the SIP).

Despite this, the Proposed Permit does not include Pennsylvania's prohibition against air pollution, incorporated in the SIP. *See generally* Proposed Permit; *see also* 25 Pa. Code §§ 121.7 and 121.1; 40 C.F.R. § 52.2020 (identifying these sections as part of the SIP). Therefore, EPA

[7] All grounds for objection were timely raised in the comments submitted by the Sierra Club on the Homer City Proposed Permit. *See* 42 U.S.C. § 7661(b)(2); Sierra Club Comments at 3.

should object to the Proposed Permit as it does not contain all of the requirements that the Homer City Plant must comply with under the SIP.

II. The Proposed Permit Fails to Prevent Harmful Air Pollution and Violations of the Applicable Acid Rain Provision

The Homer City Proposed Permit fails to include emission limits and averaging periods on SO_2 emissions sufficient to prevent the facility from causing ambient concentrations in excess of the health-based standard in the one-hour SO_2 NAAQS, and thereby impermissibly permits air pollution and violates the applicable acid rain provisions.

As discussed above and in Sierra Club's comments submitted to PaDEP, under Pennsylvania's SIP Homer City's Proposed Permit must include emission limitations to ensure that the facility is in compliance with all "applicable requirements." 25 Pa. Code § 121.1; *see also* 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 121.1 as part of the SIP). Thus, Homer City's Title V permit must reference and incorporate Pennsylvania's prohibition of harmful pollution, as it is included in the SIP, and federal acid rain provisions, included specifically in the definition of "applicable requirement." 25 Pa. Code § 121.7 (incorporated into SIP at 40 C.F.R. § 52.2020); 25 Pa. Code § 121.1 (including requirements of the "acid rain program under Title IV of the Clean Air Act . . . or the regulations thereunder" as "applicable").

As such, both the prohibition against harmful air pollution and the acid rain program require that Homer City's Proposed Permit include limitations stringent enough to prevent violations of the NAAQS, as NAAQS are set at the level necessary to protect public health and are specifically incorporated into the federal acid rain regulations. Despite this, Homer City's Proposed Permit fails to include emissions limitations sufficient to prevent violations of the one-hour SO_2 NAAQS. Accordingly, the Proposed Permit is in violation of the Pennsylvania SIP and federal law and EPA should object to the permit.

A. The Proposed Permit Fails to Include Sufficiently Stringent SO_2 Emission Limits, Allowing the Homer City Plant to Cause Harmful Air Pollution and Violate the NAAQS

1. The Proposed Permit Fails to Include Sufficient Numerical Emission Limitations

Under the CAA, the primary NAAQS must be set at a level adequate to protect public health with an adequate margin of safety. 42 U.S.C. § 7409(b). Thus, the specific limit in the 1-hour SO_2 NAAQS of 196.2 $\mu g/m^3$ is dispositive authority that higher levels of SO2 pollution are or "may be inimical to public health" or "injurious" to human life; the NAAQS represent EPA's conclusions regarding the impact of SO_2 on public health and what constitutes air pollution. As such, the limits in the NAAQS provide a numeric translation of the Pennsylvania SIP's prohibition on air pollution. Accordingly, the Homer City Proposed Permit must include emission limitations that ensure it will not cause air pollution, as reflected in a violation of the one-hour SO_2 NAAQS.

Additionally as the Homer City Plant is an affected source under Title IV of the CAA, the Proposed Permit cannot allow violations of the NAAQS under the federal acid rain program, which is incorporated as an "applicable requirement" in the federally-approved SIP provision at 25 Pa. Code § 121.1. As this section requires that a source comply with a "standard or requirement of the acid rain program under Title IV of the CAA . . . or regulations thereunder," the Pennsylvania acid rain provision is an applicable requirement that must be imputed into any Title V permit issued. Specifically, the acid rain provision under this program requires that Title V permits "shall prohibit . . . [e]xceeding applicable emission rates or standards, including ambient air quality standards." 25 Pa. Code § 127.531(f)(2).[8] Accordingly, the Proposed Permit must also ensure that the Homer City Plant will not violate the NAAQS under this provision, as well.

Despite these requirements, the Proposed Permit does not impose the restrictions required under the law and will allow the Homer City Plant to cause air pollution by violating the NAAQS. Under Section E, the "Source Group Restrictions," the Proposed Permit establishes the following limits for all three boilers:

	Allowable pounds SO_2 per 10^6 Btu Heat Input
Thirty-day running average not to be exceeded at any time	3.7
Daily average not to be exceeded more than 2 days in any running 30-day period	4.0
Daily average maximum not to be exceeded at any time	4.8

Proposed Permit at 40.

These emissions limits remain unchanged from the current Title V Permit issued in 2004. *Compare* Current Permit at 25, 37 *with* Proposed Permit at 24, 40. Additionally, under Section D, "Source Level Requirements," Unit 3 is subject to a limit of 0.4 lb/mmBtu based on a 30 day rolling average and 12,720 tons of SO_2 in any 12 month consecutive period. *Id.* at 24. Units 1 and 2 are also under additional limits in the current Plan Approval which allows the installation and temporary operation of dry flue gas desulfurization ("FGD") systems, requiring a limit of 0.20 lb/mmBtu from each unit on a 30-day rolling average (excluding periods of startup or shutdown) and 5,950 tons of SO_2 from each unit in a consecutive 12-month period. Plan Approval at 18. These limits and averaging periods thus not only establish inconsistent requirements for the units, they do not ensure that the plant will not cause a violation of the prohibition against air pollution in Pennsylvania's SIP.

Indeed, it is unquestionable that these limits will allow Homer City to violate the SO_2 NAAQS, as air dispersion modeling recently showed. In January 2012, Camille Sears, an expert modeler,[9] performed AERMOD air dispersion modeling to assess the impacts of the SO_2

[8] Federal acid rain regulations additionally require sources to comply with NAAQS. *See* 40 C.F.R. 72.9(h)(1).
[9] Camille Sears has a Master's degree in Atmospheric Science, and more than thirty years of experience in air quality impact analyses, health risk assessments, meteorological monitoring, and geographic information systems. *See* Homer City Modeling Report, Attachment 1.

emissions from the Homer City Plant, modeling the Plant's actual maximum and permitted allowable SO_2 emissions to determine whether emissions from the Plant would cause or contribute to violations of the one-hour SO_2 NAAQS. Homer City Modeling Report at 3. The modeling protocol employed was consistent with the EPA's March 2011 guidance and utilized the most recent versions of AERMOD, AERMET, and AERMINUTE. *Id.* at 2-10.

The modeling results found that both the currently permitted level of allowable SO_2 emissions from the plant and the maximum level of SO_2 emissions lead to significant exceedances of the 1-hour SO_2 NAAQS over a wide geographic area. *Id.* at 12 and Figures 2 and 3. While the one-hour SO_2 NAAQS is set at 196.2 $\mu g/m^3$, the total allowable SO_2 emissions from the Plant combined with the background levels of SO_2 results in concentrations as high as 2,178.4 $\mu g/m^3$, or more than eleven times as high as the public health standard set by EPA. *Id.* Analysis performed using actual peak 2010 emissions from Homer City with ambient background pollution levels results in ambient SO_2 concentrations as high as 1,389.2 $\mu g/m^3$. *Id.* Homer City would require at least a 97.5% reduction from the currently allowable maximum daily emission rate of 4.8 lb/mmBtu in order to ensure compliance. *Id.* at 13. Such a reduction would be the equivalent to an SO_2 emission limit for each of Units 1 and 2 of 0.12 lb/mmBtu or less measured on an hourly basis. *Id.*

In sum, these results unquestionably demonstrate that the emission limits in the Proposed Permit are insufficient to prevent Homer City from not only committing violations of the one-hour SO_2 NAAQS and thereby, violating requirements of the acid rain program, but also from creating "air pollution" in contravention of Pennsylvania's SIP's pollution prohibition. *See* 40 C.F.R. § 52.2020; 25 Pa. Code § 121.7; 25 Pa. Code § 121.1. Thus, EPA should object to the Proposed Permit.

2. *The Proposed Permit Fails to Include Proper Averaging Periods in its SO_2 Emission Limits*

In addition to ensuring that the Proposed Permit's SO_2 emissions limits are stringent enough to assure compliance with all applicable requirements, the Homer City Permit must further ensure that the averaging times associated with those SO_2 emissions standards are sufficient to similarly assure compliance with all applicable standards, including the prohibition on air pollution and the acid rain provisions ensuring compliance with the NAAQS. *See* 25 Pa. Code § 121.1; 25 Pa. Code § 121.7; 40 C.F.R. § 52.2020. As indicated above, the maximum concentration of SO_2 permitted to exist in the ambient air, at the point of its use is set forth as a one-hour average. *See* 25 Pa. Code § 131.2 (incorporating the federal NAAQS by reference); *see also* 40 C.F.R. § 52.2020 (identifying § 131.2 as part of the SIP). In addition, under Pennsylvania's SIP regulations for sampling and testing, the averaging time for determining emissions of SO_2 is one hour. *See* 25 Pa. Code § 139.13(6); *see also* 40 C.F.R. § 52.2020 (identifying §139.13(6) as part of the SIP).

As currently proposed, the Proposed Permit does not set forth an emissions limit for SO_2 based on a one-hour average. Instead, the Permit requires the daily and monthly averages for all three Units as follows:

	Allowable pounds SO_2 per 10^6 Btu Heat Input
Thirty-day running average not to be exceeded at any time	3.7
Daily average not to be exceeded more than 2 days in any running 30-day period	4.0
Daily average maximum not to be exceeded at any time	4.8

Proposed Permit at 40. Unit 3 is also subject to a 0.4 lb/mmBtu 30 day rolling average limitation. Proposed Permit at 24.

These limits as currently proposed cannot ensure compliance with the applicable one-hour SO_2 emissions standard. As EPA noted in guidance to the one-hour SO_2 NAAQS rulemaking and in several other recent comments and decisions, compliance with the one-hour SO_2 must be demonstrated on the basis of a one-hour averaging period. *See* U.S. EPA, *General Guidance for Implementing the 1-Hour SO_2 National Ambient Air Quality Standard in Prevention of Significant Deterioration Permits, Including an Interim 1-hour SO_2 Significant Impact Level* 7 (August 23, 2010) ("Because compliance with the new SO_2 NAAQS must be demonstrated on the basis of a 1-hour averaging period, the reviewing authority should ensure that the source's PSD permit defines a maximum allowable hourly emissions limitation for SO_2 . . . . Hourly limits are important because they are the foundation of the air quality modeling demonstration relative to the 1-hour SO_2 NAAQS."), attached hereto as Exhibit 14; *see also* U.S. EPA Region 7, *Comments re Sunflower Holcomb Station Expansion Project* 4 (August 12, 2010) (finding that "[t]o ensure the source does not cause or contribute to a violation of the NAAQS, the emission limits must. . . have the same averaging period, i.e. in this case 1-hour average emission rates for the 1-hour NAAQS"), attached hereto as Exhibit 15; *see also* U.S. EPA Region 5, *Comments re Monroe Power Plant Construction Permit* 1-2 (February 1, 2012) ("Compliance with emissions limits. . . should be determined based on averaging times consistent with the NAAQS. The SO_2 and NO_2 averaging times of 24-hour and annual, respectively, are much longer than the 1-hour averaging for the NAAQS and consequently, may not be protective of the standards."), attached hereto as Exhibit 16.

As previously discussed, it is well-documented that the health data relied upon by EPA in promulgating the new one-hour SO_2 NAAQS overwhelmingly indicated that increased asthma attacks and hospital visits are attributable to short term concentrations of sulfur compound concentrations in the air. Even short term spikes *as brief as five minutes* can cause severe health issues for certain at-risk individuals. *See* 75 Fed. Reg. at 35,550. Due to the extreme effects of even short-term exposure to SO_2 pollution, it is vitally important to require compliance with an SO_2 emissions limit at all times.

As such, an hourly averaging period is necessary to meet an hourly air quality standard. The Proposed Permit must, therefore, set forth an emissions standard for SO_2 based on a one-hour average; this is necessary in order to guarantee that the Title V permit's SO_2 standards

assure compliance with all applicable requirements contained in Pennsylvania's SIP, including the prohibition against air pollution and the acid rain provisions. *See* 25 Pa. Code § 121.7; 25 Pa. Code § 121.1; 40 C.F.R. § 52.2020. As the Homer City Proposed Permit fails to do so, EPA should object to the permit.

B. The Proposed Permit Fails to Address Current Violations of the Prohibition on Air Pollution and Ongoing Violations of the SO_2 NAAQS

As previously discussed, a Title V permit must include a compliance schedule for "requirements for which the source is not in compliance at the time of the permit issuance." 40 C.F.R. § 70.5(c)(8)(iii)(C); *id.* at § 70.6(c)(3) (requiring draft permits to contain a "schedule of compliance consistent with §70.5(c)(8)"); *see also* 42 U.S.C. § 7661c(a) ("Each permit issued under this subchapter shall include . . . a schedule of compliance").

The Homer City Plant is not only in violation of the general prohibition against air pollution under the SIP, it is also in violation of its current permit, issued in January 2004, which prohibits the Plant from "[e]xceeding applicable emissions rates or standards, including ambient air quality standards." Current Permit at 18. Thus, as recent air dispersion modeling documents, *see* Homer City Modeling Report, the Homer City plant is in violation of its current permit, and therefore the Proposed Permit must include a compliance schedule for sulfur dioxide, which it currently does not. Additionally, as the current Proposed Permit adopts the 2004 Title V permit's limits without change, the Homer City Plant will continue to be permitted to emit SO_2 emissions which exceed the one-hour NAAQS and thus will continue to commit ongoing violations of the CAA and the APCA and violate the Acid Rain provisions.

Accordingly, EPA should object to the Proposed Permit, as it does not include a compliance schedule for ongoing SO_2 violations or emission limits and averaging times to ensure the Homer City Plant will not continue to violate the SIP and the NAAQS.

C. The Proposed Permit Includes Differing SO_2 Standards than Under the Previous Scrubber Plan Approval

In addition to improper emissions limits and averaging times, the Proposed Permit contains differing standards for Unit 3 and does not reflect the standards for Units 1 and 2 in the current scrubber project Plan Approval. *See* Proposed Permit at 24, 40; Plan Approval at 18.

Under the Proposed Permit, Unit 3 is subject to both the Group Restrictions (3.7 lb/mmBtu on a 30 day running average not to be exceeded at any time; 4.0 lb/mmBtu daily average not to be exceeded more than 2 days in any running 30-day period; 4.8 lb/mmBtu daily average not to be exceeded at any time) and Source Level Restrictions (0.4 lb/mmBtu on a 30 day rolling average; 12,720 tons in a 12 month consecutive period). Proposed Permit at 24, 40. In addition to allowing Homer City to emit air pollution as previously discussed, these two differing standards lead to confusion as to which level constitutes a violation for Unit 3 and should therefore be revised to ensure clarity in Unit 3's obligations.

Additional confusion arises when comparing Units 1 and 2's obligations under the Proposed Permit in comparison with the Plan Approval to which they are also currently subject. On April 2, 2012, PaDEP issued a Plan Approval for Units 1 and 2 for the installation and temporary operation of a dry FGD system, or scrubbers. Plan Approval at 1, 11. Under the Plan Approval, emissions from Unit 1 and 2 "shall not exceed" the following:

> 0.20 lb/mmBtu from each Unit on a 30-day rolling average (excluding periods of startup or shutdown). . . .
>
> 5,950 tons from each unit in a consecutive 12-month period beginning after 1 year of operation of each NID (scrubber) system. . . .

Plan Approval at 18. Once again, on top of not ensuring that Homer City will avoid causing air pollution,[10] neither the Plan Approval nor the Proposed Permit provide clarity as to what limits Unit 1 and 2 will be subject to during the term of the Title V permit, or the time frame and process for incorporating the Plan Approval's limits into the general Title V permit. The Proposed Permit sets much higher limitations for Units 1 and 2, *see* Proposed Permit at 40, and does not incorporate or even mention the scrubber Plan Approval. As the Plan Approval is set to expire on October 2, 2014, but the final Title V permit would likely not expire until 2017, the Title V permit must reflect all of the limitations that Units 1 and 2 will be subject to throughout the life of the permit. Therefore, because of these inconsistencies, EPA should object to the Proposed Permit.

III. The Proposed Permit Fails to Ensure the Homer City Plant's Compliance with Applicable Particulate Matter Emissions and Monitoring Requirements

The Homer City Plant has a history of violations for particulate matter or PM, including a 2010 settlement for a PM violation amounting to a $30,000 fine. *See* U.S. E.P.A., Envirofacts, EME Homer City Plant Information, *available at* http://oaspub.epa.gov/enviro/afs_reports.detail_plt_view?p_state_county_compliance_src=4206300002&p_plant_id=; *see also* EPA Enforcement & Compliance History Online, EME Homer City Detailed Facility Report, *available at* http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?tool=echo&IDNumber=4206300002; *see also Bobby O. Duey, Station Director, Letter to Mark Mendocino, Chief of Operations, Pa. Dep't of Envtl. Prot, In re Notice of Violation, EME Homer City Generation L.P.* (October 5, 2009) (referencing the violation for PM) (hereinafter the "Mendocino Letter"), attached hereto as Exhibit 18; *see also* Pa. Dep't of Envtl. Prot., Consent Agreement, *In re EME Homer City Generation* (June 1, 2010).[11] The Proposed Permit, however, does not reflect these ongoing violations and even allows the Plant to violate applicable laws concerning PM.

---

[10] The Sierra Club is currently appealing the issuance of this Plan Approval on various grounds, including its failure to comply with the one-hour SO_2 NAAQS. *See* Sierra Club's Notice of Appeal of Department Plan Approval Permit #32-0005H, issued to Homer City on April 2, 2012 at 7 (May 2, 2012), attached hereto as Exhibit 17.

[11] The Sierra Club does not have a copy of this consent agreement, but note its record in both Envirofacts and ECHO data cited above.

In sum, the Proposed Permit suffers from the following problems associated with PM: (a) the Proposed Permit must include separate emissions limitations and monitoring requirements for $PM_{2.5}$ and PM_{10}; (b) the Proposed Permit must include condensable PM, as well as filterable, in its emission's limitations and monitoring requirements; (c) the Proposed Permit must include adequate emissions monitoring, including a continuous emissions monitoring system for PM; (d)the Proposed Permit fails to include adequate compliance assurance monitoring requirements, based on its use of opacity as a surrogate for PM, and (e) the Proposed Permit fails to include even the minimum base requirement of adequate stack testing.

A. The Proposed Permit Fails to Require that $PM_{2.5}$ Be Limited and Monitored Separately from PM_{10}

PM is treated as two separate pollutants under the CAA: PM_{10} and $PM_{2.5}$. *See* U.S. EPA, National Ambient Air Quality Standards, available at http://www.epa.gov/air/criteria.html. EPA has stated that because $PM_{2.5}$ now has a separate and distinct NAAQS, PM_{10} can no longer be treated as a surrogate for $PM_{2.5}$. 72 Fed. Reg. at 20,659. Therefore, consistent with the EPA's treatment of emissions information for these pollutants, the final Title V permit for the Homer City Plant must include separate and distinct limitations and standards for $PM_{2.5}$ emissions. *See* 25 Pa. Code § 121.1 ("applicable requirements" (i)); *see also* 25 Pa. Code § 141.1.

Yet, in its current state, the Proposed Permit fails to provide an emissions limit specific to $PM_{2.5}$. Instead, the permit states "[a] person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the rate of 0.1 pounds per million Btu of heat input." Proposed Permit at 40. This language does not distinguish between PM_{10} and $PM_{2.5}$, nor does it state which type of PM must be held to this limit. Yet this is the only PM limit in place for Units 1, 2, and 3. Therefore, the EPA should object to the permit as it does not include proper emissions limitations for PM.

B. The Proposed Permit Fails to Require Inclusion of and Testing for Condensable Particulate Matter

As currently drafted, the Proposed Permit completely fails to account for emissions of condensable PM from the Homer City Plant. This treatment of PM is inadequate to assure compliance with the PM NAAQS. Condensable PM is a common component of both PM_{10} and $PM_{2.5}$ and, therefore, the primary PM_{10} and $PM_{2.5}$ NAAQS include consideration of both the filterable and condensable fractions of PM. *See* EPA Basic Information on Particulate Matter, http://www.epa.gov/airquality/particlepollution (stating that, with regard to the NAAQS, "'[p]articulate matter,' also known as particle pollution or PM, is a complex mixture of extremely small particles *and liquid droplets*.") (emphasis added). Consequently, the Plant's Title V permit must indicate that both forms of particulates are considered when determining compliance with PM emissions limitations. Indeed, unless the Proposed Permit includes consideration of condensable PM, a significant portion of the Plant's PM emissions will be unaccounted for, resulting in incomplete and invalid PM emissions data. As a result, the Title V permit will fail to assure compliance with governing applicable requirements. *See* 25 Pa. Code § 121.1 ("applicable requirements" (i)). Accordingly, EPA should object to the Proposed Permit

as it does not contain PM emission limits and standards which consider both filterable and condensable PM.

Likewise, the permit must provide for a stack testing method which measures both filterable and condensable PM. As written, Homer City's Proposed Permit states in one section that stack testing requirements only measure filterable PM, not condensable, Proposed Permit at 44, while in a later section it calls for testing of "filterable PM_{10}, filterable $PM_{2.5}$, and condensable particulate," however states that this testing is "for informational purposes only and will not be used for determination of compliance. . . ." Proposed Permit at 46. Therefore, EPA should object to the Proposed Permit based on rectify inconsistencies and that the permit does not ensure that both filterable and condensable PM are tested and used in determining compliance with the PM_{10} and $PM_{2.5}$ standards, as PM includes both filterable and condensable.

C. The Proposed Permit Fails to Require Continuous Emissions Monitoring to Assure Adequate Periodic Monitoring of the Plant's Particulate Matter Emissions.

Pennsylvania's regulations—incorporated into the SIP—provide that, for PM, a "person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of . . . [t]he rate of 0.1 pounds per million Btu of heat input when the heat input to the combustion unit in millions of Btus per hour is equal to or greater than 600." 25 Pa. Code § 123.11(3); *see also* 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 123.11 as part of the SIP). The appropriate averaging time for sampling such emissions is one hour. 25 Pa. Code § 139.12(4); *see also* 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 139.12 as part of the SIP).

In addition to setting limits, the CAA requires that permits "shall set forth . . . monitoring . . . . requirements sufficient to assure compliance" with emissions limits in a Title V permit. 42 U.S.C. § 7661c(c); *see also* 40 C.F.R. §§ 70.6(a)(3)(i)(A), 70.6(a)(3)(i)(B), and 70.6(c)(1). As EPA has described, the permit writer's monitoring analysis consists of five 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. *U.S. Steel*, 2011 WL 3533368, at *7. The D.C. Circuit has also indicated that frequency of emissions monitoring must reflect the averaging time used to determine compliance. *Sierra Club*, 536 F.3d at 765.

Here, the Proposed Permit contains a PM emission standard prohibiting the emission of "particulate matter from a combustion unit in excess of the rate of 0.1 pounds per million Btu of heat input." Proposed Permit at 40; *see also* 25 Pa. Code § 123.11(a)(3). Because the Pennsylvania SIP does not contain provisions requiring specific types of PM monitoring, the second scenario described in *Sierra Club* applies: the permit must include "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 536 F.3d at 675.

However, the monitoring frequency required by the Proposed Permit is not adequate to assure compliance with hourly limits. Instead, the permit provides that stack testing for PM should occur once *every two years*. The permit states

> [t]he permittee shall conduct a source test within one (1) year of the issuance of this Operating Permit and at least every two (2) years thereafter. Stack testing conducted within the two (2) year period prior to the issuance of this TVOP may be used to meet the requirements of this condition and to start the two (2) year clock on subsequent testing.

Proposed Permit at 44. Additionally, the Proposed Permit does not provide any explanation for why monitoring once every two years is adequate to assure compliance with a continuous standard. Indeed, EPA has found that such infrequent monitoring is in fact unlawful. *See U.S. Steel*, 2011 WL 3533368, at *7.

Instead, the Proposed Permit must require the use of continuous emissions monitoring systems ("CEMS") for the Homer City Plant, as an application of the five *U.S. Steel* factors makes clear.

1. CEMS are required due to the variability of PM emissions, as related to add-on controls like electrostatic precipitators

First, looking at factors one and three together, the variability of emissions, especially as they relate to the add-on controls used by Homer City in this case, strongly indicate the necessity for CEMS for PM. The Homer City Plant employs electrostatic precipitators ("ESPs") as the means of controlling PM emissions. Proposed Permit at 25, 37. As fully described in the attached Declaration of Ranajit Sahu, this control method, combined with the inherent variability of PM emissions from coal-fired boilers, creates a very high degree of variability in Homer City's PM emissions.[12] *See* Declaration of Ranajit (Ron) Sahu (hereinafter "Sahu Declaration"), attached hereto as Exhibit 19. Specifically, Dr. Sahu notes that various "properties of the fuel (coal), properties of the flyash particles themselves, and factors affecting ESP performance . . . [collectively and through their interactions and variations over time] will affect how much [particulate matter] is actually emitted." *Id.* at 5. Dr. Sahu further notes that "[g]iven these numerous factors [related to the fuel, flyash, and ESP], that can singly and in combination, affect the emissions of these pollutants from each of the . . . boilers, the emissions of $PM/PM_{10}/PM_{2.5}$ will likely be variable, and significantly so." *Id.* at 9. Dr. Sahu goes on to state that it is "not uncommon for such variability to be multiple-times or even an *order of magnitude* different between the typical three back-to-back hourly test runs in a stack test." *Id.* (emphasis added). Dr. Sahu concludes that "it is highly unlikely that an occasional measurement (such as a stack test) will accurately be able to capture such variability . . . [t]hus, continuous measurements of filterable PM, using CEMS that are now available, are the proper means of accurately measuring such emissions." *Id.* at 9-10.

[12] Dr. Sahu's declaration was specifically in regards to the Shawville Generating Station; however his analysis is applicable to the Homer City Plant, as well.

In addition, and as EPA is well-aware, stack tests are scheduled well ahead of time. Sources equipped with ESPs like Homer City can and almost always do perform work on their ESPs before the scheduled stack test. This includes realigning plates, replacing broken wires and electronics in the ESP as well as cleaning the ESP, all of which improves ESP performance. In fact, sources often have stack testing companies perform "diagnostic tests" before the "official stack test." If the results of the diagnostic test show violations, then the source can simply perform work on the ESP to ensure that it "passes" the official stack test. Thus, the stack test does not tell the public or regulatory agencies whether the source will be in compliance during the following multi-year period when the ESP once again suffers damage and degradation.

Therefore, because PM emissions are highly variable, due to Homer City's use of ESPs, PM CEMS should be required in the Proposed Permit.

2. Homer City has a history of major violations for PM emissions

Closely related to variability, looking at the second factor—the likelihood of violation—the Homer City Plant's history of major PM violations again mitigates the need for PM CEMS. *See* U.S. E.P.A., Envirofacts, EME Homer City Plant Information, *available at* http://oaspub.epa.gov/enviro/afs_reports.detail_plt_view?p_state_county_compliance_src=42063 00002&p_plant_id=; *see also* EPA Enforcement & Compliance History Online, EME Homer City Detailed Facility Report, *available at* http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?tool=echo&IDNumber=4206300002; *see also* Mendocino Letter; *see also* Consent Agreement re Notice of Violation EME Homer City Generation PM Violations (June 1, 2010).[13]

Given this past history and the variability of the PM emissions discussed above, continued violation is likely. Therefore to ensure compliance, continuous direct monitoring should be required in the form of PM CEMS.

3. PM CEMS are available and employed for similar units at facilities comparable to Homer City

Finally, and perhaps most significantly, under the two remaining factors, the availability and reliability of PM CEMS for similar emission units shows that continuous monitoring will assure compliance with the PM emission limit at the Homer City Plant. PM CEMS are common technology that has been readily available on a commercial scale for many years. *See* U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Current Knowledge of Particulate Matter (PM) Continuous Emission Monitoring, September 2000, *available at* http://www.epa.gov/ttn/emc/cem/pmcemsknowfinalrep.pdf. Indeed, many facilities have installed and are operating PM CEMS, demonstrating that not only are these systems available, but they are reliable and accurate, as well.

[13] The Sierra Club does not have a copy of this consent agreement, but note its record in both Envirofacts and ECHO data above.

In comments EPA submitted in March 2005 for the Robinson Power Company PSD Application and Draft Plan Approval, for a proposed 270 megawatt waste-coal fired, circulating fluidized bed (CFB) boiler facility at Robinson Township, Pennsylvania, EPA noted that:

> The proposed plan approval requires annual stack testing to assure compliance with the particulate matter emission limits from the CFB and its associated fabric-filter baghouse. In light of the evolution of CEMS systems for particulate matter, *EPA is strongly urging the requirement to install and operate a particulate matter CEMS* at the proposed facility. Currently, *there are several facilities that operate PM CEMS and have demonstrated that the systems are reliable and accurate.* These are Tampa Electric power plant (Florida), Eli Lilly Corporation (Indiana), and the U.S. Department of Energy (Tennessee). EPA has also secured commitments from up to 30 existing coal-fired utility installations to install PM CEMS over the next couple of years. It is fair to assume that the state of technology for PM CEMS will be even further evolved by the time the proposed Robinson Power facility begins operation. Further, the facility will be required to establish a compliance assurance monitoring plan (CAM) as part of its title V operating permit and the federal CAM regulations strongly encourage reliance on continuous monitoring systems as a means for assuring compliance.

U.S. EPA Region 3, *Comment Letter Regarding Robinson Power Company Waste-Coal-Fired Power Generation Facility from David Campbell, Chief Permits and Technical Assessments Branch, to Thomas Josheph, Pa. Dep't of Envtl, Prot.*, 6 (March 11, 2005), attached hereto as Exhibit 20. These comments, which clearly show the shifting trend toward and EPA's acceptance of the establishment of PM CEMS as the preferred technology for monitoring PM emissions, were written *over seven years ago*. In fact, PM CEMS have already been required in Pennsylvania at existing coal-fired plants. *See, e.g.*, Partial Consent Decree, *In re Citizens for Pennsylvania's Future*, No. 07-1412 (W.D.P.A. August 17, 2009) (requiring PM CEMS for the Bruce Mansfield Plant), attached hereto as Exhibit 21; *see also* Pa. Dep't. of Envtl. Prot., Consent Order and Agreement, *In re FirstEnergy Generation Corp.*, (February 28, 2008) (same), attached hereto as Exhibit 22.

In sum, given the use, reliability, and accuracy of monitoring requirements for similar emission units at other facilities, as well as the other factors underlying the *U.S. Steel* analysis, EPA should object to the Proposed Permit and require the use of PM CEMS at the Homer City Plant.

D. The Proposed Permit Fails to Include Adequate Compliance Assurance Monitoring Requirements for Particulate Matter

The Homer City Plant is subject to the Compliance Assurance Monitoring Rule ("CAM") found in 40 C.F.R. Part 64. Under its CAM rules, the EPA requires that major source owners "establish . . . appropriate range(s) . . . for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards." 40 C.F.R. § 64.3(a)(2); *see also* 42 U.S.C. § 7414(a)(3) (authorizing the EPA to "require enhanced monitoring and submission of compliance certifications" from major sources).

However, the conditions contained in the Homer City Proposed Permit are insufficient to satisfy the applicable CAM requirements.

As currently drafted, the Proposed Permit contemplates opacity monitoring for Units 1 and 2 as the "indicator" or methodology to ensure continuous compliance with both the Plant's opacity limits and with separate particulate matter emissions limits. Specifically, as written, the Proposed Permit states that "[t]hree-hour block average opacity will be maintained at less than 20%. Any opacity average less this value will be considered a reasonable surrogate indicator of PM standard compliance." Proposed Permit at 37. Employing opacity monitoring as a surrogate for PM monitoring in the manner set forth in the Proposed Permit will not adequately assure compliance with the Plant's PM emission limits. In light of the fact that opacity tends to be an imperfect criterion by which to judge PM emissions with precision (in that while the presence of an opacity violation indicates a PM emissions violation, the absence of an opacity violation does not necessarily mean that PM emissions are beneath allowable limits because of transparent or condensable PM), this method of compliance assurance is entirely insufficient to determine compliance with applicable PM standards.

As currently drafted, with opacity monitoring serving as a surrogate for PM monitoring at the Homer City Plant for Units 1 and 2, an excursion of the PM emissions limitation occurs when the calculated PM emissions exceeds a particular pounds per MMBtu limit, calculated as a 3-hour block average. Proposed Permit at 37. However, the applicable PM emissions standard under the Pennsylvania SIP, with which the Title V permit must assure compliance sets forth a continuous emission limit based on an *hourly average*. *See* 25 Pa. Code § 139.12(4); *see also* 40 C.F.R. § 52.2020 (identifying 25 Pa. Code § 139.12 as part of the SIP). Thus, the proposed excursion threshold for the calculated PM emissions is dramatically *weaker* than the SIP's PM standard. The permit therefore fails to assure compliance with the applicable PM emissions limitations requirements set forth in the SIP. *See* 25 Pa. Code § 121.1 ("applicable requirements"); 40 C.F.R. § 64.3(a)(2).

Additionally, the Proposed Permit's use of opacity monitoring as a surrogate for PM monitoring also falls short of adequately assuring compliance with applicable PM standards in that it fails to capture secondary particulate matter emissions, i.e., the particulate matter that condenses from vapor *after* leaving the exhaust stack. Due to the exclusion of condensable PM emissions, mere monitoring of opacity does not provide assurance that overall PM emissions for the Homer City Plant are within proscribed limits.[14]

Thus, because of the Proposed Permit's use of opacity as a surrogate on a 3-hour block average, and concomitant failure to include monitoring for condensable PM, EPA should object to the permit.

[14] Again, the NAAQS for PM_{10} and $PM_{2.5}$ take into consideration both filterable and condensable particulate matter. *See* EPA Basic Information on Particulate Matter, http://www.epa.gov/airquality/particlepollution (stating that, with regard to the NAAQS, "'[p]articulate matter,' also known as particle pollution or PM, is a complex mixture of extremely small particles *and liquid droplets*.") (emphasis added).

E. The Proposed Permit Fails to Include Stack Testing with Frequency Sufficient to Ensure Compliance with PM Emission Limits

Even if PaDEP determines that PM CEMS are infeasible at the Homer City Plant (which it has not yet done), the Proposed Permit must at least require more frequent stack testing to ensure at least a somewhat better monitoring system for PM emissions. As currently written, the Proposed Permit only requires one stack test *every two years*. The permit states

> [t]he permittee shall conduct a source test within one (1) year of the issuance of this Operating Permit and at least every two (2) years thereafter. Stack testing conducted within the two (2) year period prior to the issuance of this TVOP may be used to meet the requirements of this condition and to start the two (2) year clock on subsequent testing.

Proposed Permit at 44. This is entirely inadequate. Stack tests mere snapshots in time which do not indicate system performance during periods outside of the test, but the extreme infrequency of this already subpar testing method simply cannot assure compliance with applicable PM emission limits.

Federal regulations make clear that monitoring and reporting requirements must match the time period over which an emission limitation is measured. *See* 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(1). The D.C. Circuit Court of Appeals has explicitly stated that "a monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a [Title V] permit unless and until it is supplemented by more rigorous standards." *See Sierra Club v. EPA,* 536 F.3d 673, 677 (D.C. Cir. 2008). As further explained by the Court, annual testing is unlikely to assure compliance with a daily emission limit. *Id.* at 675. Here, it is all the more obvious that stack testing once every two years will not assure compliance with an hourly emission limit. The frequency of monitoring must instead correlate in some manner to the averaging time used to determine compliance.

Thus, the Proposed Permit's infrequent and intermittent compliance testing requirements will neither assure nor demonstrate compliance with PM limitations, which are on an hourly basis. EPA should therefore object to the permit until, *at the very least*, it requires quarterly stack tests for PM, conducted pursuant to the final test method published in 75 Fed. Reg. 80,118 (Dec. 21, 2010). *See* 25 Pa. Code § 121.1.

IV. The Proposed Permit Impermissibly Claims to Apply a Permit Shield to Unidentified Future Projects

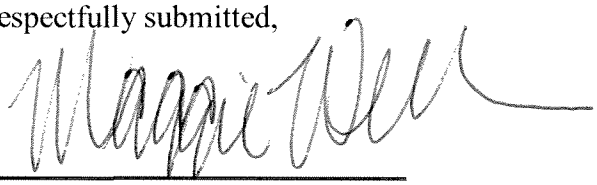
As discussed above, federal and state regulations require that applicable requirements be "specifically identified" in the permit in order for there to be a permit shield. 40 C.F.R. § 70.6(f)(1)(i); 25 Pa. Code § 127.516(a)(2). Additionally, permit shields do not apply to changes that do not undergo public review, 63 Fed. Reg. at 50,313, or to changes made pursuant to an alternative operating scenario. 72 Fed. Reg. at 52,216 fn. 22.

However, Homer City's Proposed Permit impermissibly claims to apply a permit shield to unidentified future projects. Provisions under Section B, at #013(b), #014(b), #017(e), #025(b) and #028(c) & (d) claim to grant a permit shield but they do not specifically identify what applicable requirements are shielded. Proposed Permit at 8, 9, 13, 14. In addition, the conditions include off-permit change provisions and other permit changes, such as minor permit modifications, that do not go through public notice and comment. *See e.g.* Proposed Permit at 14, Section B, #028(c). Therefore, they do not comply with 40 C.F.R. § 70.6(f)(1)(i) and 25 Pa. Code. § 127.516(a)(2) and EPA should object to the Proposed Permit.

CONCLUSION

For the reasons cited above, the Sierra Club respectfully requests that the Administrator of the United States Environmental Protection Agency grant this Petition to Object to the Homer City Title V Permit and order the Pennsylvania Department of Environmental Protection to include in a new permit: (1) the prohibition on air pollution; (2) hourly SO_2 emission limits sufficiently stringent to avoid causing harmful air pollution and violating the applicable acid rain provisions; (3) adequate monitoring provisions to assure compliance with the permit's particulate matter emission limits, namely continuous emissions monitoring; and (4) permit shields which only apply to specifically identified applicable requirements.

Respectfully submitted,



Maggie Wendler
The Sierra Club
50 F Street NW, 8th Floor
Washington, D.C. 20001
(202) 548-4590
maggie.wendler@sierraclub.org

Zachary Fabish
The Sierra Club
50 F Street NW, 8th Floor
Washington, D.C. 20001
(202) 675-7917
zachary.fabish@sierraclub.org