BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

SUPPLEMENT TO PETITION TO OBJECT TO THE PROPOSED TITLE V PERMIT FOR EME HOMER CITY GENERATING STATION ISSUED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

SUPPLEMENT TO PETITION TO OBJECT TO THE PROPOSED TITLE V PERMIT FOR EME HOMER CITY GENERATING STATION

As per Section 505 of the Clean Air Act ("CAA"), the Sierra Club hereby respectfully submits this supplement to the previously filed petition to the Environmental Protection Agency ("EPA") to object to the Proposed Title V Permit for the EME Homer City Generating Station ("Homer City" or "the Plant") in Indiana County, Pennsylvania, issued by Pennsylvania Department of Environmental Protection ("PaDEP"). The Proposed Permit, and now the Final 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, the Final Permit fails to include numerical emission limits and monitoring sufficient to prevent the Plant from causing impermissible air pollution in the form of harmful concentrations of sulfur dioxide ("SO_2") as well as violations of an applicable acid rain provision. This objection, as well as a number of other grounds for objection, were timely raised in our comments to PaDEP on the Proposed Permit (hereinafter "Sierra Club Comments"), attached hereto as Exhibit 1, as well as our petition to EPA to object to the Proposed Permit, attached hereto as Exhibit 2. We now submit this supplement to our petition to object in order to address two issues subsequently raised by PaDEP concerning our SO_2-related objection.

INTRODUCTION

Homer City's previous Title V Permit expired on January 30, 2009. On July 31, 2008, PaDEP received from the Plant an application for renewal of the Plant's Title V Permit. Four years later, on May 25, 2012, PaDEP issued a Proposed Permit for public notice and comment. On June 25, 2012, the Sierra Club submitted timely comments on that Proposed Permit. Sierra Club Comments, Exhibit 1.

According to the CAA, within 45 days of receipt of a proposed Title V permit, 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 EPA does not object during this period, any person may petition the Administrator for issuance of an objection. *Id.* at § 7661d(b)(2). EPA's 45-day review period for Homer City's Proposed Permit began on May 29, 2012, and ended on July 12, 2012. Subsequently, on September 6, 2012, Sierra Club filed a petition to object with EPA, attached hereto as Exhibit 2.

OBJECTION

THE NUMERICAL SO_2 EMISSION LIMITS IN THE TITLE V PERMIT FAIL TO PREVENT HARMFUL AIR POLLUTION AND VIOLATIONS OF AN APPLICABLE ACID RAIN PROVISION.

As discussed throughout our comments submitted on June 25, 2012, and our petition to object filed on September 6, 2012, Title V permits in Pennsylvania must include operation and

emission limitations sufficient to ensure that the permitted facility is in compliance with all "applicable requirements at the time of permit issuance." *See* 25 Pa. Code § 127.512(h); *see also* 25 Pa. Code § 121.1 ("applicable requirements"). With regard to the Plant's SO_2 emissions, two applicable requirements dictate that the SO_2 emissions limits be set at a level sufficient to protect the one-hour SO_2 National Ambient Air Quality Standard ("NAAQS"). First, both the definition of "air pollution" and Pennsylvania's prohibition in 25 Pa. Code § 121.7 that no person shall cause, suffer, or permit air pollution, are part of the State's federally-approved state implementation plan ("SIP") and are thereby an applicable requirement.[1,2] Second, the Plant's Title V permit must comply with all applicable rain provisions, including the explicit prohibition of violating the SO_2 NAAQS in accordance with the acid deposition control program (Title IV) of the CAA found at 25 Pa. Code § 127.531. As a result, the final Title V permit must include numerical limits stringent enough to prevent violations of the primary ambient air quality standard for SO_2.[3]

1. Pennsylvania's Prohibition of Harmful Air Pollution is An Applicable Requirement with Which the Plant's Title V Permit must Assure Compliance.

To be clear, in this context we are not stating that the one-hour SO_2 NAAQS is *by itself* the applicable requirement with which the terms of the permit must assure compliance. Rather it is the prohibition of air pollution that is the applicable requirement with which the terms of the permit must assure compliance. The new primary one-hour SO_2 NAAQS was designed specifically to prevent the harmful effects of SO_2 pollution on human health, and, as a result,

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[1] EPA has already notified PaDEP that the final Title V permits for the Homer City Generation Station, Mitchell Power Station, and Hatfield's Ferry Station, issued late last year are inadequate as issued, stating that the permit for each plant "does not include the general standard, and the permit therefore has a material mistake and fails to assure compliance with all applicable requirements, including the SIP." *See* Letters from Diana Esher to Pennsylvania Department of Environmental Protection dated April 17, 2013, attached hereto as Exhibit 3. Accordingly, the Plant's Title V permit must not only include explicitly include the language of 25 Pa. Code § 121.7, but also contain emissions limitations and standards sufficient to ensure compliance with this applicable requirement.

[2] EPA has affirmed that where prohibitions on air pollution are part of a SIP, they are enforceable requirements. *See* Letter from Genevieve Damico, Chief, Air Permits Section EPA Region 5 to Michael Ahern, Manager, Permit Issuance, Ohio EPA (Apr. 25, 2012). *See also Hercules, Inc.,* Petition IV-2003-01 (United States Environmental Protection Agency November 10, 2004) (Order Responding to Petition to Object to State Operating Permit), and *TransAlta Centralia Generation, LLC,* Permit No. SW 98-8-R3 (United States Environmental Protection Agency April 28, 2011) (Order Responding to Petition to Object to State Operating Permit) (asserting the same, and discussed in greater detail below). In addition, the Pennsylvania Environmental Hearing Board has affirmed that the State's pollution prohibition is not hortatory, but is a substantive requirement, holding that "[t]here can no longer be any doubt that at least in Pennsylvania, causing air pollution itself is a separate offense from the violation of any other specific environmental law or regulation." *Commonwealth v. Medusa Corp.*, 1978 EHB 149, 1978 WL 3835 at *13 (Pa. Env. Hearing Bd. 1978), *remanded in part on other grounds sub nom. Medusa Corp. v Commonwealth*, 415 A. 2d 105 (Cmwlth Ct. 1980), a case concerning particulate matter emissions from a cement kiln. In *Medusa*, Pennsylvania carried its case in large part because it could show that the kilns were causing violations of the PM NAAQS. This data, combined with citizen testimony, was "substantial evidence" that Medusa had violated the air pollution prohibition of 25 Penn. Admin Code § 121.7. *Id.*

[3] PaDEP has, in fact, taken steps to set permit limits for the Plant to prevent exceedances of the SO_2 NAAQS. *See* Homer City Plan Approval 32-00055H (Revised April 4, 2013), at 10 (setting plantwide, hourly mass limits for SO_2 emissions applicable during all times including startup and shutdown), attached hereto as Exhibit 4.

the NAAQS provides the numerical translation of the SIP's prohibition of air pollution—that no person may permit the presence in the outdoor atmosphere of any form of contaminant in a manner or concentration inimical or which may be inimical to public health, safety or welfare or which is or may be injurious to human life.[4] *See* 25 Pa. Code §§ 121.7, 121.1.

Where there is evidence that a proposed permit does not comply with the general prohibition of air pollution, necessary numerical limitations must be included in the final permit to assure compliance with the general prohibition of air pollution. Here, refined air dispersion modeling results demonstrate that the SO_2 emissions currently permitted by the Plant's Title V permit exceed the health-based ambient air quality standard and are, therefore, inimical to public health and injurious to human life. *See* Camille Marie Sears, Air Dispersion Modeling Analysis for Verifying Compliance with the One-Hour SO_2 NAAQS: EME – Homer City, January 27, 2012, attached as Exhibit 6.

EPA has already determined that states should impose additional emission limitations in a Title V permit to assure compliance with a general prohibition on air pollution. *See Hercules, Inc.*, Petition IV-2003-01 (United States Environmental Protection Agency November 10, 2004) (Order Responding to Petition to Object to State Operating Permit), generally, (hereinafter "*Hercules*"). Moreover, EPA has held that where a state agency has "reason to believe that a person is in violation of [a general prohibition of air pollution], [the state agency] has the authority . . . to do any analysis it deems necessary to ensure compliance with the Act and the Rules." *Hercules* at 8. In addition, "[s]hould [the state agency] determine that a person is in violation of [the general prohibition of air pollution], it has the authority to include and/or revise emission limitations, i.e., numerical limits and/or equipment or operation or maintenance requirements, in the applicable air quality permit." *Id*.

Pennsylvania's prohibition of air pollution recognizes that there may be times when compliance with the specific emission limitations or other requirements in the permit may be insufficient to prevent a condition of air pollution as defined by the SIP and that in such circumstances PaDEP has broad authority to impose necessary emission limitations in a Title V permit. *See Hercules* at 10. Thus, where it is shown that the prohibition of air pollution will be violated, PaDEP must include appropriate limits in the Plant's Title V permit in order to assure compliance with the federally-enforceable applicable requirement. Indeed, in *TransAlta Centralia Generation, LLC*, Permit No. SW 98-8-R3 (United States Environmental Protection Agency April 28, 2011) (Order Responding to Petition to Object to State Operating Permit)

[4] Earlier this year, Massachusetts Department of Environmental Protection ("MassDEP") issued a draft Title V operating permit for the Mt. Tom Generating Station, located in Holyoke, Massachusetts, containing an explicit permit condition that states that, "[i]n accordance with 310 CMR 7.02(7) the Permittee shall demonstrate that the facility does not cause or contribute to a violation of U.S. EPA's one hour SO_2 NAAQS (40 C.F.R. 50.71)." Mt. Tom Draft Permit at 20, attached hereto as Exhibit 5. Like 25 Pa. Code §121.7, 310 CMR 7.02(7) entails requirements in instances where "the Department determines that any facility or product manufactured therein has the likelihood of causing or contributing to a condition of air pollution." (emphasis added). As Massachusetts has done in the Mt. Tom Title V permit, PaDEP must ensure that Homer City's Title V permit contains a condition stating that "in accordance with 25 Pa. Code §121.7, the Permittee shall demonstrate that the facility does not cause or contribute to a violation of U.S. EPA's one hour SO_2 NAAQS."

(hereinafter "*TransAlta*"), EPA cited to *Hercules*, stating that it was only where compliance with the broad prohibition of air pollution in a SIP could be assured, the permitting authority did not have to impose in the Title V permit specific emission limitations or standards to implement the broad prohibition of air pollution. *TransAlta* at 7 (emphasis added). Here, however, there is no assurance that the permit provides for compliance with the State's prohibition of air pollution and instead, the SO_2 emissions limits currently set forth in the permit demonstrably will result in violations of the prohibition.

In its Comments and Response Document, attached hereto as Exhibit 7, PaDEP nonetheless cites to *Hercules* and *TransAlta* to claim that it is not required to translate the SIP's general prohibition of air pollution into source-specific emission limits on specific pollutants in Title V permits. *See* PaDEP Comments and Response Document at 3. As explained above, both *Hercules* and *TransAlta* dictate that PaDEP does in fact have the authority to impose additional emission limitations in the Title V permit to assure compliance with the SIP's general prohibition on air pollution, and where there is evidence to show that the prohibition of air pollution is being violated with regard to a specific pollutant and, even more than that, there is also evidence as to the appropriate limits necessary to assure compliance with said requirement, PaDEP should include those limits in the Plant's Title V permit in order to assure compliance with the federally-enforceable prohibition of air pollution.

In the present case, Sierra Club has provided expert air dispersion modeling analysis showing that the Plant is permitted to emit SO_2 at a level which exceeds the health-based standard and, therefore, its emissions are "inimical to public health" and "injurious to human life" and are, therefore, in violation of the prohibition of air pollution. *See* 25 Pa. Code §§ 121.7, 121.1. Again, the expert air dispersion modeling analysis provided to PaDEP further provides the analysis necessary to set appropriate SO_2 limits so as to ensure those limits comply with the SIP's prohibition of air pollution. This modeling was conducted in adherence to all available EPA modeling guidance for evaluating source impacts on attainment of the one-hour SO_2 NAAQS via aerial dispersion modeling. In addition, PaDEP had an opportunity to review Sierra Club's modeling and the various inputs used in this modeling before finalizing the Plant's Title V renewal permit since Sierra Club provided this expert modeling analysis, as well as the modeling input and output files, to PaDEP along with our comments on the Proposed Permit. Yet, PaDEP still finalized a Title V permit which contained inadequate SO_2 emissions limits. This is improper. EPA's holdings in *Hercules* and *TransAlta* direct PaDEP to re-evaluate and revise the Plant's SO_2 emissions limitations; where there exists analysis sufficient to determine emission limits necessary to assure compliance with the prohibition of air pollution, those limits must be incorporated in Title V permitting in Pennsylvania.

Further, PaDEP's citation to *Berks County v. Department of Environmental Protection and Exide Technologies* to suggest that, "promulgation of a revised NAAQS does not authorize the Department to set requirements relating to the substances covered by the NAAQS in an operating permit outside the context of the SIP process," is unavailing, as PaDEP relies on a misstatement of that case's holding. PaDEP Comments and Response Document at 2, citing (EHB Docket No. 2010-166-L) OPINION AND ORDER ON MOTION FOR SUMMARY JUDGMENT, issued March 16, 2012 (hereinafter "*Berks County*"). The *Berks County* determination did not

speak to the question of whether or not NAAQS-informed emission limits could be included in permits where necessary to ensure that other applicable conditions are addressed. Indeed, *Berks County* recognized that there may be certain circumstances that warrant the inclusion of NAAQS-informed permit limits for a particular facility. *See Berks County* at 5. In *Berks County*, the parties merely failed to provide this justification for doing so under the facts of that case. *Id at 4 and 5*.

Here, however, there is sufficient factual and legal justification for inclusion of additional SO_2 emission limits necessary to prevent violation of the prohibition against harmful air pollution. Factually, evidence in the form of expert air dispersion modeling has been presented to PaDEP which clearly shows that the Plant is permitted to and does emit SO_2 at a level predicted to exceed NAAQS and is inimical to public health and injurious to human life. Legally, the Pennsylvania SIP expressly prohibits air pollution of this sort under 25 Pa. Code § 121.7. In addition, as discussed above, EPA has specified that when emission limitations contained in a Title V permit may be insufficient to prevent a condition of air pollution as defined by the SIP, a state agency has broad authority to impose additional necessary emission limitations in a Title V permit. *See Hercules* at 10. Accordingly, PaDEP's reliance on *Berks County* is misplaced. Besides, the *Berks County* EHB decision is a state administrative decision and, therefore, is not binding on EPA even if it were applicable to the present situation, which, as demonstrated above, it is not. Therefore, EPA must object to the Title V permit and, in accordance with Pennsylvania's SIP, the emission limits must be appropriately revised to assure that the concentration and duration of SO_2 emissions from the Plant will not cause or contribute to exceedances of the one-hour SO_2 NAAQS.

2. Pennsylvania's Acid Rain Regulations are Federally-Enforceable Applicable Requirements with Which the Plant's Title V Permit must Assure Compliance.

As explained in our comments on the Proposed Permit and our petition to object, SO_2 is further regulated independently in Pennsylvania through the state's acid rain provisions, which is also an applicable requirement with which Homer City's Title V permit must assure compliance. *See* 25 Pa. Code § 121.1 (defining "applicable requirements" as "[r]equirements which apply to any source at a Title V facility including the following: . . . A standard or other requirement of the acid rain program under Title IV of the Clean Air Act (42 U.S.C.A. § § 7641-7651o) or the regulations thereunder"); *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); *see also* 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). Specifically, Pennsylvania's Title IV acid rain provisions include a condition that, "[i]n addition to the other requirements of [Chapter 127], permits issued under this section shall prohibit . . . [e]xceeding applicable emission rates or standards, <u>including ambient air quality standards</u>." 25 Pa. Code § 127.531(f)(2) (emphasis added). The prohibition of exceeding applicable ambient air quality standards found at 25 Pa. Code § 127.531(f)(2), is an

independent applicable requirement that must be incorporated into the Plant's TV permit through the numerical SO_2 emission limitations.

In face of this, PaDEP has suggested that 25 Pa. Code § 127.531(f)(2) is not part of the SIP and is superseded by the federal regulations: "EPA delegated the federal acid rain provisions to the state because the state had not incorporated by reference the federal rules and did not adopt rules that conformed with EPA' s model acid rain regulations (61 Fed. Reg. 39598)." PaDEP Comments and Response Document at 3. However, PaDEP's assertion is erroneous. As part of Subchapter G of the Commonwealth's Title V Operating Permits Program, 25 Pa. Code § 127.531 was approved in 1996 and, therefore, is an applicable requirement with which the terms of the Plant's Title V permit must assure compliance. *See* Clean Air Act Final Full Approval Of Operating Permits Program; Final Approval of Operating Permit and Plan Approval Programs Under Section 112(l); Final Approval of State Implementation Plan Revision for the Issuance of Federally Enforceable State Plan Approvals and Operating Permits Under Section 110; Commonwealth of Pennsylvania, 61 Fed. Reg. 39597-39601, 39598 (July 30, 1996).

Under Title V of the CAA and its implementing regulations, found at 40 C.F.R Part 70, states were required to develop and submit operating permits programs to EPA. In response to this mandate, Pennsylvania submitted an administratively complete Title V Operating Permit Program for the Commonwealth of Pennsylvania on May 18, 1995. *See* 61 Fed. Reg. at 39598. Of note here, Section 127.531 of Subchapter G of that submittal contained the acid rain provisions of the Commonwealth's Title V operating permits program. *See id*. Rather than merely incorporate by reference the federal acid rain rules or adopt the federal model rule, Section 127.531 of that submittal consisted of a set of state-specific acid rain provisions which met the federal mandate under Title IV of the CAA. Although EPA expressed some hesitation about the state-specific language of Pennsylvania's acid rain program, in its full approval of Pennsylvania's submission, EPA stated that those concerns were resolved by a delegation of additional federal requirements.[5] Specifically EPA stated:

> EPA is aware that Pennsylvania has not directly incorporated by reference EPA's Title IV regulations found at 40 CFR Part 72, and has not adopted EPA's model rule. However, as referenced in EPA's March 7, 1996 Federal Register notice proposing full approval of Pennsylvania's program (61 FR 9125), <u>several regulatory provisions require that Pennsylvania's Title V program be operated in accordance with the requirements of Title IV and its implementing regulations</u> . . . For additional assurance that Pennsylvania's operating permit program will operate in compliance with applicable acid rain requirements, EPA notes that the Commonwealth has agreed to accept delegation of the applicable provisions of

[5] The delegation of certain federal requirements was meant to ensure some level of conformity with the federal program and to guarantee that, in addition to the state-specific acid rain regulations, all federal acid rain regulations would be explicitly delegated to the state as well. Indeed, in its approval of Pennsylvania's Title V program and the accompanying delegation of the federal acid rain regulations, EPA says nothing about disapproving the state's acid rain provisions, nor does EPA put forth a FIP as would be required had the plan not been fully approved.

> 40 C.F.R. Parts 70, 72, and 78 for the purpose of implementing the Title IV requirements of its operating permit program.

61 Fed. Reg. at 39598 (emphasis added). Accordingly, on March 7, 1996, EPA proposed "full approval" of the operating permits program for the Commonwealth of Pennsylvania, and subsequently, on July 30, 1996, EPA published its final "full approval" of Pennsylvania's Title V Operating Permit Program and State Operating Permit and Plan Approval Programs, of which Section 127.521 was a part. *See id*. (emphasis added).

As such, 25 Pa. Code § 127.531 was approved by EPA and is part of the SIP. Indeed, there was no disapproval nor even a partial, limited, or conditional approval of Pennsylvania's submission; rather, as stated above, it was approved in full. PaDEP cannot now assert that the State's acid rain provisions are not part of the SIP without making the baseless claim that EPA's full approval in 1996 was somehow actually a partial disapproval. When EPA disapproves a SIP, they are required to put their own FIP in place through a public comment process. *See* CAA § 110(c)(1). That is not what happened here.

Accordingly, because the Plant is an affected source under Title IV of the CAA, the final Title V permit must not only contain the condition that the Plant shall not emit SO_2 in a manner that would exceed applicable emission rates or standards, including ambient air quality standards, but also ensure that its SO_2 emission limits and standards are set to assure compliance with that provision. *See* 25 Pa. Code § 127.531(f)(2); *see also* 35 P.S. § 4006.5(e)(2). Here, the applicable regulatory language has been properly included in the Title V Permit. *See* Final Permit, page 17 ("In addition to the other requirements of this chapter, permits issued under this section shall prohibit . . . [e]xceeding applicable emission rates or standards, including ambient air quality standards."). However, as explained in the section above, PaDEP has failed to ensure that the SO_2 limits contained in the permit are set to assure compliance with this provision, i.e., by assuring that Homer City will not cause exceedances of the NAAQS. *See* 25 Pa. Code § 127.512(h); *see also* 25 Pa. Code § 121.1 ("applicable requirements"). Accordingly, EPA must object to this permit as issued.

CONCLUSION

For the reasons cited in the petition to object and in this supplement to that petition, Sierra Club respectfully requests that the Administrator of the United States Environmental Protection Agency grant our Petition to Object to the Homer City Title V permit and order PaDEP to reissue a new permit containing sufficient terms and conditions to assure compliance with all applicable requirements in accordance with the CAA.

Respectfully submitted,

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