

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:)	ORDER RESPONDING TO
)	PETITIONER'S REQUEST
EAST KENTUCKY POWER COOPERATIVE, INC)	THAT THE ADMINISTRATOR
WILLIAM C. DALE POWER STATION)	OBJECT TO ISSUANCE OF
)	STATE OPERATING PERMIT
CLARK COUNTY, KENTUCKY)	
TITLE V AIR QUALITY PERMIT)	
# V-08-009)	
)	
ISSUED BY THE KENTUCKY)	
DIVISION FOR AIR QUALITY)	

**ORDER RESPONDING TO ISSUES RAISED IN NOVEMBER 24, 2008 PETITION,
AND DENYING REQUEST FOR OBJECTION TO PERMIT**

On November 24, 2008, the United States Environmental Protection Agency (EPA) received a petition from the Sierra Club and the Kentucky Environmental Foundation (Petitioners) pursuant to Section 505(b)(2) of the Clean Air Act ("CAA" or "Act"), 42 United States Code (U.S.C.) § 7661d(b)(2). The Petition requests that EPA object to the renewal title V permit issued by the Kentucky Division for Air Quality ("KDAQ" or "Division") on September 26, 2009, to East Kentucky Power Cooperative ("EKPC") for the William C. Dale Power Station ("Dale Station") located in Clark County, Kentucky. The permit, #V-08-009, ("Permit") is a CAA title V operating permit issued by KDAQ pursuant to Kentucky's Administrative Regulations (KAR) at 401 KAR 52:020 (title V regulations).

The Petitioners have requested that the Administrator object to the Dale Station Permit because, they allege, the Permit is not in compliance with the Act, in that:

1. The maximum heat input rates in the Permit must be enforceable limits because, presumably, Dale has a state operating permit that includes these maximum heat inputs, and, because without such maximum heat input limits, compliance with the National Ambient Air Quality Standards (NAAQS) for SO₂ cannot be assured.
2. KDAQ cannot delete the 3-hour averaging time from the particulate matter (PM) emission limit for certain coal handling equipment because the emission limit must have an averaging time; therefore, the 3-hour averaging time should be placed back into the Permit and the Permit should be required to include monitoring and reporting adequate to assure compliance with the PM emission limit.

EPA has reviewed these allegations pursuant to the standard set forth in section 505(b)(2) of the Act, which requires the Administrator to issue an objection if the petitioner demonstrates to the Administrator that the permit is not in compliance with the applicable requirements of the Act. *See also* 40 CFR. § 70.8(d); *Sierra Club v. Johnson*, 436 F.3d 1269, 1280 (11th Cir. 2006); and *New York Public Interest Group v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2002).

In considering this matter, EPA reviewed the Petition and other material, including the Permit, statement of basis, referenced EKPC Spurlock and TVA Paradise state operating permits, KDAQ Comments and Response on the Draft Permit (RTC), EKPC's response to the Petition, relevant provisions of the Kentucky State Implementation Plan (SIP), Federal Register notices pertaining to Kentucky's SIP, CAA title V provisions, and title V regulations. Based on a review of all of the information before me, and for reasons detailed in this order, I deny the Petitioners' request.

I. STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), calls upon each state to develop and submit to EPA an operating permit program intended to meet the requirements of CAA title V. The Commonwealth of Kentucky originally submitted to EPA its title V program governing the issuance of operating permits in 1993, and EPA granted full approval on October 31, 2001. 66 *Fed. Reg.* 54953. The program is now incorporated into Kentucky's Administrative Regulations at 401 KAR 52:020. All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable SIP. CAA §§ 502(a) and 504(a), 42 U.S.C. §§ 7661a(a) and 7661c(a).

The title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting, and other conditions to assure compliance by sources with applicable requirements. 57 *Fed. Reg.* 32250, 32251 (July 21, 1992). One purpose of the title V program is to enable the source, EPA, states, and the public to better understand the applicable requirements to which the source is subject and whether the source is complying with those requirements. Thus, the title V operating permit program is a vehicle for ensuring that existing air quality control requirements are appropriately applied to facility emission units and that compliance with these requirements is assured.

Under Section 505(a) of the CAA, 42 U.S.C. § 7661d(a), and the relevant implementing regulations (40 CFR § 70.8(a)), states are required to submit each proposed title V permit, and certain revisions to such permits, to EPA for review. Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the permit if it is determined not to be in compliance with applicable requirements or the requirements of title V. 40 CFR § 70.8(c). If EPA does not object to a permit on its own initiative, section 505(b)(2) of the CAA provides that any person may petition the Administrator, within 60 days of the expiration of EPA's 45-day review period, to object to the permit. 42 U.S.C. § 7661d(b)(2), *see also* 40 CFR § 70.8(d). In response to such a petition, the CAA requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the CAA. 42 U.S.C. § 7661d(b)(2); *see also* 40 CFR § 70.8(c)(1), *New York Public Interest Research Group (NYPIRG) v. Whitman*,

321 F.3d 316, 333 n.11 (2^d Cir. 2003). Under section 505(b)(2), the burden is on the petitioner to make the required demonstration to EPA. *Sierra Club v. EPA*, 557 F.3d 401, 406 (6th Cir. 2009); *Sierra Club v. Johnson*, 541 F.3d 1257, 1266-1267 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677-678 (7th Cir. 2008) (discussing the burden of proof in title V petitions); *see also NYPIRG*, 321 F.3d at 333 n.11. If, in responding to a petition, EPA objects to a permit that has already been issued, EPA or the permitting authority will modify, terminate, or revoke and reissue the permit consistent with the procedures set forth in 40 CFR §§ 70.7(g)(4) and (5)(i) - (ii), and 40 CFR § 70.8(d).

II. BACKGROUND

A. The Facility

The Dale Station facility is an electric generating plant owned and operated by EKPC in the community of Ford in Clark County, Kentucky, on the Kentucky River. This area has been designated by EPA, under CAA Section 107(d), 42 U.S.C. § 7407(d), as attainment or unclassifiable for all of the NAAQS. Dale Station burns fossil fuels, primarily coal, to generate electricity. The plant includes four coal-fired boilers (Emission Units 1, 2, 3, and 4 in the Permit), each supplying steam to a dedicated turbine-generator. Each boiler is a balance-draft, dry-bottom, wall-fired type boiler which uses pulverized coal as the primary fuel and No. 2 fuel oil for start up and stabilization. Each boiler uses an electrostatic precipitator and low NO_x burners for emission control. The total capacity of the Dale Station is 196 net megawatts (MW).

Units 1 and 2 were constructed in 1954, and each has a capacity of 23 net MW. The maximum continuous rating for Units 1 and 2 is 255.9 million British thermal units per hour (MMBtu/hr). Units 3 and 4 were constructed in 1957 and 1960, respectively, and each has a capacity of 75 net MW. The maximum continuous rating for Unit 3 is 796.3 MMBtu/hr, and for Unit 4 is 756 MMBtu/hr. Unit 5 is not addressed by the Petition. Unit 6 is comprised of certain coal handling operations, including railcar and truck receiving pits, a reclaim hopper, and a number of conveyor drop points. PM emissions from these coal handling operations are controlled using enclosures, underground enclosures, low drops, and covered conveyors.

B. The Permit

The initial title V permit for Dale Station, number V-97-053, was issued by KDAQ to EKPC on November 4, 1999. On May 3, 2004, EKPC filed an application for renewal of the title V permit for Dale Station. Before the renewal title V permit was finalized, EPA initiated an enforcement action against EKPC which was resolved by two federal consent decrees entered on September 24, 2007, and November 30, 2007. On March 24, 2008, EKPC submitted an updated renewal title V application to KDAQ, incorporating the federal consent decree requirements. KDAQ prepared a draft renewal permit, and made it available for a 30-day public comment period starting on May 6, 2008. KDAQ received comments from the Sierra Club and the Kentucky Environmental Foundation (“Comments”). On August 11, 2008, KDAQ responded to the comments and submitted the proposed permit to EPA for review. EPA did not object or comment, and the Permit was issued 46 days later, on September 26, 2008.

III. THRESHOLD REQUIREMENTS

A. Timeliness of Petition

Section 505(b)(2) of the Act provides that a person may petition the Administrator of EPA, within 60 days after expiration of EPA's 45-day review period, to object to the issuance of a proposed permit. KDAQ submitted the proposed permit to EPA for review on August 11, 2008. EPA's 45-day review period expired on September 25, 2008. Thus, the 60-day petition period ended on November 24, 2008. The Petition is dated November 21, 2008, and was received by EPA on November 24, 2008. EPA finds that Petitioners timely filed their petition.

B. Objections Raised with Reasonable Specificity During Public Comment Period

Section 505(b)(2) of the CAA provides that a petition shall be based on objections raised with reasonable specificity during the public comment period provided by the permitting agency, unless the petitioner demonstrates in the petition that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period. 42 U.S.C. § 7661d(b)(2). EPA reviewed the comments submitted to KDAQ during the public comment period and found that Petitioners submitted comments on June 5, 2008. Petitioners' comment number 2 asserted that the maximum heat input rates for the boilers must be enforceable permit limits. Comments at 3. Thus, EPA finds that the Petition meets this statutory threshold for the heat input issue.

Petitioners' comment number 10 asserted that there was not adequate monitoring and reporting for the coal handling equipment, and that the compliance demonstration method had no rational relationship to the 3-hour emission limit as the input data is in monthly units but the emission limit is a 3-hour averaging time, and, thus, a new compliance demonstration method was needed. Comments at 5. KDAQ responded to Petitioners' comment number 10 in part by deleting the 3-hour averaging time. RTC at 15. The Petition asserts that KDAQ cannot delete the 3-hour averaging time from the PM emission limit because the emission limit must have an averaging time; therefore, the 3-hour averaging time should be placed back into the Permit and the monitoring and reporting in the Permit "needs to be adequate to ensure compliance with this 3-hour average emission limit." Petition at 7. Petitioners state they did not raise the lack of an averaging time in their comments because there was an averaging time in the draft permit when Petitioners made their comment. Section 505(b)(2) of the CAA provides that issues not raised during the public comment period may be raised in a petition if the grounds for such objection arose after the public comment period. As explained, the grounds for Petitioners' objection regarding the lack of an averaging time arose after the close of the public comment period. Thus, EPA finds that the Petition meets this threshold requirement for this averaging time and monitoring and reporting issue.

IV. EPA DETERMINATIONS ON ISSUES RAISED IN PETITION

A. HEAT INPUT ISSUE

Background: The Permit lists the maximum heat inputs (referred to in the Permit as maximum continuous ratings) as part of the description of each Unit 1 through 4, and does not make these maximum heat inputs enforceable limits. See Permit at 2 and 9; RTC at 12.

Petitioners' claims: The Petitioners assert that the Permit should explicitly provide that the maximum heat inputs are enforceable limits, otherwise the Permit's SO₂ emission limit, which is in the form of a lb/MMBtu limit, cannot ensure compliance with the NAAQS for SO₂. Petitioners note that, without a limit on heat input, SO₂ emissions can increase with increases in heat input. Petitioners also presume that Dale Station has a state operating permit (SOP) that limits heat input, and argue that this situation is similar to EKPC's Spurlock Station and TVA's Paradise Station where heat input limits from prior SIP-approved SOPs were required to be included as enforceable limits in subsequent title V permits.

EPA's response. The Petition is denied on this issue. As noted above, EPA must issue an objection to the title V permit if the petitioner demonstrates that the permit does not comply with the requirements of the Act (including the SIP). Petitioners have failed to demonstrate that the listing of maximum heat inputs in the description sections of the Permit does not comply with the requirements of the Act (including the SIP).

Compliance with SO₂ NAAQS. Contrary to Petitioners' assertions, the NAAQS themselves are not "applicable requirements," rather, the measures contained in each state's EPA-approved SIP to achieve the NAAQS are applicable requirements. See 40 CFR § 70.2.

The CAA provides that the EPA sets the NAAQS, but the states then determine how best to attain and maintain the NAAQS within their boundaries. As EPA has explained in prior orders, a NAAQS by itself does not impose any obligation on sources. "A source is not obligated to reduce emissions as a result of the [NAAQS] until the state identifies a specific emission reduction measure needed for attainment (and applicable to the source), and that measure is incorporated into a SIP approved by EPA." Sep. 25, 2008 denial of reconsideration regarding Reliant Portland Generating Station; *see also* In the Matter of Marcal Paper Mills, Inc., (Nov. 30, 2006); *Cate v. Transcontinental Gas Pipe Line Corp.*, 904 F.Supp. 526 (W.D. Va. 1995) ("It is well-established that the NAAQS are not an 'emission standard or limitation' as defined by the Act.").

It is the EPA-approved measures contained in the Kentucky SIP that assure the attainment and maintenance of the NAAQS and that constitute the applicable requirements for purposes of title V. For SO₂, the applicable requirement in Kentucky is identified in 40 CFR § 52.928 (2008) as follows:

The revised SO₂ emission limit for large coal-fired boilers in . . . Clark . . . Count[y], submitted on June 29, 1979 is disapproved since it does not provide for attainment and maintenance of all SO₂ NAAQS. The limit approved by EPA on May 10, 1976 (41 FR 19105), remains the limit applicable to these sources.

The limit approved by EPA on May 10, 1976 is the SO₂ limit in 401 KAR 3:060 Section 3 (1975) which states that all coal-fired boilers in Clark County with heat input greater than or

equal to 250 MMBtu/hr are subject to an SO₂ emission limit of 1.8 lbs/MMBtu. The applicable requirement does not contain a total mass emission limit, nor a maximum heat input limit. Instead, the applicable requirement contains a chart labeled “Allowable Sulfur Dioxide Emissions Based on Heat Input Capacity.” The chart lists various heat input ranges on one axis and, for each heat input range, the chart sets an SO₂ emission limit in MMBtu.

EPA notes that the Permit contains this 1.8 lbs/MMBtu SO₂ limit for each of the four boilers. Permit at 3 and 11.

Heat input limits as an applicable requirement. Petitioners have not identified any applicable requirement containing a heat input limit. The Petition does not describe or refer to any actual prior SOP for Dale Station; rather, Petitioners state that “presumably” Dale Station has a SOP. Petitioners’ reference to a SOP that they presume to exist is insufficient to meet Petitioner’s burden to demonstrate that the Permit is not in compliance with the Act. In reviewing the record for this Petition, EPA has not found any prior SOP for Dale Station that was issued pursuant to a SIP-approved permit program (which would make its terms and conditions applicable requirements for subsequent title V permits). EPA did locate a Dale Station SOP that was issued on March 25, 1982, prior to EPA’s approval of Kentucky’s state operating permit regulations into the Kentucky SIP on July 12, 1982 with a September 10, 1982 effective date. (47 Fed. Reg. 30059). Petitioners have not demonstrated that this March 25, 1982 SOP is an applicable requirement.

EPA also notes that the EKPC Spurlock and TVA Paradise matters referenced by Petitioners involved different facts, leading to a different result. In EKPC Spurlock and TVA Paradise, the SOPs were issued on April 27, 1983 and June 29, 1987 respectively, *after* EPA approved Kentucky’s state operating permit regulations into the Kentucky SIP. There are other relevant differences with TVA Paradise, including the fact that the heat input limits for TVA Paradise were based on a source-specific SIP revision. *See* 40 C.F.R. § 52.920(d). Under these different facts, the heat input limits that were in those SOPs and the SIP as enforceable limits were applicable requirements and, thus, were included in the title V permits.

For all of the reasons discussed above, the Petition is denied with respect to this issue.

B. THREE HOUR AVERAGING TIME ISSUE

Background. Unit 6 is comprised of certain coal handling operations, including railcar and truck receiving pits, a reclaim hopper, and a number of conveyor drop points. PM emissions from these coal handling operations are controlled using enclosures, underground enclosures, low drops, and covered conveyors. Permit at 19. Unit 6 does not contain stacks. The Permit sets a PM emission limit for Unit 6 of 64.76 lbs/hour, citing to 401 KAR 61:020 - Section 3(2)(a), a regulation that uses a process weight equation to set the amount of PM that can be emitted. *Id.* The Permit contains a compliance demonstration method for Unit 6’s emission limit based on an emission calculation. *Id.*

The Permit also contains a 40-percent opacity limit for Unit 6. *Id.* Visual monitoring of opacity must be performed on a weekly basis. *Id.* If visible emissions are seen from Unit 6,

opacity must be determined in accordance with Reference Method 9. Permit at 19-20. The Permit requires monitoring and recordkeeping of the amount of coal received and processed, as well as a log of all weekly visual observations, all Method 9 evaluations performed, and corrective actions taken. Permit at 20.

Petitioners' claim. The Draft Permit provisions for Unit 6 stated "particulate matter emissions shall not exceed 64.76 lbs/hour based on a 3-hour average," and cited to 401 KAR 61:020 - Section 3(2)(a). In response, Petitioners made the following comments on the Draft Permit: "[t]here is not adequate monitoring and reporting for the coal handling equipment," "the compliance demonstration method has no rational relationship to a three-hour emission limit as the input data is in monthly units but the emission limit is a three hour averaging time. Thus, a new compliance demonstration method is needed;" and "there must be reporting of all data in order to determine compliance." Comments at 5. KDAQ responded as follows:

Since 401 KAR 61:020 does not specify a compliance period and the compliance demonstration is a mathematical calculation based on throughput, hours of operation and established emission factors, the Division considers the compliance demonstration method adequate as written. Based on the maximum throughput, emissions from this unit are far below the allowable limit established by 401 KAR 61:020. The three hour compliance period has been deleted from the proposed permit.

RTC at 15. In the Petition, Petitioners assert that an averaging time is necessary; that a three hour averaging time is most appropriate and should be returned to the Permit; and that, once it is, monitoring and reporting in the Permit should be adequate to assure compliance with the 3-hour averaging time PM emission limit. Petition at 6-7.

EPA's response. The Petition is denied on this issue. As referenced in KDAQ's response to comments, the Permit contains the following compliance demonstration method for Unit 6's PM emission limit:

Compliance shall be demonstrated by the following emission calculation: Particulate matter emissions in pounds per hour = (monthly amount of coal processed in tons/month)(1 month/hours of operation that month)(emission factor of 0.005 lb/ton)(1-control efficiency of 70%).

Permit at 19. This equation calculates the lbs/hr of PM emitted by multiplying the tons of coal processed per month by 0.005, an industry-average emission factor, and then dividing this figure by the hours of operation to get the amount of PM generated per hour. Next, the formula reduces this amount by 70-percent to account for a 70-percent control.

In addition, KDAQ explained that, even if operated at full capacity, PM emissions from this unit would still be far below the allowable limit in the SIP. RTC at 15. At maximum throughput (i.e., 350 tons/hour, see Permit at 19), and assuming no controls (even though this emission unit is controlled), this unit would emit roughly 4 lbs/hour of PM, and the PM limit is 64.76 lbs/hour. Further, the Permit requires monitoring and recordkeeping of the amount of coal received and processed. Permit at 20.

The Petitioners do not demonstrate that these provisions fail to accurately incorporate or assure compliance with applicable requirements. Petitioners' reference to the 3-hour averaging time pertains to a reference test method in the SIP used for stacks. PM emissions from Unit 6 are from receiving pits, hoppers, and conveyer drop points. Petitioners do not demonstrate that this 3-hour averaging time for a stack test method is appropriate or necessary for the emission points associated with this unit.

For the reasons discussed above, EPA denies the Petition on this issue.

VI. CONCLUSION

For the reasons set forth above, and pursuant to Section 505(b) of the CAA and 40 CFR § 70.8(d), I hereby deny the petition.

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Dated



Lisa P. Jackson,
Administrator.