

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF)	
)	
TENNESSEE VALLEY AUTHORITY)	
SHAWNEE FOSSIL PLANT)	
)	PETITION No. IV-2011-1
MCCRACKEN COUNTY, KENTUCKY)	
TITLE V AIR QUALITY PERMIT)	
No. V-09-002 R1)	
)	
ISSUED BY THE KENTUCKY DIVISION)	
FOR AIR QUALITY)	
)	
)	

**ORDER DENYING PETITION FOR
OBJECTION TO PERMIT**

On March 1, 2011, the United States Environmental Protection Agency (EPA) received a Petition dated February 28, 2011, from the Environmental Integrity Project and the Southern Alliance for Clean Energy (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 the EPA object to Revision 1 of a title V operating permit, Permit Number V-09-002 R1, issued by the Kentucky Division for Air Quality (KDAQ) on February 7, 2011, to Tennessee Valley Authority (TVA) for its existing Shawnee Fossil Plant located in West Paducah (McCracken County), Kentucky. Permit No. V-09-002 R1 (Permit Revision 1) is a CAA title V operating permit issued pursuant to Kentucky's Administrative Regulations (KAR) at 401 KAR 52:020 (title V regulations). The facility is an existing electric power generating plant.

This Order contains EPA's response to the Petitioners' February 28, 2011, request that the EPA object to the TVA Shawnee Permit Revision 1.¹ Based on a review of the Petition, other relevant materials, including the TVA Shawnee Permit Revision 1 and permit record, and relevant statutory and regulatory authorities, and as explained below, I deny the Petition requesting that the EPA object to the TVA Shawnee Permit Revision 1.

I. STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the CAA, 42 U.S.C. § 7661a(d)(1), calls upon each state to develop and submit to the EPA an operating permit program intended to meet the requirements of title V of the CAA. The

¹ In their Petition, the Petitioners refer to Permit Revision 1 as "the Permit."

Commonwealth of Kentucky² originally submitted its title V program governing the issuance of operating permits in 1993, and the 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 State Implementation Plan (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 (referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting and other conditions to assure sources' compliance with applicable requirements. 57 *Fed. Reg.* 32250, 32251 (July 21, 1992). One purpose of the title V program is to "enable the source, States, the EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." *Id.* Thus, the title V operating permit program is a vehicle for ensuring that air quality control requirements are appropriately applied to facility emission units and for assuring compliance with such requirements.

Under CAA section 505(a), 42 U.S.C. § 7661d(a), and the implementing regulations at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V permit to the EPA for review. Upon receipt of a proposed permit, the 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 Part 70. 40 C.F.R. § 70.8(c). If the EPA does not object to a permit on its own initiative, section 505(b)(2) of the Act and 40 C.F.R. § 70.8(d) provide that any person may petition the Administrator, within 60 days of the expiration of the EPA's 45-day review period, to object to the permit. The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator 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); 40 C.F.R. § 70.8(d). In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1); *see also New York Public Interest Research Group, Inc. (NYPIRG) v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003). Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA. *MacClarence v. EPA*, 596 F.3d 1123, 1130-33 (9th Cir. 2010); *Sierra Club v. Johnson*, 541 F.3d 1257, 1266-1267 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677-78 (7th Cir. 2008); *Sierra Club v. EPA*, 557 F.3d 401, 406 (6th Cir. 2009) (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, the EPA objects to a permit that has already been issued, the EPA or the permitting authority will modify, terminate, or revoke and reissue the permit consistent with the procedures set forth in 40 C.F.R. §§ 70.7(g)(4) and (5)(i) - (ii), and 40 C.F.R. § 70.8(d).

² The Commonwealth of Kentucky Environmental and Public Protection Cabinet submitted the title V program and oversees the Kentucky Division for Air Quality (KDAQ), which is the permitting authority for title V permits in Kentucky.

II. BACKGROUND

Facility

A more detailed description of the facility is included in the KDAQ Statement of Basis for Permit Revision 1, dated June 22, 2010 (SOB R1), for the draft permit. In summary, the facility is located in West Paducah, Kentucky (McCracken County), on the south bank of the Ohio River approximately 13 miles northwest of the mouth of the Tennessee River. The facility is an existing electric generating facility that includes ten coal-fired boilers (9 pulverized coal-fired units and one fluidized-bed combustor unit), two oil-fired boilers, and coal, limestone and ash handling facilities. SOB R1 at 2. Units 1-9 were constructed at different times but they are essentially identical dry-bottom, wall-fired boilers with heat input capacities of 1,691 million British thermal units (MMBtu)/hour each. *Id.* Unit 10 has a heat input capacity of 1,800 MMBtu/hour. *Id.* Units 16 and 17, which are discussed in the Petition, are part of the fly ash handling system.

Permit History

The permit at issue in the Petition is Permit Revision 1, a CAA title V operating permit issued by KDAQ pursuant to its regulations at 401 KAR 52:020. The initial Shawnee title V permit, Permit No. V-03-054, was issued on June 21, 2004, and has since undergone multiple revisions. KDAQ Executive Summary, Proposed Permit V-09-002, August 2, 2009. A final title V renewal permit was issued on October 22, 2009. On February 7, 2011, KDAQ issued TVA Shawnee Permit Revision 1. Permit Revision 1 resulted from KDAQ's determination that the previously issued permit needed to be "reopened for cause" pursuant to 401 KAR 52:020 § 19. *See also* 40 C.F.R. § 70.7(f)(2). On February 28, 2011, the Petition was submitted to the EPA regarding Permit Revision 1. On October 17, 2011, KDAQ issued a second permit revision (Permit Revision 2), which made changes to Permit Revision 1 stemming in part from a settlement agreement reached between TVA and the EPA resolving alleged CAA violations at a number of TVA facilities, including the Shawnee facility. *See, e.g.*, Federal Facilities Compliance Agreement (FFCA) Between the EPA and TVA, Docket No. CAA-04-2010-1760 (June 13, 2011) (available online at <http://www.epa.gov/compliance/resources/agreements/caa/tva-ffca.pdf>). Permit Revision 2 is not a subject of the Petition.

Timeliness of Petition

Pursuant to the CAA, if the EPA does not object during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to take such action. 42 U.S.C. § 7661d(b)(2). Thus, any petition seeking the EPA's objection to the February 7, 2011, Permit Revision 1 was due on or before March 30, 2011 (the proposal date for Permit Revision 1 was December 15, 2010). The Petition, dated February 28, 2011, was received by the EPA on March 1, 2011, via electronic mail. Thus, the Petition is timely.³

³The Petitioners submitted a notice of intent to sue letter to the EPA dated July 20, 2011, in which the Petitioners appeared to identify two additional issues not previously raised in the February 28, 2011 Petition. First, the Petitioners stated that KDAQ did not address their objections or respond to their comments. Second, the Petitioners stated that a particulate matter continuous emissions monitoring system should be included for Unit 10 (the Petition only addresses Units 1-9). These issues are not included in the Petition and are not addressed in today's Order. Notably, the Petitioners failed to meet the threshold requirements of CAA Section 505(b)(2) for raising these issues.

Petitioners subsequently filed a lawsuit in the United States District Court for the District of Columbia alleging that the EPA failed to respond to their Petition. The EPA and the Petitioners entered into a Consent Decree in which the EPA agreed to sign a response to the February 28, 2011, Petition by September 1, 2012. *Southern Alliance for Clean Energy v. EPA*, Case No. 12-CV-00338-ESH (Dist. D.C.). Today's Order is intended to satisfy that requirement.

III. EPA DETERMINATIONS

Petitioners' Claims. The Petitioners raise four main categories of claims in their February 28, 2011, Petition. First, the Petitioners contend that the EPA must object to the Permit because the Permit does not include applicable prevention of significant deterioration (PSD) requirements for Units 1 and 4 stemming from alleged major modifications that occurred in the late 1980s and early 1990s. Second, the Petitioners contend that the Permit does not contain sufficient monitoring for the particulate matter (PM) emission limits for Units 1-9 because the PM limit is based on a 3-hour average and the Petitioners characterize the monitoring as only requiring stack test data every four years. Petition at 7. As part of this claim, the Petitioners contend that opacity data from the continuous opacity monitoring system (COMS) is inadequate for monitoring compliance with PM emissions limits because a relationship between opacity and PM has not been established. Petition at 8-9. Further, the Petitioners request installation of a PM continuous emission monitoring system (CEMS) for Units 1-9 and cite examples of other facilities that have PM CEMS installed. Petition at 9-10. Third, the Petitioners contend that the Permit does not contain sufficient monitoring for the opacity limits for Units 1-9. The Petitioners characterize the opacity monitoring as a Method 9 test every two weeks with COMS as an optional alternative. Petition at 10. The Petition instead requests the use of COMS to demonstrate compliance with the opacity standard. Fourth, the Petitioners contend that the Permit does not contain sufficient monitoring to assure compliance with the fugitive dust emission requirements from the dry fly ash handling operations (Units 16 and 17). Petition at 1. More specifically, with regard to Unit 16, the Petition states that Unit 16 is subject to an hourly PM limit as well as continuous opacity requirements, but that the monitoring includes only weekly qualitative visible observations followed by possible Method 9 readings. The Petitioners claim that such monitoring cannot assure compliance with an hourly limit and request more frequent monitoring. Petition at 11. With regard to Unit 17, the Petitioners contend that the Permit prohibits fugitive dust from crossing the property line, but that the Permit fails to include any monitoring for this requirement. The Petitioners state that the Permit must be modified to include monitoring to assure compliance with this requirement. Petition at 11.

EPA response. The Petition is denied for the reasons provided below. The EPA interprets its regulations to limit the scope of petitions to object on permit revisions resulting from reopenings for cause. The scope of petitions to object is limited to issues related to the parts of the permit for which the permitting authority has determined that cause to reopen exists. Because the Petitioners' objections apply to parts of the Shawnee Permit that are beyond the scope of the reopening for cause resulting in Permit Revision 1, the EPA is denying the Petition.

As was noted earlier, the initial title V operating permit for the Shawnee facility was issued in 2004 and a final renewal permit was issued on October 22, 2009. During both the initial permit issuance and the renewal process, opportunities were provided for public notice and comment, consistent with the requirements found at 401 KAR 52:020 (which track the requirements found in federal regulations at 40 C.F.R. Part 70). The permit revision at issue in the Petition was a reopening for cause designed to address changes requested by TVA and to correct a material mistake or inaccuracy regarding the

monitoring, recordkeeping and reporting requirements necessary to be in compliance with 40 C.F.R. Part 60, Subpart Da. The monitoring issues raised in the Petition do not derive from the monitoring changes made in the reopening for cause, which, according to KDAQ, were necessary to be in compliance with Subpart Da. According to the Statement of Basis for the draft Permit Revision 1, Permit Number V-09-002 R1 (SOB R1), on February 23, 2010, TVA contacted KDAQ and made a request to make certain changes to the 2009 final renewal permit to provide for “compliance clarifications, corrections to information transposed from the previously approved permit (V-03-054), inaccurate regulatory applications and clerical errors.” SOB R1 at 1. TVA also provided KDAQ with a document entitled “Comments & Questions TVA Shawnee Fossil Plant Title V Renewal Permit V-09-002” dated February 23, 2010. This document appears to identify changes requested by TVA on or about February 23, 2010. On May 10, 2010, KDAQ issued a letter with a subject matter line of “Notice of Intent to Reopen Permit V-09-002.” In that letter, KDAQ explained that it,

has determined that it is necessary to reopen and revise the permit issued for [Shawnee] located at 7900 Metropolis Lake Road, Highway 996, West Paducah, Kentucky. The permit can be reopened for cause based on 401 KAR 52:020, Section 19, as the permit contains a material mistake or an inaccurate statement was made when establishing the standards, terms or conditions of the permit.

The Division received suggested changes to the permit (V-09-002) via email on February 23, 2010. On February 26, 2010, the Division met with representatives for TVA [Shawnee facility] to discuss the changes and agreed to revise the permit. During the meeting, it became evident that repealed portions of 40 CFR 60, Subpart Da, had been applied incorrectly to the permit. The permit is being reopened to address the changes requested and to accurately apply the monitoring, recordkeeping and reporting requirements necessary to be in compliance with revised 40 CFR 60, Subpart Da.

The SOB R1 for the draft Permit Revision 1 further explained that,

this permit is being open[ed] for cause in accordance with 401 KAR 52:020, Section 19. The Division concurred with the source and determined that the permit contains a material mistake or inaccurate references. To satisfy the reopening and the requirement of Section 2(9) of the *Cabinet Provisions and Procedures for Issuing title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, a letter was dated May 10, 2010, was sent to TVA [Shawnee facility]...Details of the letter [were] to address the changes requested and to apply the monitoring, recordkeeping and reporting requirements necessary to be in compliance with 40 CFR 60, Subpart Da, which was revised on January 28, 2009.

SOB R1 at 1. A later SOB for Revision 1, dated November 22, 2010, includes the same explanation.

As noted above, the EPA interprets its regulations to limit the scope of petitions to object on permit revisions resulting from reopenings for cause to issues related to the parts of the permit for which cause to reopen exists. This interpretation is consistent with the EPA’s regulations, Kentucky’s approved title V program, and the EPA precedent and prior statements. In both its May 10, 2010, letter to TVA and SOB R1, KDAQ states that the permit is being reopened for cause in accordance with 401 KAR 52:020 § 19(2). That provision states, in relevant part, “(2) Reopening a permit: (a) Shall follow the same procedures as initial permits; and (b) Shall affect only those parts of the permit for which cause to

reopen exists.” This Kentucky regulation tracks the federal regulation found at 40 C.F.R. § 70.7(f)(2), which states, “[p]roceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.” In addition, in the broader context of permit modifications, the EPA has interpreted its title V regulations at 40 C.F.R. Part 70 to provide a more limited scope for citizen petitions to the EPA regarding permit modifications than is otherwise available for original permit issuance and permit renewals. *See, e.g., In the Matter of Wisconsin Public Service Corporation – Weston Generating Station* (Order on Petition) (December 19, 2007) at 5-7 (hereafter referred to as “*Weston Order*”); *see also* Questions and Answers on the Requirements of Operating Permits Program Regulations (July 7, 1993) at 7-8. This interpretation is consistent with the EPA’s regulations governing permits that are reopened for cause – the regulation states that proceedings to reopen and issue a permit shall affect “only those parts of the permit for which cause to reopen exists.” 40 C.F.R. § 70.7(f)(2).⁴

In addition, in the preamble to the Part 70 rules, in the broader context of permit modifications, the EPA explained that:

Public objections to a draft permit, permit revision, or permit renewal must be germane to the applicable requirements implicated by the permit action in question. For example, objections addressed to portions of an existing permit that would not in any way be affected by a proposed permit revision would not be germane. Public comments will only be germane if they address whether the draft permit is consistent with the applicable requirements or requirements of part 70.

57 *Fed Reg.* 32250, 32290/3 (July 21, 1992). The EPA also supported this interpretation in the 2007 *Weston Order*, in the context of a significant permit modification, wherein the EPA stated “[T]his interpretation is not only consistent with the regulations but it also furthers the statutory requirement that the Title V regulations contain “[a]dequate, streamlined, and reasonable procedures” for evaluating permit applications and issuing permits.” *Weston Order* at 6 (citing CAA § 502(b)(6); 40 U.S.C. § 7661a(b)(6)).

Whereas the *Weston Order* addressed a significant modification to a permit, with regard to a permit that is reopened for cause, as noted above, the regulations themselves directly limit the scope of the permit proceedings to only those parts of the permit for which cause to reopen exists. Therefore, the EPA will determine, based on the case-specific facts, whether the issues raised by a petitioner in the context of a permit reopening are within the scope of the proceeding.

In the present case regarding Permit Revision 1 for the Shawnee facility, as was explained earlier, KDAQ reopened the 2009 permit (V-09-002) for cause to address changes requested by TVA and to

⁴ The EPA believes this regulation limits the scope of the reopening proceedings to those parts of the permit for which *the permitting authority or EPA determine* cause to reopen exists. As one basis for a permit reopening is where the permit must be revised “to assure compliance with the applicable requirements,” 40 C.F.R. § 70.7(f)(2)(iv), if the EPA were to interpret its regulation to allow any issue raised by any person to be the subject of the reopening proceeding, the scope of the proceeding would be identical to original permit issuance, nullifying the clearly limiting nature of this regulation governing reopenings for cause. Further, the regulations themselves specify that the permitting authority or the EPA would determine whether there is a material mistake or inaccuracy, or a need for revision to assure compliance with applicable requirements. *See* 40 C.F.R. §§ 70.2(f)(2)(iii)-(iv).

apply the monitoring, recordkeeping and reporting requirements necessary to be in compliance with 40 C.F.R. Part 60, Subpart Da, which was revised on January 28, 2009 (74 Fed. Reg. 5072). SOB R1 at 1. As previously explained, the monitoring issues raised in the Petition did not derive from the monitoring issues addressed in the reopening for cause, which, according to KDAQ, were necessary to be in compliance with Subpart Da. The issues raised in the Petition were summarized earlier in this Order, and regard only Units 1-9, 16 and 17. A review of the changes made during Permit Revision 1 indicates that the changes made to the language for Units 1-9, 16, and 17, correspond closely with TVA's February 23, 2010, list of "comments and questions." These changes were mainly rewording, citation changes, and minor corrections, and were not related to the issues raised in the Petition. None of the changes made by KDAQ during Permit Revision 1 resulted in or appear to have exacerbated the issues raised in the Petition. Rather, a review of the previous permit (V-09-002) conditions indicates that every issue raised by the Petitioners could have been raised during a previous permit action for which the scope of public comment was not limited. In addition, the Petitioners have not demonstrated, or even attempted to demonstrate, that KDAQ's basis for determining that cause to reopen the previous permit existed was the trigger for the issues raised in the Petition. Further, the Petitioners make no attempt to demonstrate that specific changes made during Permit Revision 1 gave rise to the Petitioners' claims.

Although changes made to Permit Revision 1 did result in minor changes to certain conditions of the permit about which the Petitioners raise issues (i.e., conditions for Units 1-9, 16 and 17), the Petitioners' substantive issues with those conditions were not affected by the changes made during the reopen for cause. The EPA does not believe the limitation of proceedings in 40 C.F.R. § 70.7(f)(2) to "those parts of the permit for which cause to reopen exists" should be interpreted to involve a mechanical exercise of determining whether there are any changes at all in any parts of a broad permit condition subject to a citizen objection. Rather, consistent with the purpose and structure of 40 C.F.R. § 70.7(f), it is more reasonable to evaluate whether the substantive concerns raised in a petition regarding particular provisions are related to the cause for reopening and associated permit revisions ultimately adopted. *See, e.g.*, 40 C.F.R. §§ 70.7(f)(1)(i)-(iv)(identifying the circumstances warranting the reopening of a permit for cause).

Further, none of the issues raised by the Petitioners were a basis on which KDAQ determined that cause to reopen the permit existed. While KDAQ substantively responded to the Petitioners' public comments, the permitting record (including the public notice) demonstrates that Permit Revision 1 was reopened for cause because "the Division determined that the permit contains a material mistake or an inaccurate statement." SOB R1 at 1.⁵ The public notice also explains that there was a previous public comment opportunity (regarding Permit No. V-09-002) in June 2009.

Consistent with the language of the regulation regarding reopening for cause, the EPA's interpretations regarding the limited scope of public petitions for permit revisions, and the permit record in this matter, the EPA determines that the issues raised in the Petition submitted pursuant to CAA Section 505(b)(2) go beyond the scope of issues that may be raised in a petition to object regarding TVA Shawnee Permit Revision 1.

⁵ Relatedly, in the *Weston* Order, in the context of a significant permit modification, the EPA also explained that, "[w]e do not think the permitting authorities' discretion concerning the solicitation of comments affects our interpretation of the rule concerning the scope of petitions for permit modification actions...EPA did not intend, in offering permitting authorities such discretion, to expand the permissible scope of petitions to issues not germane to the permit modifications the permitting authorities ultimately adopt." *Weston* Order at 9, fn 3.

IV. CONCLUSION

For the reasons set forth above and pursuant to section 505(b)(2) of the CAA and 40 C.F.R. § 70.8(d), I hereby deny the Petition dated February 28, 2011.

AUG 31 2012

Date



Lisa P. Jackson
Administrator