

BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:	)	
	)	
EAST KENTUCKY POWER COOPERATIVE, INC.)	)	
HUGH L. SPURLOCK GENERATING STATION )	)	PETITION No.: IV-2008-4b
	)	
MAYSVILLE, KENTUCKY )	)	
TITLE V/PSD AIR QUALITY PERMIT )	)	
# V-06-007 (REVISION 2) )	)	
	)	
ISSUED BY THE KENTUCKY )	)	
DIVISION FOR AIR QUALITY )	)	
	)	

**ORDER DENYING IN PART AND GRANTING IN PART APRIL 28, 2008**  
**CLEAN AIR ACT TITLE V PETITION**

On April 28, 2008, the United States Environmental Protection Agency (EPA) received a petition from Sierra Club (Petitioner) pursuant to Section 505(b)(2) of the Clean Air Act (CAA or Act), 42 U.S.C. § 7661d(b)(2). (PETITION NO.: IV-2008-4b) The Petition requests that EPA object to the merged CAA construction/operating permit issued by the Kentucky Division for Air Quality (KDAQ or Division) on April 18, 2008 to East Kentucky Power Cooperative, Inc. (EKPC) for the Hugh L. Spurlock Generating Station (Spurlock) in Maysville (Mason County), Kentucky. Permit #V-06-007 (Revision 2) is for operation of the facility as a whole and construction of a new circulating fluidized bed (CFB) electric generating unit known as Emissions Unit 17 or CFB Unit 4. Permit Revision 2 is a merged CAA prevention of significant deterioration (PSD) construction permit and a CAA title V operating permit issued pursuant to the Kentucky Administrative Regulations (KAR) at 401 KAR 52:020 (title V regulations) and 51:017 (PSD regulations).

Sierra Club's April 28, 2008 Petition raises several issues in requesting that EPA object to Permit Revision 2. Specifically, Sierra Club alleges that: (1) the permit revision proposed by KDAQ fails to include the required heat input limit applicable to Unit 2 and unlawfully attempts to increase that limit without going through PSD (or any other CAA title I) permitting; (2) KDAQ's review of low-sulfur coal was not adequate; and (3) the permit lacks hazardous air pollutant (HAP) emission limits under section 112(g) of the CAA. Pursuant to a Consent Decree entered by the Eastern District of Kentucky between EPA and Sierra Club, EPA agreed to respond to Sierra Club's Petition in two orders – responding to issue 3 in the first order (which was issued on September 21, 2009) and issues 1 and 2 in a subsequent order (due by November 30, 2009). This is the second Order issued in response to the Petition and addresses issues 1 and 2.

Based on a review of the Petition and other relevant materials, including the EKPC Spurlock permit and permit record, and relevant statutory and regulatory authorities, I deny Petitioner's request on issue 1 and grant Petitioner's request on issue 2 for KDAQ's failure to adequately respond to Sierra Club's comments.

## **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 to meet the requirements of title V of the CAA. The Commonwealth of Kentucky<sup>1</sup> originally submitted its title V program governing the issuance of operating permits in 1993, and EPA granted final full approval on October 22, 2001. 66 *Fed. Reg.* 54,953 (October 31, 2001). 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 (which are referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting, and other conditions to assure sources comply with existing applicable requirements. 57 *Fed. Reg.* 32,250, 32,251 (July 21, 1992) (EPA final action promulgating Part 70 rules). 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), 42 U.S.C. § 7661d(a), of the CAA and the relevant implementing regulations (40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 70.8(c)(1); *New York Public Interest Research Group (NYPIRG) v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003). Under section 505(b)(2), the

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<sup>1</sup> The Commonwealth of Kentucky Environmental and Public Protection Cabinet (Kentucky Cabinet), which submitted Kentucky's title V program, oversees KDAQ, which is the permitting authority for title V and PSD permits in Kentucky.

burden is on the petitioner to make the required demonstration to EPA. *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); *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, 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 C.F.R. §§ 70.7(g)(4) and (5)(i) - (ii), and 40 C.F.R. § 70.8(d).

## **II. BACKGROUND**

### **A. Existing Facility**

EKPC Spurlock is an electric generating plant that burns fossil fuels, primarily coal, to generate electricity. The plant includes two pulverized coal boilers and two CFB boilers. Emission Unit 17/CFB Unit 4 began commercial operations in April 2009 and is a new 300 megawatt coal-fired electric utility boiler utilizing CFB technology. The new CFB boiler is equipped with selective non-catalytic reduction, pulse jet fabric filters, dry lime scrubbing, and limestone injection pollution control systems.<sup>2</sup>

### **B. Current Permit History**

The EKPC Spurlock title V permit at issue is Revision 2, issued in response to EPA's August 30, 2007 "Order Granting in Part and Denying in Part Petition for Objection to Permit." *See In re East Kentucky Power Cooperative, Inc.* (Hugh L. Spurlock Generating Station) Petition No. IV-2006-4, Order on Petition (August 30, 2007) (hereinafter referred to as the August 2007 Order). The August 2007 Order responded to an August 17, 2006 Petition by Sierra Club regarding the EKPC Spurlock Permit Revision 1 (hereinafter referred to as the August 2006 Petition). The August 2007 Order granted on two issues – one dealing with a heat input limit for Unit 2 and one dealing with the best available control technology (BACT) analysis and elimination of the use of eastern bituminous low-sulfur coal. August 2007 Order at 11 and 29, respectively. Following EPA's August 2007 Order, on December 21, 2007, EKPC submitted a request to revise its title V/PSD permit consistent with the August 2007 Order with regard to the heat input limit on Unit 2. Also consistent with the August 2007 Order, KDAQ requested and received additional information from EKPC and revised its best available control technology (BACT) analysis (part of the PSD review for the new unit) regarding eastern bituminous low-sulfur coal at the new CFB Unit 4. The Statement of Basis for Revision 2 was changed to include additional information on low-sulfur coal. A more detailed account of the permitting history for the EKPC Spurlock facility is included in the August 2007 Order, and in the permit

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<sup>2</sup> For more details regarding the EKPC Spurlock facility and its permitting history, *see In re East Kentucky Power Cooperative, Inc.* (Hugh L. Spurlock Generating Station) Petition No. IV-2006-4, Order on Petition (August 30, 2007), which responded to the August 17, 2006 title V petition from Sierra Club regarding Permit Revision 1 for the EKPC Spurlock facility. KDAQ permit materials are also available at <http://www.air.ky.gov/permitting/East+Kentucky+Power+Cooperative+Inc.htm>.

record. The April 2008 Petition raised concerns with Permit Revision 2 as it regarded both the heat input and low-sulfur coal issues.

### **C. Litigation History**

On August 19, 2009, Sierra Club amended a previously filed complaint in the Eastern District of Kentucky to include a claim seeking to compel the Administrator to respond to the April 28, 2008 Petition. *Sierra Club v. Johnson* (No. 2:09-CV-00085-WOB (E. D. Ky.)). Thereafter, EPA and Sierra Club agreed to resolve the case through a Consent Decree that requires EPA to respond to the Petition in two parts. A Consent Decree was entered by the Eastern District of Kentucky on October 16, 2009. Under the terms of the Consent Decree, a response to issue 3 in the Petition was due on or before September 21, 2009 (which EPA issued), and a response to issues 1 and 2 is due on or before November 30, 2009.

Consistent with the Consent Decree, this Order responds to issues 1 and 2 in Sierra Club's April 2008 title V petition.

## **III. THRESHOLD REQUIREMENTS**

### **A. Timeliness of Petition**

Section 505(b)(2) of the CAA provides that any person may petition the Administrator of EPA within sixty days after the expiration of EPA's 45-day review period, to object to the issuance of a proposed permit. KDAQ issued the proposed Permit Revision 2 on March 5, 2008. EPA's 45-day review period for Permit Revision 2 expired on April 19, 2008. Thus, the sixty-day petition period ended on June 18, 2008. EPA received Sierra Club's April 28, 2008 Petition on May 7, 2008. Accordingly, EPA finds that Sierra Club timely filed its 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 Kentucky during the public comment period for Revision 2 and found that Sierra Club submitted comments on February 1, 2008. Sierra Club's comments addressed both the issues of heat input and low-sulfur coal with reasonable specificity as required by the CAA. Thus, EPA finds that the Petition meets this threshold requirement.

#### **IV. EPA DETERMINATIONS ON APRIL 28, 2008 PETITION ISSUES 1 AND 2**

##### **A. EPA Determination on Issue 1: Change in Heat Input Limit for Unit 2**

*Petitioner's Claims.* Petitioner argues that EPA must object to the revised title V permit because the permit does not include a heat input limit of 4,850 million British thermal units (MMBtu)/hour for Unit 2. Petitioner cites to EPA's August 30, 2007 Order as requiring that KDAQ revise the title V permit to include the 4,850 MMBtu/hour heat input limit. Petition at 5-8. Petitioner also asserts that KDAQ's inclusion of the 5,600 MMBtu/hour heat input limit, which stemmed from a September 24, 2007 consent decree between EPA and EKPC, was not a sufficient response to EPA's August 30, 2007 Order. Petition at 7-9. Petitioner notes that despite KDAQ's comments that the recent title V permit revision was a "combined PSD/title V revision," Petitioner states that the revision did not meet PSD review requirements (e.g., there was no BACT, air quality, or increment analysis). Petition at 7, n. 1. Petitioner further claims that the inclusion of the 5,600 MMBtu/hour heat input limit would modify an EPA-issued PSD permit dating back to the late 1970s. Petition at 12-13. On this last point, Petitioner notes that EKPC's original PSD application in 1976 listed a heat input limit of 4,850 MMBtu/hour and argues that EPA issued that PSD permit based on that specific heat input limit. Petitioner concludes that the heat input limit of 4,850 MMBtu/hour must be included in the current title V permit, and that heat input limit cannot be modified through a title V permit revision. Petition at 13-14.

*EPA's Response.* For the reasons set forth below, EPA is denying Petitioner's claims regarding the heat input limit.

In the August 2007 Order, EPA granted Petitioner's request that EPA object to the Spurlock permit because the permit failed to include the heat input limit of 4,850 mmBtu/hour in the "Operating Limitation" section (as opposed to the "Description" portion of the permit), consistent with a previously issued 1983 state operating permit. August 2007 Order at 11-13.

Following issuance of the Order, on September 24, 2007, the Eastern District of Kentucky (Central Division) entered a Consent Decree (CD) between EPA and EKPC resolving various alleged violations including failure to comply with a heat input limit of 4,850 mmBtu/hour (third claim for relief in the Complaint). Order, *U.S. v. East Kentucky Power Cooperative, Inc.*, Civil Action No. 04-34-KSF (E. D. Ky., September 24, 2007). The CD specifically addressed this alleged violation and allowed for EKPC to increase the heat input limit in its title V permit to 5,600 mmBtu/hour. CD at ¶165. The CD was entered by the Court following the required public comment period pursuant to 28 C.F.R. § 50.7. Sierra Club submitted comments similar to the ones included in the April 2008 Petition to the Court during the public comment period on the enforcement CD. Despite these comments, the Court subsequently entered the CD on September 24, 2007, changing the legal obligations, including resolving EPA's claims regarding the permitting obligations, of EKPC with regards to the heat input limit and certain other requirements at the Spurlock facility.

The CD resolved numerous alleged violations and resulted in a "systemwide" settlement including significant emissions reductions by the EKPC system, including the following

facilities: Spurlock, the “Cooper Plant” in Somerset, Kentucky, and the “Dale Plant” near Winchester, Kentucky. The CD set forth a schedule for completion of all the emission reductions; many of the reductions were required to begin within 30 or 60 days following entry of the CD. At Spurlock, the CD required that the selective catalytic reduction (SCR) be operated year-round at Units 1 and 2 to reduce emissions of nitrogen oxides (NO<sub>x</sub>). CD at ¶52. The CD also established specific emission rates for NO<sub>x</sub> for Units 1 and 2, based on the year-round operation of the SCR. Low-NO<sub>x</sub> burners were also required for all Spurlock units, as well as over-fire air for Unit 2 at Spurlock. CD at ¶56. In addition, the CD established systemwide NO<sub>x</sub> tonnage caps for the EKPC system. With regard to sulfur dioxide (SO<sub>2</sub>), the CD also required installation of control technology and emissions reductions. At Spurlock in particular, the CD required installation of flue gas desulfurization (FGD) technology at both Units 1 and 2 by October 1, 2008 and June 30, 2011, respectively. A 30-day rolling average and removal efficiency rate were also established by the CD for SO<sub>2</sub>. CD at ¶64. As with NO<sub>x</sub>, the CD also established systemwide tonnage limitations for SO<sub>2</sub>. The CD provided for the surrender of SO<sub>2</sub> allowances, and also included provisions for reducing particulate matter (PM) emissions, increasing the efficiency of PM control devices, and requiring installation for PM and mercury continuous emissions monitoring system (CEMS) on Spurlock Unit 2. CD at ¶¶70-104. Thus, while the CD authorizes the increase in heat input to 5,600 mmBtu/hour for Spurlock Unit 2, the CD also requires substantial emissions reductions of NO<sub>x</sub> and SO<sub>2</sub>, as well as improvements for PM and mercury at Spurlock and for other parts of the EKPC system. Appendix A to the CD, “Environmental Projects Requirements,” also describes additional reductions that the Spurlock facility must undertake. The CD required payment of a \$750,000 civil penalty and required EKPC to provide EPA with regular status updates on its compliance with the CD.

With regard to the specific issue raised by Sierra Club – the increase in the heat input limit for Spurlock Unit 2 – the CD requires that “[w]ithin one hundred eighty (180) days after entry of this Consent Decree, EKPC shall apply for amendment of its Title V permit for the Spurlock Plant to incorporate a MCR [maximum continuous rating] of 5600 mmBTU/hr for Spurlock Unit 2.” CD at ¶165. Further, the CD provides that entry of the CD shall resolve all civil claims by the United States against EKPC under the PSD provisions of the CAA (as well as other provisions) arising from any modifications commenced at any EKPC system unit prior to the date of lodging the CD, including EKPC’s operation of Spurlock Unit 2 at a heat input above 4,850 MMBtu/hour, and until December 31, 2015. CD at ¶¶119 -120.

In the August 2007 Order, EPA explained that its decision to grant an objection regarding the heat input limit “d[id] not conflict with the proposed consent decree that will resolve EPA’s civil enforcement action for EKPC’s alleged violations of the maximum heat input limit contained in its underlying state operating permit” and which would require that EKPC “apply to KYDAQ under the Kentucky SIP for a permit that would authorize a change in that heat input limit, which in turn would be incorporated in the title V permit.” *Id.* at 13. Accordingly, on December 21, 2007, after entry of the CD containing these requirements by the court in the enforcement action, EKPC submitted an application to revise its title V/PSD permit consistent with the CD requirements. With regard to the heat input limit on Unit 2, EKPC’s application requested to change the limit to 5600 MMBtu/hr. Thus, consistent with both the requirements of the August 2007 Order and CD, Revision 2 incorporated the heat input limit for Unit 2 into the “Operating Limitations” section of the permit and changed that limit to 5600 MMBtu/hr.

Petitioner alleges that EPA must object because KDAQ improperly incorporated the higher heat input limit without meeting the full PSD review requirements, but the claim pertains to an issue that was addressed in the CD entered by the court in the enforcement action.

EPA has previously addressed the situation where a title V petition raises an issue that has been resolved in a CD entered in an enforcement matter in *In the Matter of WE Energies Oak Creek Power Plant*, Order on Petition (June 12, 2009) (Oak Creek Order). In the Oak Creek Order, EPA explained that,

Congress did not directly address how EPA must handle title V petitions that raise the same issues EPA has resolved through an enforcement settlement. The enforcement provisions of the Act do not address how EPA must treat a title V petition on an issue EPA has settled in an enforcement case. See CAA sections 113(b) and 167. Similarly, title V does not directly answer this question. Title V provides that “[t]he Administrator shall issue an objection ... if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter. . . .” CAA § 505(b)(2). On the one hand, this language could be read to say that, if a petitioner demonstrates that a permit is not in compliance with Act’s requirements, EPA must object to the permit, even if EPA (and the United States) has reached a resolution in an enforcement case on the same issue. On the other hand, the language requires the petitioner to “demonstrate to the Administrator that the permit is not in compliance” with the Act as a whole. Where EPA has entered into a CD specifically designed to address a source’s compliance with the Act, and the CD has been given the force of law by a court, it is not clear that Congress intended the Administrator to accept a contrary demonstration that could potentially force EPA to require a State to add additional permit terms and potentially undermine the CD in the title V context. A review of the legislative history does not further elucidate congressional intent on this matter.

Oak Creek Order at 8. EPA further explained that “[a]s Congress has not directly spoken to this precise question at issue, EPA may adopt a reasonable interpretation to fill the gap.” *Id.*, citing *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-44 (1984).

EPA then set forth the reasonable interpretation to fill the gap between title V petition responses and the issuance of a CD as follows,

EPA adopts the approach that, once EPA has resolved a matter through enforcement resulting in a CD approved by a court, the Administrator will not determine that a demonstration of noncompliance with the Act has been made in the title V context. This approach is reasonable for several reasons, including: (1) it avoids conflicts between settlements of enforcement cases and responses to title V petitions (including potentially competing court proceedings); (2) it does not create disincentives for sources to agree to reasonable terms in settling enforcement matters; (3) it does not require EPA to revisit complex applicability issues in the short 60 day timeframe for EPA to respond to title V petitions; (4) it

does not unfairly prejudice sources that settled enforcement actions in good faith; and (5) EPA should not be forced to re-litigate issues of compliance with the Act where EPA and the source have settled. Further, the public is afforded an opportunity to comment on CDs, see 28 C.F.R. § 50.7.

Oak Creek Order at 9.<sup>3</sup>

In issuing this Order, EPA faces a similar situation in which claims raised in the pending title V Petition involve issues also addressed in requirements of a court-ordered CD. Accordingly, EPA relies on the above reasoning provided in the Oak Creek Order to support denial of the Petitioner's request that EPA object to the Spurlock permit.

The current petition requests that EPA object to the new heat input limit, which was established through a court order entered as part of the enforcement process, and which included litigation and negotiation between EPA and EKPC, as well as Sierra Club's entry of comments during consideration of the CD that raised similar concerns regarding the raising of the heat input limit. In KDAQ's Response to Comments (RTC) for Spurlock Permit Revision 2, KDAQ explains that the "underlying basis for the decision to increase the rated heat input of Unit 2 from 4850 MMBtu/hr to 5600 MMBtu/hr is the enforcement action, *U.S. v. East Kentucky Power Cooperative, Inc.*, Case No. 04-34-KSF (E.D. KY), and subsequent consent decree which requires this amendment to the Title V permit. The specific rationale for proposing to increase the limit in this permitting action is the permittee's application for a combined PSD review and Title V permit modification." KDAQ RTC Revision 2 at 2. In light of the circumstances described above and the reasoning provided in the Oak Creek Order, EPA determines that the Petitioner has not "demonstrate[d] to the Administrator that the permit is not in compliance with the requirements of [the Act]." CAA § 505(b)(2). The petition is denied on this issue.

## **B. EPA Determination on Issue 2: BACT Review of Low-Sulfur Coal**

*Petitioner's Claims.* Petitioner first claims that KDAQ failed to respond to its comments on KDAQ's revised cost analysis. Petition at 15. With regard to the substance of the cost analysis, Petitioner raises a number of issues, which are summarized here. Petition at 15. First, Petitioner takes issue with KDAQ's alleged reliance on incremental cost effectiveness as opposed to average cost effectiveness. Petition at 16. Petitioner next alleges that KDAQ failed to use either incremental cost or average cost. Specifically, Petitioner takes issue with KDAQ's comparison of the difference in fuel costs (a single component of the total costs of the pollution control system) to the difference in tons removed by the entire pollution control system. Petition

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<sup>3</sup> In the enforcement action discussed in the Oak Creek Order, the court noted that "no one can dispute the protracted nature of this type of litigation, where similar cases have been pending for years and the parties have devoted tens of thousands of hours. The proposed amended consent decree appears to be a careful assessment of litigation risks based on extensive experience with this type of litigation." *United States v. Wisconsin Electric Power Company*, 522 F. Supp. 2d. 1107, 1118 (E.D. Wisc.2007). As with the *Wisconsin Electric* case, the *EKPC* enforcement action that included Spurlock Unit 2 took years to resolve, during which time the parties were engaged simultaneously in litigation and negotiation of a settlement.



at 18. Rather, Petitioner suggests that KDAQ should have calculated average cost effectiveness by comparing the entire pollution control train, including low-sulfur coal with the difference in tons removed by the entire pollution control train. Petition at 19. Petitioner concludes that this approach results in low-sulfur coal being cost-effective. *Id.* With regard to incremental cost effectiveness, Petitioner concludes that KDAQ's analysis was designed to prejudice the BACT analysis against cleaner fuels, contrary to Congress' "clear direction that clean fuels be used." Petition at 20.

With regard to representative comparative costs, Petitioner concludes that there was "no attempt by Kentucky DAQ to compare the cost of using low sulfur coal at other boilers with the cost at Spurlock 4." Petition at 21. Petitioner further explains that KDAQ "attempted to compare the high sulfur fuel costs, alone, to the emission reductions based on low sulfur coal plus both a limestone CFB bed and a dry scrubber." Petition at 22. Petitioner argues that this "distorts the comparison and inflates the cost per ton calculation. The comparison should have been the high-sulfur coal to low-sulfur coal, or the high-sulfur coal plus scrubbing to the low-sulfur coal plus scrubbing." Petition at 22. Finally, Petitioner faults KDAQ for using EPA cost data without accounting for assumptions associated with that data such as capacity factor, interest rate, and equipment life – factors that can vary from facility to facility. *Id.* With regard to the range of comparative cost data, Petitioner states that KDAQ improperly compared the upper-end cost value, apparently calculated by EPA, with the lower end of the range of the reported comparative cost data. Petition at 22. Petitioner concludes that once the cost analysis is done correctly, low-sulfur coal cannot be eliminated based on cost. Petitioner also takes issue with Kentucky's use of a control efficiency of 99.33% for SO<sub>2</sub>. Petitioner argues that this is inconsistent with the control efficiency used in establishing the BACT limit for the higher sulfur "design" coal. *Id.* Thus, Petitioner asserts, the final SO<sub>2</sub> limit should be 0.02 lb/MMbtu based on the 99.33% control efficiency used in the cost analysis. *Id.*

*EPA's Response.* For the reasons discussed below, EPA grants the Petition on this issue and directs KDAQ to substantively respond to Sierra Club's comments on the revised cost analysis and, if necessary, make appropriate changes to the permit.

Public participation requirements for both PSD and title V permits are governed by Kentucky regulation. 401 KAR 52:100. This regulation, among other things, requires KDAQ to "[p]repare a response to the comments received during the comment period." 401 KAR 52:100 § 2(b); *see also* 401 KAR 52:100 § 6(a) (Kentucky must "consider" comments submitted during the public hearing). It is a general principle of administrative law that a meaningful notice and opportunity for public comment dictates that a permitting authority respond to significant comments. *In re New York Fertilizer Company*, Petition No. II-2002-12, Order on Petition (May 25, 2004) at 7 (permitting agency had an obligation to respond to significant public comments and adequately explain the basis of its decision), *citing Home Box Office v. FCC*, 567 F.2d 9, 35 (D.C. Cir. 1977). In the title V or PSD context, "significant" comments are those that may result in different terms and conditions of a permit. *See New York Fertilizer Order* at 8, *citing Portland Cement Assoc. v. Ruckelshaus*, 486 F.2d 375, 393 (D.C. Cir. 1973); *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 180 (EAB 2000).

Petitioner's comments regarding the revised best available control technology (BACT) analysis for low-sulfur coal were "significant" because they raised issues that may have resulted in a change to the permit – i.e., improper elimination of eastern bituminous low-sulfur coal, which could change EKPC's obligations regarding coal use at the Spurlock facility. Consequently, KDAQ was required to address the substance of these comments, because they could result in a change in the permit. *See In the Matter of Tennessee Valley Authority Paradise Fossil Fuel Plant*, Petition No. IV-2007-3, Order on Petition (July 13, 2009) at 5-6; *In the Matter of Louisiana Pacific Corporation, Tomahawk, Wisconsin*, Petition No. V-200-6-3, Order on Petition (November 5, 2007) at 5-6; *In the Matter of CEMEX Inc., Lyons Cement Plant*, Petition No. VIII-2008-01, Order on Petition (April 29, 2009) at 9-10; *In the Matter of Midwest Generation, LLC Fisk Generating Station*, Petition No. V-2004-1, Order on Petition (March 25, 2005) at 4-5. However, instead of addressing Petitioner's specific comments regarding average cost effectiveness and representative comparative costs, KDAQ simply stated:

In accordance with the Administrator's objection, DAQ revised the statement of basis for permit V -06-007 Revision 2 to include justification for excluding low sulphur eastern bituminous coal as BACT for 502. DAQ included such justification in the Statement of Basis for this permit. By letter dated February 27, 2008, U.S. EPA informed DAQ that "[t]he draft permit revision, more specifically the statement of basis adequately addresses the requirement to provide sufficient justification for eliminating low-sulfur eastern bituminous coal as best available control technology (for sulfur dioxide emissions) for Emission Unit 17 (Unit #4)." Therefore the objection has been resolved.

KDAQ RTC Revision 2 at 14.


KDAQ's response relies on comments that EPA submitted during the comment period on the draft permit – comments that were provided when the permit record was still in development. EPA's comment letter did not consider any other comments raised or information that might have been provided during the comment period, including the substantive issues raised by Sierra Club. Accordingly, EPA's letter simply amounted to a comment on KDAQ's preliminary analysis and did not address the substance of Sierra Club's comments on this issue. Thus, EKPC's reference to EPA's comment letter does not amount to the type of substantive response to Sierra Club's significant comments that is required by law. EPA is reviewing the Petition based on KDAQ's permit record for the proposed permit, and that record fails to provide a response that addresses the substantive points regarding the BACT analysis that were made by Petitioner in its public comment.

Accordingly, KDAQ is directed to revise the response to comments document to include a substantive response to Petitioner's comments and make any necessary changes to the permit, consistent with the timeline outlined in CAA § 505(c).

**V. CONCLUSION**

For the reasons set forth above, and pursuant to Section 505(b) of the CAA and 40 C.F.R. § 70.8(d), I hereby deny in part and grant in part Sierra Club's April 28, 2008 Petition regarding the EKPC Spurlock facility.

11/30/09  
Dated

  
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Lisa P. Jackson  
Administrator