

**BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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**PETITION FOR OBJECTION**

In the Matter of the Revised Proposed Operating  
Permit for the East Kentucky Power Cooperative,  
Inc. Hugh L. Spurlock Generating Station in  
Maysville, Kentucky.

Source I.D. No. 21-161-00009

Permit No. V-06-007R3,  
Revised December 22, 2009

Proposed by the Kentucky Environmental  
Protection Cabinet Department for Environmental  
Protection Division for Air Quality.

## I. INTRODUCTION

Pursuant to Clean Air Act § 505(b)(2) and 40 CFR § 70.8(d), the Sierra Club hereby petitions the Administrator of the United States Environmental Protection Agency (“EPA”) to object to revised proposed Title V Operating Permit for the Hugh L. Spurlock Generating Station in Maysville, Kentucky (“Permit”), V-06-007R3, attached at Exhibit A. The Administrator has objected to earlier versions of the Permit in two separate orders. One of the objections was on the same issue that Sierra Club raises below. The Permit was proposed to U.S. EPA by the Kentucky Department for Environmental Protection Division for Air Quality (hereinafter “DAQ”) more than 45 days ago. Sierra Club submitted comments to the DAQ on the draft permit attached as Exhibit B, including Exhibits 1 - 12. DAQ’s response to comments is attached as Exhibit C. This petition is filed within sixty days following the end of U.S. EPA’s 45-day review period which is April 6, 2010. *See* Ex. D. The Administrator must grant or deny this petition within sixty days after it is filed. If the U.S. EPA Administrator determines that the Permit does not comply with the requirements of the Clean Air Act or any “applicable requirement,” she must object to issuance of the permit. 42 U.S.C. § 7661b(b); 40 C.F.R. § 70.8(c)(1) (“The [U.S. EPA] Administrator will object to the issuance of any permit determined by the Administrator not to be in compliance with applicable requirements or requirements of this part.”). “Applicable requirements” include, *inter alia*, any provision of the Kentucky State Implementation Plan (“SIP”), and any standard or requirement under Clean Air Act section 112. 40 C.F.R. § 70.2. Therefore, the Administrator must object to the Permit because the Permit fails to comply with all applicable requirements. 42 U.S.C. § 7661d(b); 40 C.F.R. § 70.8(d); *New York Public Interest Research Group v. Whitman*, 321 F.3d 316, 333 n.11 (2<sup>nd</sup> Cir. 2002).

## **II. GROUNDS FOR OBJECTING**

### **1) DAQ FAILED TO PROVIDE ADEQUATE PUBLIC PARTICIPATION**

#### **A. DAQ'S NOTICE WAS INADEQUATE BECAUSE IT WAS DIFFICULT TO DETERMINATE WHICH PERMIT WAS ACTUAL UP FOR REVIEW.**

40 C.F.R. § 70.7(h) requires that “all permit proceedings . . . shall provide adequate procedures for public notice[.]” The notice must “identify the activity or activities involved in the permitting action[.]” *Id.* DAQ failed to provide adequate procedures for the Permit. EPA should address this issue, which may appear minor, because DAQ explained in its response to comments that the issue addressed below occurs with all DAQ’s permits and because it is part of DAQ’s overall sub-optimal public participation efforts.

DAQ’s web site said that the draft permit Revision 3 was revised on 4/18/08. *See* Ex. 1 of Ex. B. This information was wrong. In addition, the draft permit Revision 3 available on DAQ’s web site says that it was revised on 4/18/08. *See* Ex. 2 at First Page of Ex. B. Yet the public notice for draft permit Revision 3 was issued in November of 2009. This all leads to confusion as to whether Ex. 2 of Ex. B is actually the permit currently open for public comment. On December 8, 2009, the undersigned e-mailed DAQ’s Ben Markin, who is listed in the public notice as the person to whom questions should be directed.<sup>1</sup> The e-mail asked Mr. Markin for clarification on this issue. Mr. Markin did not reply to this e-mail prior to Sierra Club submitting its comments.

DAQ’s public participation practices were criticized by the Administrative Law Judge who reviewed the Spurlock 4 PSD permit and more recently by the U.S. EPA Administrator with

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<sup>1</sup> All documents referenced in these comments that are in DAQ’s possession and were incorporated by reference into Sierra Club’s comments. Thus, they should be part of the permitting record that DAQ provided to EPA.

regard to the Trimble II permit. Failure to make it clear what permit is even open for public comment is another example of public participation practices that are inadequate. Therefore, EPA should object to the Permit and require DAQ to post on its website and include in draft permits issued for public comment a place holder that will be filled in when (and if) the permit is finalized. The place holders on the web page and in the draft permit should make it clear to members of the general public that the permit they are looking at is currently in draft form.

In the response to comments, DAQ explains that the 4/18/08 revised date that DAQ placed on its web page and included in draft permit Revision 3 was actually the revision date for Revision 2, not Revision 3. In other words, DAQ admits that it included incorrect information on its web page and in the draft permit Revision 3. Providing wrong information to the public is not an adequate procedure required by 40 C.F.R. § 70.7(h). DAQ tries to justify providing the public with incorrect information by saying that it is standard practice for all permits. That only makes the situation worse. Consistently providing wrong information to the public does not somehow make the wrong information adequate.

**B. SEVERAL OF DAQ’S RESPONSES TO COMMENTS WERE INADEQUATE BECAUSE THEY DID NOT IDENTIFY THE CHANGES MADE AND THE BASIS FOR THE CHANGE.**

In response to the comments DAQ labeled as 5 and 9, DAQ said that it concurs in part and the “monitoring, recordkeeping and reporting requirements in the permit and the statement of basis have been revised in consideration to the commenter’s suggestions and the supplemental information submitted by EKPC.” Ex. C at 8, 10. In response to the comments DAQ labeled as 10 and 11, DAQ said that it concurs in part and the “monitoring, recordkeeping and reporting requirements in the permit and the statement of basis have been revised in consideration to the commenter’s suggestions.” Ex. C at 10, 11.

EPA should object because these are inadequate responses to this comment. They do not explain which provisions were changed and how they were changed, which were changed because of Sierra Club's comments and which were changed because of supplemental information submitted by EKPC and what that supplemental information was. Title V is not supposed to require members of the public to engage in detective work to figure out what the permitting agency has done. Rather, the permitting agency must provide in its response to comments an explanation of exactly what changes it made and why. The problem of DAQ's inadequate response to comments is particularly acute here because, as explained below, DAQ actually significantly weakened the protections afforded by the comment on the guise of concurring in part with the comment.

**2) THE PERMIT IS NOT IN COMPLIANCE WITH THE CLEAN AIR ACT BECAUSE IT FAILS TO CONTAIN A CASE-BY-CASE MACT DETERMINATION.**

**A. DAQ FAILED TO FOLLOW EPA'S ORDER AND ISSUE A REVISED PERMIT WITH A CASE-BY-CASE MACT DETERMINATION**

The Permit is illegal because it fails to contain a case-by-case MACT determination for Spurlock 4. *See* Ex. A at 25, Applicable Regulations. EPA ordered DAQ to perform a case-by-case MACT determination for Spurlock 4 and modify the Spurlock Title V permit to include that determination. *See In the Matter of EKPC Spurlock Station Permit V-06-007 (Revision 2)*, Order Granting Issue 3 of April 28, 2008 Clean Air Act Title V Petition (Order) attached as Ex. 3 to Ex B. Once EPA issued the Order, DAQ's only option was to submit a permit revised to meet the objection in the Order. 42 U.S.C. § 7661d(c); 40 C.F.R. § 70.8(d).

DAQ's public notice for the draft Revision 3 permit stated that EPA's objection asked DAQ to "address 112(g) applicability for all hazardous air pollutants," which DAQ proposes to do by "issuing a revised proposed permit [that] includes additional emission limits, monitoring,

testing, and recordkeeping conditions to ensure that limits of Hazardous Air Pollutants (“HAPs”) from CFB Unit 4 are enforceable as a practical matter and to preclude applicability of Section 112(g) of the Clean Air Act.”

What the EPA Order actually says, however, is that “EPA is granting issue 3 in the Petition because CFB unit 4 is subject to 112(g) case-by-case MACT requirements.” Ex. 3 at p. 5 to Ex. B. EPA also stated that “EPA agrees with Sierra Club that KDAQ must undertake a 112(g) case-by-case MACT determination for HAPs for Unit 4,” that “KDAQ must develop case-by-case MACT limits consistent with section 112(g),” and that “KDAQ must revise the EKPC Spurlock Title V permit to include case-by-case MACT limits.” *Id.* at p. 7. DAQ even acknowledged this in the Revised Permit Statement of Basis (Revised SOB) at 1 when DAQ stated:

Specifically, the Division was ordered to revise the final Title V permit to include case-by-case Maximum Achievable Control Technology (MACT) limits on HAP emissions for CFB Unit 4, and, if necessary, a compliance schedule with dates for compliance with the case-by-case MACT limits.

Ex. 4 at 1 to Ex. B.

However, in the Permit, DAQ disregarded the EPA’s Order. Instead, DAQ explains in the Revised SOB:

In a letter dated October 5, 2009, the Division requested EKPC to adequately address U.S. EPA’s Order regarding the applicability of CAA Section 112(g). The Division requested emission calculations and supporting information for all HAPs emitted from CFB Unit 4 to provide a case-by-case analysis for the control of individual HAPs, or as an alternative, submit a demonstration that CFB Unit 4 is minor for HAPs and not subject to the requirements of CAA Section 112(g).

...

The total combined potential HAP emissions for CFB Unit 4 are predicted not to exceed 22.5 tons per year. Additionally, potential emissions of HCl, the single HAP emitted in largest quantity, are predicted not to exceed 9.0 tons per year. Therefore, CFB Unit 4 is a

minor source for HAPs and is not subject to a case-by-case MACT determination requirement under CAA Section 112(g).

Ex. 4 at 1, 5

Thus, contrary to the EPA Order, DAQ did not make a case-by-case MACT determination for Spurlock 4 and modify the Spurlock 4 Title V permit to incorporate that determination. DAQ's failure to do so violates the Clean Air Act.

42 U.S.C. § 7661d(c) provides that DAQ must submit a permit revision to EPA that is "revised to meet the objection[.]" *See also* 40 C.F.R. § 70.8(d) (a revised permit must satisfy EPA's objection). Here, the objection was that the Spurlock Title V permit fails to contain a case-by-case MACT determination for Spurlock 4. Ex. 3 at 5, 7 to Ex. B. The Permit does not contain a case-by-case MACT determination for Spurlock 4. *See* Ex. A. Thus the Permit fails to meet EPA's objection in violation of 42 U.S.C. § 7661d(c) and 40 C.F.R. § 70.8(d).

Below we will explain why EPA is correct and that Spurlock 4 is currently subject to the case-by-case MACT requirements contrary to DAQ's latest decision. However, in the end, none of these reasons matter. EPA has issued its Order and the Clean Air Act, not to mention the Supremacy Clause of the U.S. Constitution, do not allow DAQ to unilaterally overrule EPA's Order. As the U.S. Court of Appeals for the 11<sup>th</sup> Circuit put it, "[w]hen it comes to the Title V permitting process, [DAQ] is not a board of pardons." *Sierra Club v. Johnson*, 436 F.3d 1269, 1280 (11<sup>th</sup> Cir. 2006).

DAQ's response to this comment begins by saying the "chronological order of events regarding Spurlock 4 permitting is important" but, after providing the chronology, the response fails to explain how the chronology in this case leads to the conclusion that DAQ can violate EPA's Order requiring it to issue a case-by-case MACT determination for Spurlock 4. Ex. C at

3-4. It is worth mentioning, however, that DAQ once again admits that it originally determined that Spurlock 4 was, by itself, a major source of HAPs.

DAQ goes on to claim that 112(g) only applies to newly constructed or reconstructed major sources. Ex. C at 4. As explained below, CAA § 112(g) also applies to modified major sources but DAQ is correct that a source must be a major source for CAA § 112(g) to apply. DAQ then claims that the first step of a case-by-case MACT determination is to determine if the case-by-case MACT standard applies and that because EPA did not address this issue, DAQ is free to address the applicability issue in its “case-by-case MACT” determination and conclude that the case-by-case MACT standard is not applicable because Spurlock 4 is a minor source. This argument fails for two related reasons.

One is that it is not true that the first step of a case-by-case MACT determination is an applicability determination. Rather, an agency does not start a case-by-case MACT determination until after it has determined that the case-by-case MACT standard applies. In other words, applicability determinations and case-by-case MACT determinations are two separate things. EPA’s Order did not say to DAQ to conduct an applicability determination and then if it is positive, a case-by-case MACT determination. *See* Ex. 3 to Ex. B. The Order rather requires DAQ to conduct a case-by-case MACT determination. *Id.*

The second reason DAQ’s argument fails is that the Order itself explains that DAQ must make a case-by-case MACT determination, which includes emission limits for all HAPs emitted by Spurlock 4. The Order starts out by acknowledging that the issue raised in the Petition, and thus the issue that the Order responds to, is whether “the permit lacks hazardous air pollutant (HAP) emission limits under section 112(g) of the CAA.” Ex. 3 at 2 of Ex. B (emphasis added), *Id.* at 4 (same). The Order continues, ordering that “KDAQ must undertake a 112(g) case-by-

case maximum available control technology (MACT) determination for all HAPs for CFB Unit 4.” *Id.* The Order goes on to once again state: “EPA is granting issue 3 in the Petition because CFB Unit 4 is subject to 112(g) case-by-case MACT requirements.” *Id.* at 5. Implicit in this statement is a determination, consistent with DAQ’s position at the time, that Spurlock 4 is a major source of HAPs. DAQ’s attempt to directly contradict the order and say that CFB Unit 4 is not subject to 112(g) case-by-case MACT requirement must be rejected, because it is contrary to 42 U.S.C. § 7661d(c) and 40 C.F.R. § 70.8(d), because it is wrong, and also because it endangers EPA’s Congressional-granted oversight authority in allowing state agencies to unilaterally overrule EPA orders. Finally, the plain language of the Order should end any debate on this issue as it provides: “KDAQ must revise the EKPC Spurlock title V permit to include the case-by-case MACT limits on HAP emission[.]” Ex. 3 at 7 to Ex. B (emphasis added). It should be undisputable that DAQ has not revised the EKPC Spurlock Title V permit to include the case-by-case MACT limits on HAP emissions. *See* Ex. A. Thus, EPA must object because the Permit fails to meet EPA’s objection.

Sierra Club notes that DAQ’s response to comment could mislead one to think that DAQ determined that Spurlock 4 is a natural minor source, that is it is physically incapable of emitting HAPs at over the major source threshold. The reality, however, is that DAQ added emission limits, monitoring, testing and reporting requirements in Permit, which was issued on December 22, 2009, over half a year after Spurlock 4 commenced commercial operations. *See e.g.* Ex. A at 27, Condition Section B.2(o). This fact further confirms EPA’s reasonableness in determining that case-by-case MACT emission limits apply because Spurlock 4 is a major source of HAPs.

**B. THE CLEAN AIR ACT'S "ONCE IN, ALWAYS IN" PROVISION MANDATES THAT SPURLOCK 4, WHICH COMMENCED CONSTRUCTION AND OPERATION, HAVE A CASE-BY-CASE MACT DETERMINATION**

The Clean Air Act provides that once a source is a major source of hazardous air pollutants and passes its first compliance date, i.e. the date it has to comply with an emission limit or other substantive requirement, it cannot subsequently avoid hazardous air pollutant emission limits by later obtaining a permit modification. *See e.g.* Ex. 5 at 5 to Ex. B. In other words, East Kentucky Power Cooperative cannot “unring” the Section 112 bell. Thus, even if the Order allowed DAQ to conduct an applicability determination at this point, which it does not, as a legal matter, DAQ should have concluded that Spurlock 4 must comply with the case-by-case MACT emission limits regardless of any synthetic minor cap on HAPs emissions.

Prior to commencing construction and operation of Spurlock 4, EKPC and DAQ both determined that Spurlock 4 had a potential to emit HAPs over the MACT major source threshold. *See* Ex 6 at 8th page to Ex. B (EKPC admitting: “When the application was submitted in 2004, Spurlock 4 was subject to the requirements of Section 112 of the Clean Air Act relating to the emissions of hazardous air pollutants (HAPs) based on EPA's December 2000 decision to list EGUs as a major source category.”); Ex. 7 to Ex. B (Prevention of Significant Deterioration Analysis for a Proposed New Electric Utility Boiler in Maysville, Kentucky, East Kentucky Power Cooperative Hugh L. Spurlock Generating Station E.A. Gilbert Unit 4 at p. 2-10, showing Spurlock Unit 4’s potential to emit of all hazardous air pollutants is 52.4 tons per year and potential to emit of a single hazardous air pollutant, hydrochloric acid, is 42.602 tons per year); Ex. 8 at 2 to Ex. B (Kentucky Division of Air Quality states that Spurlock Unit 4’s potential to emit of hydrochloric acid is 36 tons per year). *See also* 42 U.S.C. § 7412(a)(1) (defining “[m]ajor source” as “any stationary source or group of stationary sources located within a contiguous area

and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year of any [HAP] or 25 tons per year of more of any combination of [HAP]”). Spurlock 4 began emitting HAPs no later than April of 2009. Ex. 3 at 7 to Ex. B. By that date, Spurlock 4 was required to comply with MACT emission limits. In other words, Spurlock 4’s first compliance date was no later than April, 2009. However, it was not until May 27, 2009 that EKPC first submitted its application to attempt to limit its emissions to below the major source threshold. Ex. C at 4. It was not until December 22, 2009 that EKPC received the Permit which attempts to limit its emissions to below the major source threshold. Ex. A. Thus, the Permit, even if it did limit Spurlock 4’s PTE to below the major source threshold, does not, as a matter of law, mean that the case-by-case MACT requirements are not applicable.

DAQ responded to the comment on this issue by claiming the “Seitz memo” which is found as Exhibit 5 to Sierra Club’s comments, does not address case-by-case MACT standards. Ex. C at 4-5. This is not correct. The Seitz memo discussed Section 112 of the Clean Air Act. Ex. 5 at 1 to Ex. B. Section 112 included both Section 112(g) as well as Section 112(d). In any event, DAQ does not provide any explanation for why the “once in, always in” policy would apply to sources with a 112(d) standard but not with a 112(g) standard.

DAQ also explains that the D.C. Circuit did not decide whether electric generating units (EGUs) that commenced construction between March 29, 2005 and March 14, 2008 must comply with Clean Air Act § 112(g). However, EPA has directly answered this question in the affirmative. Ex. E at 1<sup>st</sup> page.

**C. EAST KENTUCKY POWER COOPERATIVE MODIFIED SPURLOCK STATION BY THE ADDITION OF SPURLOCK 4. THIS MADE THE CASE-BY-CASE MACT REQUIREMENTS APPLICABLE TO SPURLOCK 4**

East Kentucky Power Cooperative’s modification to the Spurlock Generating Station— by adding Unit 4— means that the case-by-case MACT requirements are also applicable to Spurlock 4 via 42 U.S.C. § 7412(g)(2)(A), which provides:

... no person may modify a major source of hazardous air pollutants in such State, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for existing sources will be met. Such determination shall be made on a case-by-case basis where no applicable emissions limitations have been established by the Administrator.

Prior to constructing Spurlock Unit 4, the Spurlock power plant was a major source for HAPs because it had the potential to emit greater than 10 tons of any single hazardous pollutant and more than 25 tons of all hazardous pollutants, combined, annually. *See e.g.* Ex. 8 at 2 to Ex.

B. In 2005, 2006 and 2007, actual emissions of just five HAPs were as follows:

	Hazardous Air Pollutant		
	2005 Emissions (in tons)	2006 Emissions (in tons)	(2007 Emissions) (in tons)
Beryllium	0.0124556	0.0152519	0.018983
Hydrochloric Acid	1495.3923104	1350.9402552	95.5957634
Hydrofluoric Acid	186.9377453	199.7449892	197.6923946
Lead	0.1834434	0.2042420	0.1777237
Mercury	5.0918791	5.4434016	5.6112215

*See* Ex 9 (2005 Emissions Inventory), p. 1 to Ex. B; Ex. 10 (2006 Emissions Inventory), p. 1 to Ex. B; Ex. 11 (2007 Emissions Inventory), p. 1 to Ex. B. Based on East Kentucky Power Cooperative’s own original permit application for Spurlock Unit 4, Unit 4 will emit, and thereby

increase hazardous air pollutants from the Hugh L. Spurlock Generating Station, by the following quantities of those five pollutants:

Hazardous Air Pollutant Potential to Emit from Unit 4 (in tons per year):

Beryllium	0.017
Hydrochloric Acid	36
Hydrofluoric Acid	5.764
Lead	0.07
Mercury	0.033

Ex. 8, p. 2 (HCl and lead potential to emit) to Ex. B; Ex. 7 (Permit Application), Table 2-2 to Ex.

B. It is appropriate to use these figures, rather than emission values in the Permit, because as explained below the values in the Permit are not enforceable.

This represents increases in the following percentages the Spurlock plant’s 2007 emissions:

	2007 HAPs Emissions;	Unit 4 PTE	% Increase from 2007 Emissions
Beryllium	0.018983	0.017	89.6%
Hydrochloric Acid	95.5957634	36	37.7%
Hydrofluoric Acid	197.6923946	5.764	6.9%
Lead	0.1777237	0.07	39.4%
Mercury	5.6112215	0.033	0.6%

*Id.*

Additionally, potential emissions of all HAPs increased by 52 tons per year after the addition of Spurlock Unit 4. Ex. 7, Table 2-2 to Ex. B (providing that Hazardous Air Pollutant emissions will increase 52.400 tons per year). Therefore, adding Unit 4 was a modification for purposes of 42 U.S.C. § 7412(g)(2)(A) because it was a “physical change in... a major source which increase[d] the actual emission of any hazardous air pollutant emitted by such source by more than a de minimis amount...” 42 U.S.C. § 7412(a)(5). This included increases of 36 ton of

Hydrochloric Acid (HCl) from the plant's emission rate in 2007 (37.7% increase) and of 5.76 tons of Hydrofluoric Acid from the 2007 emission rate (6.9% increase). The 52 ton increase in all HAP potential emissions is *more than twice* the threshold for an entire facility to be considered a "major source." 42 U.S.C. § 7412(a)(1) (defining a "major source" as any group of emission sources on a contiguous property that "25 tons per year or more of any combination of hazardous air pollutants."). Additionally, the 36 ton increase in Hydrochloric Acid, alone, is *more than three times* the threshold for an entire facility to be considered a "major source," and more than the threshold even when all HAPs are counted. *Id.* (defining "major source" as any source that emits more than 10 tons per year of one pollutant, or 25 tons per year of all pollutants). Moreover, the increases from 2007 emission rates represent significant percentages— well beyond "de minimis" increases. 42 U.S.C. § 7412(a)(5).

There is no regulation defining "de minimis" in 42 U.S.C. § 7412(a)(5), but no regulation is necessary. To the extent that EPA has weighed in on what qualifies as a "de minimis" amount of Hazardous Air Pollutants, it has used 1000 pounds per year (0.5 tons/year), or less. *See e.g.*, 60 Fed. Reg. 34,488 (July 3, 1995) (approving an operating permit program that includes exemptions from permit requirements for sources that emit, at most, 1000 pounds of HAPs). Even the allowable HAP emissions in the current Permit are well over this level at 9 tons for any individual HAP and 22.5 tons for all HAPs. Ex. A at 27, Condition B.2(o). For other Clean Air Act programs, EPA has defined "de minimis" as 2-4% of a regulatory threshold of such an ambient air quality impact standard. *See e.g.*, 45 Fed. Reg. 52,676, 52,707-08 (August 7, 1980) (establishing "de minimis" thresholds for increases from major modifications based on estimates of emissions that will result in ambient air impacts of 2-4% of the air quality standards); *see also* 61 Fed. Reg. 38,292 (July 23, 1996) ("The EPA believes that where a proposed source

contributes less than four percent to the [applicable air standard],” those emissions are de minimis). Sierra Club believes that these thresholds of 1000 pounds or 2-4% of the regulatory standard are well beyond the reasonable meaning of “de minimis,” especially for pollutants that do not have a “safe” level. But even applying them in this case as an overly generous definition of “de minimis” to East Kentucky Power Cooperative, the construction of Unit 4 causes HAP emission increases that are well in excess of 1000 pounds or 2-4% of regulatory thresholds. Here, the total HAP emission increase is above 104,000 pounds, well beyond 1000 pounds and more than 200% of the definition of a major source. Even the draft Permit allows an increase of 90 percent (22.5/25). No reasonable interpretation of de minimis could include a 90 percent increase. Therefore, the case-by-case MACT requirements are an applicable requirement to Spurlock 4, and really to all of the Spurlock units, because the addition of Spurlock 4 was a modification of Spurlock that triggered these requirements.

DAQ responded to the comment on this issue by citing to an inapplicable regulation. DAQ cites to 40 C.F.R. Part 63, and in particular 40 C.F.R. § 63.41. These are the regulations to implement Clean Air Act § 112(g)(2)(B). However, the above argument regarding Spurlock 4 requiring case by case MACT standards because it is a modification of a major source comes from Clean Air Act § 112(g)(2)(A). DAQ offers no reason, nor is there, why the regulations from a different part of the Clean Air Act should be applicable.

**3) THE PERMIT IS NOT IN COMPLIANCE WITH THE CLEAN AIR ACT BECAUSE THE SYNTHIC MINOR CAP IN THE PERMIT IS NOT ENFORCEABLE AS A PRACTICAL MATTER**

As explained above, EPA has already ruled that the case-by-case MACT requirements are applicable to Spurlock 4. That should be the end of the matter. If EPA objects to the Permit for its failure to contain case-by-case MACT emission limits for each HAP that Spurlock 4 will

emit, then EPA need not address the issues below that explain why the synthetic minor cap that DAQ added into the Permit is invalid because it is not enforceable as a practical matter.

**A) THE PERMIT MUST REQUIRE A HCL CEMS TO ENSURE COMPLIANCE.**

In response to comments, DAQ has removed the HCL CEMS as a method to determine compliance. Ex. C at 8-9 (“However, with regard to compliance with the HCL limit, compliance will be demonstrated by fuel analysis and the HCL removal efficiency determined from performance testing.”) Strictly speaking, this change does not remove the ability to use the HCL CEMS pursuant to the credible evidence rule. However, the problem is DAQ will certainly never use the HCL CEMS in an enforcement action to prove the Spurlock 4 has exceeded the HAPs limits in the permit. It is also unlikely that EPA would use the HCL CEMS considering that the Permit says that it is not the compliance demonstration method. If members the public attempted to use the HCL CEMS to enforce, they would have a very difficult time convincing a court that the HCL CEMS can be used to show a violation in light of the language of the Permit, the statement in the statement of basis that the HCL CEMS is not to demonstrate compliance and the fact that the Kentucky SIP does not have an explicit credible evidence rule. Therefore, EPA should object to the Permit for failure to state that the HCL CEMS will be used to determine compliance.

As DAQ itself has stated, HCL emissions vary at EKPC’s coal-fired CFBs by as much as 400% at the same unit, and that is during stack testing. *See* Ex. 12 at page 6-7 to Ex. B. The current “compliance method” of annual stack tests and fuel sampling does not provide any information about actual emissions during conditions such as startups, shutdowns and malfunctions that are other than the idealized conditions that were present during the stack test.

This means the monitoring is inadequate. *See e.g.* January 22, 2009 Letter from Carol Rushin, EPA Region 8 to Steven Pirner, Objecting to the Big Stone Power Plant Title V permit, at 10-11.

DAQ's position rejecting HCL CEMS for compliance also does not even make sense and is inconsistent with EPA Region 4's position. EPA has previously recommended the use of HCL CEMS to demonstrate compliance with a synthetic minor permit provision. *See* Ex. F at first page. DAQ does not explain why EPA's position is incorrect. DAQ says that it does not want to require HCL CEMS because there is no performance specification. DAQ does not provide any argument or evidence that HCL CEMS are unreliable. Rather, DAQ thinks that HCL CEMS are reliable enough to be an indicator of air pollution control devices. DAQ does not qualify or even attempt to explain the difference between being reliable enough to be an indicator of air pollution control devices versus reliable enough to determine compliance.

DAQ also implies that the best known minimum detection level is not low enough to determine compliance. *See* Ex. C at 9. This argument misses the mark because the HCL CEMS is most important during periods when HCL emissions are high, such as during startup, shutdown, malfunction or when conditions such as operations and coal quality happen to be conducive to high HCL emissions. As explained above, during these periods, the stack test derived emission factor is useless and "high" minimum detection levels are irrelevant. Thus, EPA should object to DAQ's failure to require an HCL CEMS to determine compliance.

**B) THE PERMIT DOES NOT HAVE SUFFICIENT TESTING, MONITORING, AND REPORTING FOR OTHER HAPS**

The Permit does not have sufficient testing, monitoring and reporting for HAPs other than HCL. For some HAPs, the Permit relies upon emission factors. EPA has repeatedly ruled that this is not sufficient for limits on the potential to emit. This is especially true because EPA has separately objected to the SO<sub>x</sub> BACT limit for Spurlock 4. This objection should lead to the use

of a different, lower sulfur coal, which will likely alter some of the emission factors. The emission factors are further problematic because the emission factors are in lbs/MMBtu heat input and there is no limit on the heat input in the Permit and no requirement to report the actual heat input in the semi-annual or annual compliance reports. For other HAPs, the Permit relies on one stack test over the lifetime of the Permit. Again, EPA has repeatedly held that one stack test over the lifetime of a permit is not sufficient.

DAQ responds to this comment by simply getting rid of all requirements for using the monitoring data from any of the other HAPs so that there are no limits on HAPs emissions except for HCL. Ex. C at 10 (“The permit and statement of basis have been revised to clarify that compliance with the [HCL] limit ensures compliance with the total HAP limit.”) This is completely illegal as a source must be limited to below 10 tons of any HAP and 25 tons of all HAPs, not just HCL. There is no factual or legal basis for this major revision to the Permit.<sup>2</sup> Rather, cyanide is listed in the Permit with an emission factor of approximately 40% of HCL. In addition, emissions from all other HAPs combined is significantly greater than HCL alone.

The Permit must require CEMs for those HAPs which can be measured by CEMS. DAQ responds to this comment by saying that the emission factors used in the Permit mean that CEMS are not need. This circular logic must fail. DAQ is saying that they assume that emissions of the other HAPs are so low that monitoring is not needed. However, DAQ would need monitoring data, including monitoring data during all operating conditions, to make such an assumption.

For those HAPs that cannot be monitored by the CEMS, the Permit should require annual stack tests to come up with an emission factor including emission factors for startup, shutdown and malfunction of the relevant control equipment for each HAP. For those HAPs whose

emissions are affected by coal quality, the stack test should include an analysis of coal quality. The Permit should then require daily coal quality analysis and the coal quality analysis should be used to adjust the emission factor. The Permit must also have an enforceable heat input limit and a requirement to report actual heat input, as well as monthly and 12 month rolling averages of mass emissions of all HAPs.

**C) THE REVISED STATEMENT OF BASIS IGNORES THE PERMIT'S PROVISION ALLOWING FOR THE USE OF TIRE DERIVED FUEL**

The Permit and Revised SOB are inadequate because they ignore that fact that Spurlock 4 is permitted to burn up to 10% tire derived fuel. The Revised SOB contains no analysis of how burning tire derived fuel will affect Spurlock 4's HAPs emissions. *See Ex. 4 to Ex. B.* In addition, the Permit does not require any stack testing to see if emissions of HAPs other than HCL are higher when burning tire derived fuel than when burning coal. *See Ex. A.* Therefore, the Permit either needs to delete the authorization to burn tire derived fuel or it needs to require stack testing of all HAPs when burning the maximum permitted tire derived fuel and the creation of emission factors for use when burning tire derived fuel.

In response to this comment, DAQ said “[p]erformance testing, including when [tire derived fuel] is combusted, shall be conducted in accordance with 401 KAR 50:045.” Ex. C at 11. However, the Permit does not actually say that Spurlock 4 must do stack testing when burning tire derived fuel. It is possible that one could infer that from Condition B.4.m, but possible inferences do not make enforceable permit conditions. In addition, Condition B.4.m would need to explicitly explain how the data from stack tests and fuel testing are to be used to

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<sup>2</sup> Furthermore, DAQ would have to have a new public comment period to make such a dramatic change in the Permit. EPA should object for DAQ's failure to do so. Obviously, Sierra Club could not have commented on this before DAQ did it.

determine compliance with the synthetic minor cap for HAPs including during startup, shutdown and malfunction.

### **III. REQUESTED RELIEF**

Therefore, the reasons explained above, EPA must object to the Permit. This would be the fourth objection to the permits for this facility. Considering that the pollution from this facility can kill innocent people and that the facility was constructed and is now operating with an illegal permit, it is clearly time for EPA to take further action. Specifically, EPA has a mandatory duty to modify, terminate or revoke the Permit and add in case-by-case MACT emission limits because DAQ will likely have issued the final Permit by the time EPA issues its objection. 42 U.S.C. § 7661d(b)(3) (emphasis added) (“If the permitting authority has issued a permit prior to receipt of an objection by the Administrator under paragraph (2) of this subsection, the Administrator **shall** modify, terminate, or revoke such permit and the permitting authority may **thereafter** only issue a revised permit in accordance with subsection (c) of this section.”)

Respectfully submitted,

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