#### BEFORE THE ADMINISTRATOR

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Proposed Operating Permit for:

LOUISVILLE GAS & ELECTRIC to operate the proposed source located at 487 Corn Creek, Bedford, Trimble County, Kentucky

Proposed by the Commonwealth of Kentucky, Environmental and Public Protection Cabinet Permit No. V-02-043 Revision 2 Source I.D. No. 21-223-00002

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT FOR THE LOUISVILLE GAS & ELECTRIC GENERATING STATION LOCATED AT 487 CORN CREEK, BEDFORD, TRIMBLE COUNTY, KENTUCKY

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SAVE THE VALLEY
SIERRA CLUB

On behalf of:

VALLEY WATCH

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Date: March 2, 2006

Pursuant to Clean Air Act § 505(b)(2) and 40 CFR § 70.8(d), Save the Valley, Valley Watch and Sierra Club hereby petition the Administrator ("the Administrator") of the United States Environmental Protection Agency ("U.S. EPA") to object to the proposed Title V Operating Permit for the proposed source located at 487 Corn Creek, Bedford, Trimble County. The permit was proposed to U.S. EPA by the Commonwealth of Kentucky, Environmental and Public Protection Cabinet (the "Cabinet"). The petitioning organizations provided comments to the Cabinet on the draft permit. A true and accurate copy of those comments is attached. This petition is filed within sixty days following the end of U.S. EPA's 45-day review period as required by Clean Air Act § 505(b)(2). The Administrator must grant or deny this petition within sixty days after it is filed.

If the U.S. EPA Administrator determines that this permit does not comply with the requirements of the Clean Air Act ("CAA") or 40 C.F.R. Part 70, he must object to issuance of the permit. See 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."). The permit fails to comply with the applicable CAA requirements and/or the requirements of 40 C.F.R. Part 70 in a number of ways. First, the public participation requirements found in 40 C.F.R. § 70.7(h) and in Kentucky's State Implementation Plan ("SIP") were not complied with during the issuance of the permit. Second, the permit does not include the applicable NSR requirements. Finally, it violates U.S. EPA policy because it contains provisions that are not practically enforceable. For all of these reasons, the permit is not in compliance with the applicable federal requirements and the Administrator must object to it.

# I. THE ADMINISTRATOR MUST OBJECT TO THE PERMIT BECAUSE THE PUBLIC PARTICIPATION REQUIREMENTS FOR ISSUING IT WERE NOT MET.

The Administrator must object to the permit because the opportunity for public participation afforded by the Cabinet regarding the Permit violated state and federal Title V and PSD public participation requirements. 42 U.S.C. 7470(5), 401 KAR 52:020 Section 25 (citing 401 KAR 52:100), 40 CFR 70.7(h), 401 KAR 52:100, 40 CFR 51.166. These violations include a failure to make available for public review all information contained in the permit application, the final permit and supporting materials, 401 KAR 52:100 Section 8; and a failure to grant a meaningful extension of the minimum comment period, 401 KAR 52:100 Section 2(a). As a result of these procedural violations, the public could not review and comment on important aspects of the permit and the agency could not consider comments that the public otherwise would have submitted. Such comments and consideration could have resulted in a materially different permit than the final permit issued by the Cabinet, and ultimately in different levels of emissions coming from the permitted new unit.

Public participation is at the core of the Clean Air Act's Prevention of Significant Deterioration ("PSD") program, whose purpose is to "assure that any decision to permit increased air pollution in any area ... is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process." 42 U.S.C. § 7470(5). The Title V process prioritizes public participation as well: a Title V permit, permit modification or renewal "may be issued only if... the permitting authority has complied with the requirements for public participation" outlined by the federal Title V regulations. 40 C.F.R. § 70.7(a)(iii) and (h). The

Cabinet issued a single combined Title V/PSD permit; therefore, public participation requirements for both the PSD and Title V programs are applicable to the present case.

Violations of public participation requirements compel the Administrator to object. *Sierra Club v. Johnson*, 2006 U.S. App. LEXUS 1380 (11<sup>th</sup> Cir. 2006) (vacating the U.S. EPA's approval of a Title V permit that the state issued following a violation of public participation requirements). The Administrator must object because the public's lack of access to relevant information forecloses "meaningful assessment" of the issues and prevents the public "from making meaningful substantive comments." *See Sierra Club v. State Bd. of Forestry*, 876 P.2d 505, 519 (Cal. 1994); *Friends of the Clearwater v. McAllister*, 214 F. Supp. 2d 1083, 1089 (D. Mont. 2002). Where a state agency fails to comply with Clean Air Act public participation requirements in a permitting decision, the Administrator may not approve the final permit. *See*, *e.g., Sierra Club*, 2006 U.S. App. LEXIS 1380 (citing 40 C.F.R. § 70.7(a)(1)(ii) that "permitting authorities may not issue a Title V permit unless all of the public participation requirements" are satisfied and vacating the United State EPA order approving of the state's Title V permit). The Administrator therefore must object to the Permit.

# A. Federal and State Regulations Governing Title V and Prevention of Significant Deterioration Permitting Decisions Require the Cabinet to Provide Adequate Opportunity for Public Participation.

Title V federal regulations outline the minimum steps that state permitting authorities must take to ensure informed public participation. First, the regulations require that the permitting authority publish notice in a newspaper "and by other means if necessary to assure adequate notice to the affected public." 40 C.F.R. § 70.7(h)(1). The notice must identify, among other things, contact information for "a person from whom interested persons may obtain additional information, *including copies* of the permit draft, the application, all relevant

supporting materials... and all other materials available to the permitting authority that are relevant to the permit decision." 40 C.F.R. § 70.7(h)(2) (emphasis added). The regulations also mandate that the state permitting authority provide at least 30 days for public comment. 40 C.F.R. § 70.7(h)(4).

Giving effect to the Clean Air Act's charge to include the public in PSD decisionmaking, federal regulations outline the minimum procedural requirements that all states must include in their State Implementation Plans ("SIPs"). 40 C.F.R. § 51.166(q). In permit cases, the reviewing body must make available in at least one location all materials the applicant submitted, the preliminary determination, and other materials considered in making the preliminary determination. 40 C.F.R. § 51.166(q)(2)(ii). The agency also must provide opportunity for the submission of written public comment and for comment at a public hearing, publish notice of these opportunities, and send a copy of the notice to the applicant and numerous affected public entities. 40 C.F.R. § 51.166(q)(2)(iii)-(iv). The reviewing body then must consider all timely submitted written comments and all comments received at any public hearing in making its final permit decision. 40 C.F.R. § 51.166(q)(2)(vi).

Kentucky employs a single set of requirements to implement both the federal PSD and Title V public participation rules, which thus must be read consistently with the minimum federal requirements. 401 KAR 52:100; 401 KAR 52:020 Section 25 (referencing 401 KAR 52:100 for requirements regarding public review of Title V permits). The Kentucky regulations are as follows. The Environmental and Public Protection Cabinet ("Cabinet") must provide a "minimum of thirty (30) days for public comment" (emphasis added) and "prepare a response to the comments received during the comment period." 401 KAR 52:100 Section 2(1). Notice of the comment period must be published in a newspaper of wide local circulation, id. at Section

4(1); the comment period must begin on the date the public notice is published and end thirty days after the publication date, assuming no extension under 401 KAR 52:100 Section 2(1)(a). Importantly, the Cabinet must "make available for public inspection all information... contained in the (a) Permit application; (b) Draft permit; and (c) Supporting materials." *Id.* at Section 8. This information must be made available in its entirety at each of three locations: (a) the main office of the Cabinet in Frankfort, Kentucky; (b) the Cabinet's regional office having jurisdiction over the source, in this case the Florence Regional Office due to the proposed unit's location in Bedford, Kentucky within Trimble County; and (c) the local public library or office of the county clerk in the county where the source is located, here the Trimble County Clerk in Bedford. Of equal importance, the Cabinet must "consider all written comments received during the public comment period." *Id.* at Section 2(3)(a).

# B. The Administrator Must Object to the Permit Because the Cabinet Failed to Provide Adequate Opportunity for Public Participation in the Trimble PSD Permitting Process.

The Administrator must object to the permit because the public participation process was deficient in three ways. First, the Cabinet made neither the entire permit application nor all supporting materials available to Petitioners. Second, the Cabinet's unresponsiveness and delay in responding to members of the public seeking to participate in the Trimble permitting decision violate the requirement for a 30-day minimum comment period. Third, the Cabinet unreasonably failed to meaningfully extend the comment period to correct its delays in providing information and informational omissions and to give the public adequate time to review the file.

1. The Administrator must object to the permit because the Cabinet made neither the entire permit application nor all supporting materials available to Petitioners.

The Administrator must object to the permit because the Cabinet violated the requirement that it make available for public inspection all information contained in the permit application, draft permit, and supporting materials. 401 KAR 52:100, Section 8; 40 C.F.R. § 70.7(h)(2); 40 C.F.R. § 51.166(q)(2)(ii). The Cabinet failed to make the complete permit application and supporting materials available to Petitioners. The permit information that the Cabinet provided to Sierra Club member Joan Lindop and expert Phyllis Fox on their separate visits to the Cabinet's office was missing a CD-ROM that included carbon monoxide air quality modeling analyses. Petitioners learned of this disk's existence in February 2006 in the course of discovery during a state administrative review of the Permit, when the Cabinet produced the disk as part of the permit administrative record. (Ex. B, Photocopy of CD-ROM; Ex. C, Prehearing Conference Report and Order Scheduling Inter Alia Formal Administrative Hearing.) The disk is dated November 7, 2005, indicating that the agency could not have made it available for the public comment period in August of the same year. (Ex. B.) An agency cannot rely on belated information to provide information or analysis that should have been subject to public review and comment as part of the initial decisionmaking process. See, e.g., Idaho Sporting Congress v. Alexander, 222 F.3d 562, 566-568 (9th Cir. 2000); Friends of the Clearwater, 214 F. Supp. at 1089.

Further, when Dr. Fox went to the Cabinet's Frankfort office to obtain the full file in person, the Cabinet provided the permit application and a box of jumbled and disorganized documents, some of which clearly did not even belong in the Trimble permitting file. (Ex. D, Decl. of Phyllis Fox at ¶ 4.) While Dr. Fox was trying to copy the application for her use and

review, the office copying machine broke down. *Id.* at ¶ 6. Dr. Fox then tagged pages that she deemed the most important and made a public records request for them, asking that the Cabinet rush the pages to her as soon as copies could be made due to the impending comment deadline. *Id.* Dr. Fox made her request on the day of her visit, July 29, 2005; she received the requested copies during the third week of August, several days after the Cabinet finally had processed her request on August 15th, long after Sierra Club had filed its comments, and nearly two weeks after the comment period had closed. *Id.*; Ex. E, Commonwealth of Kentucky, Disposition of Request to Inspect Public Records. The combination of the jumbled, disorganized file, lack of readily available copies, lack of access to the copy machine and not providing the requested documents until after the close of the comment period truly cannot be said to qualify as making the complete file available to the public.

The Cabinet additionally omitted key supporting materials from the permit information that it made available to Petitioners. In contrast to the jumbled box that it gave to Dr. Fox, the Cabinet did not provide Mrs. Lindop, a layperson, with any supporting materials. (Ex. F, Decl. of Joan Lindop at ¶ 7.) More specifically, the Cabinet did not include the "minor permit revision applications supporting the creditable emission decreases [in nitrogen oxides and sulfur dioxide]" that the department cites as the basis for the applicant's "netting" calculations. (Commonwealth of Kentucky, Division of Air Quality, Response to Comments on the Title V Permit No: V-02-043 Revision 2, at 4 (Nov. 17, 2005).) These minor permit revision applications neither were in the application provided to Ms. Lindop when she went to the Cabinet's Frankfort office as noted above, nor in the box of jumbled documents that the Cabinet gave to Dr. Fox at the same office. (Exs. F at ¶ 7 and D at ¶ 4.) The mere presence of these documents in some file room at the agency is not making the documents "available" to the public, as the public must rely

on agency representatives to retrieve the relevant file(s). Nor should a member of the public, who may have little to no experience with air permits, bear the burden of having to request each relevant document by name. The agency alone knows which information it used in making its permit decision and it is the agency's duty to make that information available.

Other supporting materials absent from the public permit file were LG&E's plan for periods of startup and shutdown, as well as the operating and maintenance procedures and manufacturer's recommendations for the proposed unit's equipment. In its Response to Comments, the applicant and the Cabinet acknowledge the absence of a startup and shutdown plan in the materials subject to public review during the July-August 2005 comment period. (Response to Comments, at 23-24.) The Cabinet in addition has recognized the need for public review of these materials by committing to make the plan available for public review once LG&E has submitted a plan. *Id.* An agency, however, cannot issue a final decision and later provide materials for review: the issued decision necessarily and improperly relied on information that was not subject to public comment. *See, e.g., Idaho Sporting Congress*, 222 F.3d 562; *Friends of the Clearwater*, 214 F. Supp. at 1089; *Sierra Club v. State Bd. of Forestry*, 876 P.2d at 519 (participation requirements are violated where an agency fails to provide information important to its decision).

In the words of the Eleventh Circuit, the agency's position on its failures to provide all relevant information seems to be that "too late can still be close enough for government work" and "not much harm, not much foul." *Sierra Club v. Johnson*, 2006 U.S. App. LEXIS 1380, \*11 and \*25 (11<sup>th</sup> Cir. 2006). This position is unacceptable. *See, e.g., id.; Grazing Fields Farm v. Goldschmidt*, 626 F.2d 1068 (1<sup>st</sup> Cir. 1980) (agency cannot base its decision on analyses that were not subject to public review); *Sierra Club*, 2006 U.S. App. LEXIS 1380, \*38-40 (state Title

V permitting authority must make available to the public during the comment period all information that the agency used in the permit review process). As a result of the above omissions during the comment period, the public could not provide meaningful comment on the permit. For instance, lacking the minor permit revision applications, Petitioners were unable to determine whether the claimed creditable emission decreases meet the regulatory standards or to make detailed comments as to how the creditable decreases should have been analyzed or otherwise could have been achieved at the facility in a manner in keeping with the regulatory requirements. By way of another example, without the carbon monoxide modeling disk that was missing from the application, Petitioners were not be able to review the required demonstration that the new unit would not cause or contribute to air pollution in violation of an applicable maximum allowable increase over baseline concentration or over an applicable National Ambient Air Quality Standard ("NAAQS") in any area. 401 KAR 51:017 Section 10(2); 42 USC § 7475(a)(3)(A); 40 CFR § 51.166(k)(2). The Administrator must object because the public's lack of access to relevant information forecloses "meaningful assessment" of the issues and prevents the public "from making meaningful substantive comments." See Sierra Club v. State Bd. of Forestry, 876 P.2d 505, 519 (Cal. 1994); Friends of the Clearwater v. McAllister, 214 F. Supp. 2d 1083, 1089 (D. Mont. 2002). It goes without saying that the Cabinet cannot consider or benefit from comments that Petitioners were unable to make. 401 KAR 52:100, Section 2(3)(a).

The Administrator must object to the permit because in the above ways the Cabinet violated the Kentucky rule that it make available for public inspection all information contained in the permit application, draft permit, and supporting materials.

2. The Administrator must object to the permit because the Cabinet's unresponsiveness and delay in responding to members of the public seeking to participate in the Trimble permitting decision violate the 30-day minimum comment period requirement.

The Administrator must object to the permit because the plain language of the federal and Kentucky Title V/PSD public participation regulations require that all relevant documents will be available to interested persons for at least the full 30 days. This conclusion is implicit in the dual requirements of a 30-day minimum comment period and public availability of permit documents during the comment period. See Ohio Chamber of Commerce Et Al. v. State Emergency Response Commission, 64 Ohio St. 3d 619 (Ohio 1992) (provision must be read in context with the federal scheme and in pari materia with the remainder of the statute); Thomas Jefferson Univ. v. Shalala, 512 U.S. 504 (1994) (courts must adhere to the unambiguous language of a regulation). Any delay by the Cabinet in making available a complete set of application, permit and supporting documents thus constitutes a violation of the requirement for a 30-day comment period. As detailed above, the Cabinet failed to timely make available all relevant permit information to Petitioners who made requests within the comment period. When Sierra Club member Joan Lindop first attempted to gain access to the public file in late June 2005, she received conflicting messages from the Cabinet's Frankfort office and the City of Bedford as to where she could review the file, which delayed her obtaining the permit information. (Ex. F at ¶ 4.) After clarifying the location, Ms. Lindop was not able to make an appointment to obtain the files at the Frankfurt office until July 20, 2005. *Id.* at ¶ 4. It was finally then that the file clerk gave Ms. Lindop a copy of LG&E's permit application for the new Trimble unit. Adding to the delay, the information that Ms. Lindop received was incomplete, necessitating a trip from California to Kentucky by Dr. Fox to obtain the remaining information. Even after these two trips, the Cabinet still had not provided Petitioners with all relevant permit information and failed to do so through the end of the comment period. These omissions and delays effectively reduced the comment period to significantly less than the required 30-day minimum and the Administrator must consequently object to the permit.

### 3. The Administrator must object to the permit because Cabinet unjustifiably failed to meaningfully extend the comment period.

The Administrator must object to the permit because Cabinet unreasonably failed to meaningfully extend the comment period to correct its delays in providing information and informational omissions and to give the public adequate time to review the file. The Cabinet has the regulatory authority to extend the Title V/PSD permit comment period. 40 C.F.R. § 70.7(h)(4) ("the permitting authority shall provide at least 30 days for public comment"); 401 KAR 52:100 Section 2(1)(a) ("the cabinet shall provide... a minimum of thirty (30) days for public comment.") In this case, an extension of the minimum 30-day comment period was required to remedy the gross inadequacies in the Cabinet's provision of relevant permit documents. The Cabinet's failure to provide an extension perpetuated its violation of the public documents provision set forth above. 401 KAR 52:100 Section 8; 40 C.F.R. § 70.7(h)(2).

In addition to the Cabinet's poor performance in providing the public with permit information, several other factors weighed in favor of the Cabinet's granting Petitioners' requests for a meaningful extension. (Ex. G, Email from John Blair to John Lyons and reply; Ex. H, Letter from Joan Lindop to John Lyons.) These factors include the technical complexity of the PSD regulations and the Permit, the voluminous relevant documents, and the large number of new source applications being submitted in a short period of time. (Ex. G.) In other analogous permitting cases, Kentucky and other states have granted comment period extensions of up to 4 months. *See* Exs. I, J, and K; *cf.* Exs. L and M (a thirty-day comment period is sufficient where no public comments are filed and no requests for extensions are made). Thus, the Cabinet should

have granted an extension of the comment period when, upon requests by Petitioners, it became apparent that the 30-day comment period was insufficient for adequate public participation. (Exs. A, G, and H.) The Cabinet instead tersely denied extension requests from Petitioners without providing any justification in violation of the Title V/PSD policy requiring informed public participation. (Ex. N, Email of John Lyons to John Blair; 42 U.S.C. § 7470(5).) The Administrator must object to the permit because a longer comment period was justified here and the Cabinet failed to provide such an extension.

# II. THE ADMINISTRATOR MUST OBJECT TO THE PERMIT BECAUSE IT DID NOT INCLUDE THE APPLICABLE NEW SOURCE REVIEW REQUIREMENTS.

New Source Review ("NSR") requirements fall within "applicable requirements" that must be included in a Title V permit. 401 KAR 52:020 Section 5; 401 KAR 51:017 Section 1; 401 KAR 51:017 Section 8. Where NSR applies and the need to utilize Best Available Control Technology ("BACT") is triggered, BACT limits must be included in the Title V Permit. The Administrator must object to the present permit because (1) there are a number of areas where the NSR analysis was erroneous and led to a failure to include BACT limits in the permit where they are otherwise required; and (2) there are BACT limits included in the permit that are incorrect or otherwise insufficient to meet the requirements for BACT.

## A. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Requiring BACT for Mercury.

The Administrator must object to the permit because the permit is required to contain provisions requiring BACT for mercury but fails to do so. Mercury falls within the definition of "regulated NSR pollutant" pursuant to 401 KAR 51:001 Section 1(210)(b). Mercury emissions of 0.043 tons per year exceed the Cabinet's definition of "significant", which is "any emissions rate" pursuant to 401 KAR 51:017 and 401 KAR 51:001 Section 1(221)(b). Consequently, 401

KAR 51:001 Section 1(221), 401 KAR 51:017 Section 1(4), 401 KAR 51:017 Section 8, and 401 KAR 51:001 Section 1(210)(b) require a NSR analysis and application of BACT for mercury in the permit. The permit violates the applicable requirements at 401 KAR 51:017 Section 1(4) and 401 KAR 51:001 Section 1(210)(b) because it classifies mercury as a "non PSD pollutant." The permit violates the applicable requirements at 401 KAR 51:001 Section 1(221), 401 KAR 51:017 Section 1(4), 401 KAR 51:017 Section 8, and 401 KAR 51:017 Section 1(210)(b) because it fails to include a NSR analysis and require BACT for mercury. For these reasons, the Administrator must object to the permit.

## B. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Requiring BACT for $NO_x$ and $SO_2$ .

The Administrator must object to the permit because it fails to require BACT for NO<sub>x</sub> and SO<sub>2</sub>. 401 KAR 51:017 Section 8. The analysis for netting out of SO<sub>2</sub> and NO<sub>x</sub> was erroneous in the assessment of whether decreases were creditable and contemporaneous. 401 KAR 51:017 Section 1(4); U.S. EPA-approved SIP 401 KAR 51:017 Section 1(30); New State Rules 401 KAR 51:001 Section 1(146); 40 CFR 52.21(b) (3) (vi) (c). Applying those requirements correctly, the unit does not net out of NSR for SO<sub>2</sub> and NO<sub>x</sub> and BACT must be included in the permit for NO<sub>x</sub> and SO<sub>2</sub>. 401 KAR 51:017 Section 8.

First, the emissions decreases used to in the netting analysis were not creditable. The analysis for the permit failed to apply the NSR requirement in netting compelling creditable decreases to be of the same qualitative significance for public health and welfare as the increases. The Cabinet acted contrary to U.S. EPA-approved SIP requirement found at 401 KAR 51:017 Section 1(30) and 40 CFR 52.21(b) (3) (vi) (c) in failing to determine whether the decrease used in the netting analysis for  $NO_x$  and  $SO_2$  emitted by Unit 1 has approximately the same qualitative significance for public health and welfare as that attributable to the increase in  $NO_x$  and  $SO_2$ 

respectively from the proposed new unit. The new state NSR rules and U.S. EPA-approved SIP NSR rules both require that a creditable decrease in emissions have "approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change." U.S. EPA-approved SIP 401 KAR 51:017, Sec. 1(30)(f)(3); New State Rules 401 KAR 51:001, Sec. 1(146)(f)(3).

As the U.S. EPA pointed out in its comments on the draft permit:

For an emissions decrease to be creditable in a netting analysis, it must have approximately the same qualitative significance for public health and welfare as that attributed to the increase. KDAQ should verify that the decreases in  $SO_2$  and  $NO_x$  emissions from Unit 1 meet the same qualitative significance criterion. This assessment needs to take into account the dispersion characteristics of Unit 1 in comparison with the dispersion characteristics of the proposed new  $NO_x$  and  $SO_2$  emissions units (primarily the new pulverized coal boiler and the new auxiliary boiler).

(Gregg Worley, U.S. EPA Region 4, Comments on Draft Permit.) However, the Cabinet dismissed this comment in its Response to Comments and made no substantive revisions to the permit in response to this point.

To satisfy "same qualitative significance for public health and welfare" requirement, the increases from the project should be offset by decreases at Unit 1 that occur in the same amount and at the same time. If the project emits X tons/day of  $NO_x$  and Y tons/day of  $SO_2$  (see e.g., Permit, p. 73, Condition 2(g)), the emission reduction at Unit 1 should provide X tons/day of  $NO_x$  reduction and Y tons/day of  $SO_2$  reduction each day. Absent such a provision Trimble may not net out of PSD for  $NO_x$  or  $SO_2$ .

This is of heightened concern for NO<sub>x</sub>. An SCR was installed on Trimble Unit 1 in 2002 to comply with the NO<sub>x</sub> SIP Call, generate NO<sub>x</sub> emission reductions, and protect air quality in Kentucky and downwind states. Presumably these reductions were also used as part of the state's maintenance plan and reasonable further progress requirements to achieve compliance with the

1-hour ozone standard. Thus, this SCR has historically only operated during the ozone season. Since this SCR was installed, Trimble's ozone season NO<sub>x</sub> emissions have been much lower than during the balance of the year. *See*, for example, the 2004- 2005 data in attachment F. The record failed to examine all of the reasons for Trimble reducing NO<sub>x</sub> emissions and assessing whether those reasons preclude use of the reductions in a netting calculation.

The applicant proposes to achieve the 1,485 ton/yr NO<sub>x</sub> emission reduction at Unit 1 through a combination of increased removal efficiency and increased SCR operating time. SOB at 5. These NO<sub>x</sub> emission reductions do not approximate the NO<sub>x</sub> emission increases in terms of protecting public health and welfare. Based on historic data summarized in attachment F, the majority of the NO<sub>x</sub> reduction is likely to occur by operating the SCR during the non-ozone season because the SCR is currently running at lose to design capacity to comply with the NO<sub>x</sub> SIP call. In turn, this means a marked increase in NO<sub>x</sub> emissions during the ozone season, precisely the time when increased

 $NO_x$  emissions would have their greatest impact on ozone levels. Thus, the  $NO_x$  emission reduction proposed to offset the  $NO_x$  emission increase from the project will not occur in the same amount and at the same time as the emission increases from project. Instead, Trimble will result in an increase in ozone levels downwind of Trimble in the summer months. This will result in an increase in the multitude of human health and welfare effects associated with elevated levels of ozone. Therefore, the proposed  $NO_x$  reductions will have less significance for public health and welfare as opposed to the proposed  $NO_x$  increases which will cause higher ozone levels. This is unlawful.

Second, the NO<sub>x</sub> and SO<sub>2</sub> emissions decreases used to in the netting analysis were not contemporaneous. EPA-approved SIP 401 KAR 51:017 Section 1(30); New State Rules 401

KAR 51:001 Section 1(146). In calculating netting for NO<sub>x</sub> and SO<sub>2</sub>, baseline emissions were erroneously used instead of actual emissions as required by both the EPA approved SIP and the new state NSR rules. EPA-approved SIP 401 KAR 51:017 Section 1(30); New State Rules 401 KAR 51:001 Section 1(146). When actual emissions are used instead of baseline emissions, the project does not net out of NSR for NO<sub>x</sub> and SO<sub>2</sub>, and BACT must be included in the permit for NO<sub>x</sub> and SO<sub>2</sub>. 401 KAR 51:017 Section 8. For instance, the creditable SO<sub>2</sub> emission reduction was calculated by subtracting the Unit 1 SO<sub>2</sub> emission limit of 4,822 ton/yr (Permit, p. 4, Condition 2.f) from 8,047 ton/yr, the average SO<sub>2</sub> emissions from Unit 1 in the years 2001 and 2002. SOB at 6, Table 3.2. This results in a reduction of 3,225 ton/yr (8,047 - 4,822 = 3,225). However, as discussed above, the wrong baseline was used. Actual emissions for purposes of netting should have been used. Actual emissions are those that occur either immediately prior or in the 2 years prior to the new SO<sub>2</sub> limit, which will allegedly become effective January 1, 2006. Under the new state NSR rule, the SO<sub>2</sub> emissions immediately prior to the effective data should be used. The SO<sub>2</sub> emissions in 2004 were 4,725 ton/yr, substantially lower than the 8,047 ton/yr assumed by the applicant. Thus, actual baseline emissions were lower than the proffered permit limit of 4,822 ton/yr, and no SO<sub>2</sub> reduction is warranted. The SO<sub>2</sub> emissions from the project are 3,225 ton/yr. SOB at 6, Table 3.3. Thus, the project triggers PSD for SO<sub>2</sub>.

Further, the claimed SO<sub>2</sub> reduction was required to comply with another regulatory program, the Acid Rain Program. The SO<sub>2</sub> emissions from Unit 1 have consistently declined since 1999, from 14,664 ton/yr to 4,725 ton/yr, to comply with the Acid Rain Program, 40 CFR Part 73. *See* annual totals in Attachment A. Using these Acid Rain reductions to also net out of PSD is double dipping. The choice of baseline years that are not immediately prior to the

effective date of the SO<sub>2</sub> permit limit, or which are not otherwise adjusted to account for future regulatory requirement, cannot also be used to net out of PSD. NSR Manual at A.48.

In sum, because the netting analysis was incorrect for  $NO_x$  and  $SO_2$  and the decreases used for netting were neither contemporaneous nor creditable, the project does not net out of NSR for  $NO_x$  or  $SO_2$ . As a result, BACT is required for both  $NO_x$  and  $SO_2$  and the administrator must object to the permit because it fails to contain conditions requiring BACT for  $NO_x$  and  $SO_2$ . 401 KAR 51:017 Section 8.

#### C. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Requiring BACT for PM and $PM_{10}$ .

The Administrator must object to the permit because it fails to require BACT for both PM and PM<sub>10</sub>, both of which have PSD significance thresholds. 401 KAR 51:017 Section 8. The permit violates the requirements of 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a)(4) and 7479(3), and 40 CFR §§ 51.166(b)(12) and (j)(2), by solely containing a BACT emission limit for particulate emissions instead of for both particulate matter and on PM<sub>10</sub>.

As the U.S. EPA pointed out in its comments on the draft permit

In support of the proposed  $PM/PM_{10}$  BACT limit of 0.018 lb/MMBtu (a limit accepted by KDAQ), LG&E cites similar BACT limits in recent Santee Cooper (South Carolina) and Longview (West Virginia) permits. The Santee Cooper permit limit (which includes condensable PM) is based on use of a dry ESP only and not a combination of PJFF and WESP as proposed for Unit 2. Although we agree that the combination of PJFF and WESP represents an appropriate BACT collection method, we would expect that this combination would be able to achieve lower emissions than a dry ESP alone.

(Gregg Worley, U.S. EPA Region 4, Comments on Draft Permit.) However, the Cabinet dismissed this comment in its response to comments and made no substantive revisions to the permit in response to this point.

The permit sets a BACT emission limit on "particulate emissions" of 0.018 lb/MMBtu (filterable and condensable). Permit, p. 73, Condition 2.a. There are two problems with this limit. First, "particulate emissions" is not defined. It is unclear whether the limit is set on particulate matter regardless of particle size ("PM") or particulate matter with an aerodynamic diameter less than 10 microns ("PM<sub>10</sub>") or both. The SOB and application suggest the limit is set on PM and PM<sub>10</sub>. SOB at 26, Table 5.4; Application, p. 3-1. However, the SOB and application are not enforceable. BACT limits for particulate matter must be set for both because PSD significance thresholds exist for both. 401 KAR 51:001, Sec. 1(221). Thus, the Administrator must object because the permit does not indicate that the regulated pollutants are PM and PM<sub>10</sub>.

Second, lower PM/PM $_{10}$  limits are achievable and were incorrectly eliminated as BACT by the applicant. Application, Appx. I. The permits for the following facilities have lower PM/PM $_{10}$  emission limits than those established for Trimble:

- Northampton, PA: 0.0088 lb/MMBtu (1-hr)
- Indeck-Elwood, IL: 0.015 lb/MMBtu (3-hr block)
- Nevco-Sevier, UT: 0.0154 lb/MMBtu (24-hr rolling)

The applicant identified the first listed limit, 0.0088 lb/MMBtu, but rejected it for a number of reasons that we believe are incorrect.

The applicant argues that Northampton is much smaller and uses a different combustion technology. Application, p. I-14. This is irrelevant because the physical and chemical characteristics of flue gas stream and the particulate removal device are similar. The ash content in the Northampton fuel is much higher than the ash content of Trimble's fuel, which means higher inlet PM concentrations and a more efficient baghouse than required for Trimble. Thus, Northampton is a worst-case. The fact that a baghouse is used on a CFB, rather than a PC boiler, is not determinative for purposes of a BACT. The underlying combustion method, CFB or a PC

boiler, is irrelevant if the gas streams are similar and can be controlled using the same control technologies, as here. NSR Manual, pp. B.10, B.11, B.16 ("The fact that a control option has never been applied to process emission units similar or identical to that proposed does not mean it can be ignored in the BACT analysis if the potential for its application exists."). Further, baghouses are routinely used to control PM/PM<sub>10</sub> from both CFBs and PC boilers. The U.S. EPA routinely groups CFBs and PC boilers together when establishing nationwide emission standards for particulate matter. 70 FR 9706 (Feb. 28, 2005). The U.S. EPA's comments on the Longview, WV facility, a large PC boiler, for example, recommended that West Virginia consider the PM BACT limits for two CFBs, Northampton and JEA Northside, in its BACT analysis for a PC boiler.

The applicant also asserts that the Northampton PM/PM<sub>10</sub> limit is filterable only, based on secondhand information from West Virginia that the testing was performed using "modified Method 5." Application, p. 1-15. This is incorrect. The stack tests and Pennsylvania's summary of these tests indicate that the limit is total, not filterable. The Northampton limit has been confirmed in two stack tests—August 1995 (0.0012 lb/MMBtu)<sup>1</sup> and February 2001 (0.0045 lb/MMBtu).<sup>2</sup> These values are total, comprising the sum of filterable plus condensable measured by U.S. EPA/DAPER Method 5. Pennsylvania, and several other states, adopted the original U.S. EPA Method 5, which includes the backhalf. As a result, BACT is required for both PM and PM<sub>10</sub>, the limit set in the permit for particulate emissions is not sufficiently stringent to be BACT, and the administrator must object to the permit because it fails to contain conditions requiring BACT for PM and PM<sub>10</sub>. 401 KAR 51:017 Section 8.

<sup>&</sup>lt;sup>1</sup> Clean Air Engineering, Report on Emissions Testing Performed for Bechtel Power Company CFB Stack and Dust Collectors, Northampton, Pennsylvania, November 3, 1995.

<sup>&</sup>lt;sup>2</sup> SGF Consulting Services, Inc., Compliance Test Report for the Measurement of Particulate Emissions, Northampton Generating Company, L.P., Title V Permit #48-00021, February 2001.

The permit also sets a BACT limit for PM/PM<sub>10</sub> emissions from the cooling tower as 0.001% drift eliminators. Permit, p. 73, Unit 41, Condition 2. The drift rate is the percent of the circulating water that is allowed to escape into the air. The smaller the number the better the control and the lower the PM emissions. The Administrator must object to the permit because the specified limit is not BACT for the new cooling tower. 401 KAR 51:017 Section 8.

The permit does not set a PM/PM<sub>10</sub> emission limit for the new cooling tower. BACT means "an emissions limitation []." 401 KAR 51:001, Sec. 1(25). The Cabinet may only impose a "design, equipment, work practice, or operational standard or combination of standards approved by the cabinet if: 1. The cabinet determines technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emission standard infeasible." 401 KAR 51:001, Sec. 1(25)(c). The Cabinet has not demonstrated any constraints to the setting of a specific PM/PM<sub>10</sub> emission limit for the cooling tower. The application calculates PM<sub>10</sub> emissions from the new cooling tower as 0.34 lb/hr. Thus, the Administrator must object to the permit because it does not establish a PM/PM<sub>10</sub> emission limit for the new cooling tower.

New Unit 2 will use the existing natural draft cooling tower, which is currently being used to cool Unit 1. A new cooling tower will be built to replace the cooling demand of Unit 1 currently supplied by the existing natural draft tower. The subject permit proposes a 0.001% drift eliminator as BACT for the new cooling tower for Unit 1. This is not BACT for the new cooling tower. The BACT analysis acknowledges many similar cooling towers that have been permitted at 0.0005% drift. Application, p. I-30.

Furthermore, the BACT analysis is fundamentally flawed. Application, Appx. I, Sec. 8.2. First, it only evaluated a 0.001% eliminator for the new tower. It did not evaluate a high

efficiency drift eliminator (0.0005%). The selected option, existing tower for Unit 2 and new tower for Unit 1, equipped with a 0.0005% eliminator would remove more PM/PM<sub>10</sub> and thus should have been evaluated as the top option. Second, the cost analysis is defective. It allocates 100% of the cost of the cooling system to the control of PM, rather than the cost of the control method itself, i.e., the drift eliminator. This would be like including the cost of the boiler in a cost effective analysis for an SCR. A high efficiency drift eliminator by itself is highly cost effective. However, if one includes the cost of the cooling tower, which is required to cool the condensate, not control PM emission, the costs are not cost effective. Third, the cost analysis is not supported. The design basis, battery limits, and costs of individual components should be identified and supported. Finally, high efficiency drift eliminators are widely used on coal fired power plants. The application identifies four. Application, p. I-30. We are aware of many others, including Intermountain, UT; Newmont, NV; Rocky Mountain Power, MT; Comanche Generating Station, CO; and the proposed Indeck-Elwood, IL. When a control alternative has been widely used, as here, it can only be eliminated as BACT if a demonstration is made that unusual circumstances exist that distinguish the source from all others. No such demonstration has been made and we believe none is likely. Thus, putting aside dry cooling for the purposes of this comment, we conclude that BACT for the new cooling tower is a high efficiency drift eliminator designed to achieve a 0.0005% drift rate.

The permit fails to set a PM/PM $_{10}$  limit for the cooling towers and the administrator must object to the permit because the standard of 0.001% drift eliminators is inconsistent with the definition of BACT and is not BACT for the new cooling tower. 401 KAR 51:017 Section 8.

### D. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Requiring BACT for Opacity and Visible Emissions.

The Administrator must object to the permit because it violates the requirements of 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a)(4) and 7479(3), and 40 CFR §§ 51.166(b)(12) and (j)(2), because the opacity limit contained in the permit is not BACT and the permit fails to contain a BACT limit for visible emissions. The permit sets a limit on opacity of 20% based on a 6-minute average. Permit, p. 73, Condition 2.c. This limit is set pursuant to 401 KAR 59.016, Sec. 3(2) and is part of the New Source Performance Standards ("NSPS") for new electric steam generating units. The record does not contain a BACT determination for opacity and the 20% opacity limit is over 20 years old and is not based on the performance of modern particulate control systems. Several coal-fired boilers have lower opacity limits including Springerville in Arizona (15%), the Sevier Power Company–Sigurd plant in Utah (10%), Intermountain Power in Utah (10%), and Plum Point Energy in Arkansas (10%). West Virginia limits opacity from coal-fired boilers to 10%.

Further, the permit fails to contain an opacity level that corresponds to the PM/PM<sub>10</sub> BACT emission rate. Opacity can be measured with a continuous opacity monitor and is commonly used as a surrogate to ensure compliance with other pollutants, including particulate matter. The permit requires the use of a continuous monitoring system for opacity from the PC boiler. Permit, p. 73, Condition 4.a. However, the relationship between opacity and PM/PM<sub>10</sub> is variable and must be determined for each individual facility.

The Administrator must also object to the permit because it violates the requirements of 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a)(4) and 7479(3), and 40 CFR §§ 51.166(b)(12) and (j)(2), in failing to include BACT limits for visible emissions. The definition of BACT includes a visible emissions standard, 401 KAR 51:001, Sec.

1(25). Opacity is a measure of the degree to which emissions from a source reduce the transmission of light. In other words, opacity is a measure of visible emissions from the source.

### E. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Requiring BACT During Periods of Startup and Shutdown.

The Administrator must object to the permit because it violates the requirements of 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a)(4) and 7479(3), to 40 CFR §§ 51.166(b)(12) and (j)(2), in failing to include BACT limits that are applicable during periods of startup and shutdown. The permit excludes periods of startup and shutdown from all emission limits except those limits expressed as tons per year. Permit, p. 73, Condition 2.p. Thus, startup/shutdown periods are excluded from the BACT limits for PM/PM<sub>10</sub> (3-hr average), CO (30-day rolling average), vOC (30-day rolling average), sulfuric acid mist (30-day rolling average), and fluorides (30-day rolling average). The permit relies instead on the general duty rule in Permit Section E for startup and shutdown periods which would require use of monitoring results, review of operating and maintenance procedures, manufacturer's recommendations on minimizing emissions, and inspection during startup/shut down. The Administrator must object to the permit because of the omission of startup and shutdown BACT limits and because mere development of startup/shut down plan is not sufficient to meet BACT requirements.

BACT emission limits must be met on a continual basis at all levels of operation. Startups and shutdowns are part of normal operation and the emissions that occur during these periods should be included in the BACT analysis and limited in the permit. In re Tallmadge Energy Center, Order Denying Review in Part and Remanding in Part, PSD Appeal No. 02-12 (EAB

Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15, 1983; Memorandum from Kathleen M. Bennett to Regional Administrators, Re: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1983

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<sup>&</sup>lt;sup>3</sup> See, e.g., Memorandum from John B. Rasnic to Linda M. Murphy January 28, 1993; Memorandum from Kathleen M. Bennett to Regional Administrators, Re: Policy on Excess

May 21, 2003) slip op. at 24 ("BACT requirements cannot be waived or otherwise ignored during periods of startup and shutdown"); *In re RockGen Energy Center*, 8 E.A.D. 536, 553-55 (EAB 1999) (holding that PSD permits may not contain blanket exemptions allowing emissions in excess of BACT limits during startup and shutdown); *In re Indeck-Niles Energy Center*, Order Denying Review, PSD Appeal No. 04-01 (EAB September 30, 2004) at 16, note 9. Emissions can be higher during startups and shutdowns (less than 50% load) because the pollution control equipment may not operate at peak efficiency or may not operate at all, e.g., the SCR.

The SOB clarifies that "the owner or operator shall utilize good work and maintenance practices and manufacturer's recommendations to minimize emissions during, and the frequency and duration of, such startup and shutdown events. The Cabinet concurs that these practices and the supercritical design of boiler constitute BACT for startup and shutdown operations of the new SPC boiler." SOB at 23. However, the SOB is not enforceable. Nonetheless, this presumably refers in part to Section E of the permit so the permit is relying on the general duty rule in Section E for startup and shutdown periods. The general duty rule does not explain exactly how emissions would be minimized during startups and shutdown, but rather would use monitoring results, review of operating and maintenance procedures, manufacturer's recommendations on minimizing emissions, and inspection.

This general duty rule and development of such plans are not sufficient to meet BACT requirements and cannot substitute for specific BACT limits. First, the general duty rule did not arise out of a top-down BACT analysis. Second, the operating and maintenance procedures and manufacturer's recommendations are not in the permit file and thus have not been subject to public review. Presumably, these plans would be developed in the future. However, the permit does not require that they be submitted to the agency for approval or be subject to public notice,

review, and appeal, as they must be if they are to satisfy BACT. *Tallmadge*, slip op. at 26. Further, the permit does not specify what conditions might be included in the plans or indicate what criteria would be used in approving the plans, or even that they would be approved. *RockGen*, 8 E.A.D. at 553.

The permit file contains no evidence that the Cabinet considered ways to eliminate or reduce excess emissions during startup and shutdown, beyond the specification of plans that would be developed in the future. Instead the crucial emissions elimination/reduction analysis has been assigned to the permitee, to be conducted in the future, without any approval whatsoever. This scheme is not acceptable under the CAA. *Tallmadge*, slip op at 26-27; *RockGen*, 8 E.A.D. 536, 551-555. The permit must describe the design, control, and methodological, or other changes that are appropriate for inclusion in the permit to minimize allowed excess emissions during startup and shutdown. *Tallmadge*, slip op. at 27.

The Administrator must object to the permit because of the omission of BACT emissions limits during startup/shut down and because mere development of startup/shut down plan is not sufficient to meet BACT requirements.

### F. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Applying Cleaner Fuels as BACT.

The Administrator must object to the permit because the limits set for the auxiliary boiler are not BACT. 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a)(4) and 7479(3), to 40 CFR §§ 51.166(b)(12) and (j)(2). The limits set for the auxiliary boiler are based upon No. 2 fuel oil. The determination of the BACT limits required consideration of cleaner fuels including using low sulfur coal or blending low sulfur coal to control emissions. The facility includes six gas turbines. Thus, clearly, there is a source of

natural gas at the site. Natural gas is BACT for auxiliary boilers where it is available, as it is at the present facility.

G. The Administrator Must Object to the Permit Because It Fails To Contain Conditions Requiring BACT for PM/PM<sub>10</sub> and Sulfuric Acid Mist Emissions at Unit 1 and Ammonia Emissions at Units 1 and 31.

The Administrator must object to the permit because it failed to include BACT limits for PM/PM<sub>10</sub> and sulfuric acid mist emissions at Unit 1 and ammonia emissions at Units 1 and 31, contrary to 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a) (4) and 7479(3), to 40 CFR §§ 51.166(b) (12) and (j) (2). The claimed decreases at Unit 1 used for netting purposes (infra at Pars. 34-52) cause an increase in sulfuric acid mist emissions of 7 tons per year or more, an increase in PM/PM<sub>10</sub> emissions of 15 tons per year or more and an increase in ammonia emissions, a PM/PM<sub>10</sub> precursor, thus triggering BACT for these pollutants.

### H. The Administrator Must Object to the Permit Because It Fails To Contain Other Conditions Requiring BACT.

The Administrator must object to the permit because the limits set for various pollutants at various facilities are not BACT in violation of 401 KAR 51:017 Section 8.

- The permit limits set for the coal blending facility, material handling operations, ash barge loading, fly ash silos, the backup diesel generator, and the emergency diesel fire water pump are not BACT in violation 401 KAR 51:001 Section 1 (25), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a) (4) and 7479(3), and 40 CFR §§ 51.166(b) (12) and (j) (2).
- The permit limits set for fluorides (HF) are not BACT in violation of 401 KAR
   51:001 Section 1 (221) (a) and 401 KAR 51:017 Section 8.

The permit limits set for H2SO4 mist ("sulfuric acid mist") are not BACT in violation of 401 KAR 51:001 Section 1 (221)(a), 401 KAR 51:017 Section 8, 42 USC §§ 7475(a)(4) and 7479(3), to 40 CFR §§ 51.166(b)(12) and (j)(2).

## III. THE ADMINISTRATOR MUST OBJECT TO THE PERMIT BECAUSE IT CONTAINS CONDITIONS THAT VIOLATE U.S. EPA POLICY REQUIRING A PERMIT TO BE PRACTICALLY ENFORCEABLE

The proposed Title V permit contains numerous conditions which are not practically enforceable. This is a violation of U.S. EPA policy regarding practical enforceability and, consequently, the Administrator must object to the permit. For a permit condition to be enforceable, the permit must leave no doubt as to exactly what the facility must do to comply with the condition. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46.

A permit is enforceable as a practical matter (or practically enforceable) if permit conditions establish a clear legal obligation for the source [and] allow compliance to be verified. Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement.

Id.

The Administrator must object to the permit because it fails to include emissions limits, standards, compliance provisions, monitoring, record keeping and reporting requirements among other things that are enforceable and that assure compliance, in violation of 42 USC § 7661c(a) and 401 KAR 52:020.

A. The Administrator Must Object to the Permit Because the Permit Fails to Incorporate Compliance Provisions Contained in the Unenforceable Statement of Basis.

The Administrator must object to the permit because it fails to incorporate compliance limitations and testing parameters specified in the unenforceable Statement of Basis ("SOB")

into the permit itself. Most of the procedures that would be used to determine compliance with permit conditions are summarized in the unenforceable SOB, but are not included in the permit. These include the initial and periodic stack testing for PM/PM<sub>10</sub>, VOCs, fluoride, sulfuric acid mist, mercury, and lead emissions from the PC boiler. SOB, pp. 26-28, Table 5.4. The permit itself contains the sulfuric acid mist and fluoride monitoring, but includes it in Section B.4.j in Table 1, CAM Monitoring Approach. The Preamble to the CAM regulations makes it clear that compliance with CAM indicator provisions does not make an applicable requirement enforceable. 62 FR 54,900-54,947.<sup>4</sup>

The SOB is not an enforceable document. The purpose of the Title V program is to include all of the provisions, including compliance provisions, in a single document, the Title V Permit. Thus, the Administrator must object to the permit.

### B. The Administrator Must Object to the Permit Because CAM Compliance Provisions Are Not Adequate To Ensure Compliance With Permit Limits.

The Administrator must object to the permit because the permit sets unenforceable limits through the use of indicator parameters for VOCs, SAM and fluorides for Unit 31, and PM/PM<sub>10</sub> for Unit 1 and for its failure to include explicit statements that the indicators are not set as enforceable limits. This is a result of the permit's failure to (a) require studies and testing to adequately establish the relationship between the control equipment parameter to be monitored and emission levels of each regulated pollutant, which will vary over time due to, among other things, changes in combustion efficiency, coal quality, and the condition of the boiler and air pollution control train; (b) include acceptable performance ranges for each parameter, including separate ranges for each fuel type; (c) specifically state that a violation of any of the indicator

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<sup>&</sup>lt;sup>4</sup> Version available on U.S. EPA's CAM website at www.epa.gov/ttn/emc/cam.html.

parameters is a per se violation of the pollutant limit; (d) require sufficient periodic retesting to validate the indicator ranges and ensure on-going compliance.

The permit includes CAM monitoring for two pollutants, sulfuric acid mist and fluorides and relies on this CAM monitoring to assure compliance with the BACT limits on sulfuric acid mist and fluorides. SOB, pp. 27-28, Table 5.4. The CAM monitoring requirements do not assure compliance with the sulfuric acid mist and fluoride BACT limits. Compliance with CAM indicator provisions, such as proposed in the present permit, does not make an applicable requirement, e.g., a BACT limit, enforceable. 62 F.R. 54,900-54,947. Further, the CAM section of the permit only addresses sulfuric acid mist and fluoride. CAM monitoring also should be required for other pollutants, including total PM/PM<sub>10</sub> (the CEMS only measures filterable) and lead emissions from the PC boiler.

In the present permit, for each parameter that is monitored through an indicator, none of the proposed indicators are set as enforceable limits. The permit fails to state that an exceedance of an indicator is a violation of the underlying applicable requirement; consequently, the indicator does not assure that the underlying requirement is enforceable; it only provides a reasonable assurance of compliance. The Administrator has objected to Title V permits in Region 4 for failure to include explicit statements that the indicators are not set as enforceable limits. For example, in the Tampa Electric Company's F.J. Gannon Station case, the U.S. EPA objected to the Title V permit, stating:

While the permit does include parametric monitoring of emission unit and control equipment operation in the O&M plans for these units... the parametric monitoring scheme that been specified is not adequate. The parameters to be monitored and the frequency of monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed

<sup>&</sup>lt;sup>5</sup> Version available on U.S. EPA's CAM website at www.epa.gov/ttn/emc/cam.html

between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of normal operating time. The Department should set the appropriate percentage of the operating time would serve as trigger for this testing require.

U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Tampa Electric Company, F.J. Gannon Station, Permit No. 0570040-002-AV. The indicator approach proposed by the Cabinet to assure compliance with permit limits is probative. Compliance must be determined by a performance test or other similar data in which actual stack emissions are measured.

#### C. The Administrator Must Object to the Permit Because the PC Boiler Limits on Toxic Substances Are Not Enforceable.

The Administrator must object to the permit because the PC boiler limits on toxic substances are not enforceable. The permit fails to require direct compliance monitoring of toxic substances for Unit 31, relying instead on PM/PM<sub>10</sub>, SO<sub>2</sub>, carbon monoxide and mercury as indicators of toxic substances emissions. However, the permit establishes no relationship between emissions of toxic substances and the indicators, and also fails to identify the specific toxic substances that are covered by this condition.

The permit states that compliance with the limits on PM/PM<sub>10</sub>, SO<sub>2</sub>, CO, and mercury shall constitute compliance with 401 KAR 63:020 with respect to toxic substances. Permit, p. 73, Condition 2.o. This condition assumes that all of the toxic substances emitted by the project are related to these four pollutants and that the emission limits on these four pollutants are low enough to assure that emissions of toxic substances are not harmful to health and welfare of

humans, animals and plants. 410 KAR 63:020, Sec. 3. There are two problems with these assumptions.

First, the file contained no evidence that the Cabinet has identified the specific toxic substances that would be emitted by Trimble, quantified their emissions, and performed a risk assessment to determine if the emissions of these substances are harmful to health and welfare of humans, animals and plants.

Second, the file contained no evidence that there is any relationship between these four regulated pollutants and the unidentified toxic substances they are designed to control. Based on regression analysis of coal quality data in the Thoroughbred case, most of the toxic substances of concern are not related to these four pollutants. Dioxins, mercury, and selenium, for example, are not related to SO<sub>2</sub>, PM/PM<sub>10</sub>, NO<sub>x</sub>, or CO emissions. Further, there is no evidence that the specific limits imposed on PM/PM<sub>10</sub>, SO<sub>2</sub>, CO, and mercury are low enough to assure that emissions of all toxic substances are not harmful to health and welfare of humans, animals, and plants.

Thus, the Administrator must object to the permit.

#### D. The Administrator Must Object to the Permit Because the PC Boiler Lead Limit Is Not Enforceable.

The Administrator must object to the permit because the lead limit is not enforceable for a number of reasons. First, the permit relies on annual performance testing for lead, which is inadequate to assure continuous compliance with the lead limit for Unit 31, as variability in the lead content of coal requires at least quarterly stack testing and weekly coal sampling. Second, the permit fails to specifically require the use of monitoring data to assure continuous compliance with permitted levels of emissions for lead, which renders monitoring data mere description. Third, the permit fails to establish emission rates in units of mass per unit time for

lead, instead relying on the firing rates included in the unit descriptions, i.e., (lb/MMBtu)(MMBtu/hr) = lb/hr; however, descriptive information is not enforceable.

Fourth, the permit sets a limit on lead of 0.55 ton/yr based on a 12-month rolling total, Permit, p. 73, Condition 2.m, which is not enforceable. The averaging time is ambiguous and excessively long. It is unclear whether the limit is an annual average rolled monthly or an annual average rolled annually. Regardless, these averaging times are too long because an inspector cannot determine if they are being complied with.

The limit is also slightly less than the PSD significance threshold of 0.6 ton/yr. 401 KAR 51:017, Sec. 1(221)(a). If emissions exceed 0.6 ton/yr, BACT for lead would be required. Thus, the new unit is a synthetic minor for lead. Synthetic minor limits generally require both an emission limit and a production limit to assure that emissions remain below the significance threshold. Thus, we recommend that the permit be modified to limit the amount of coal that can burned and the lead content of the coal.

Finally, the permit itself does not require any testing to determine if the lead limit is met. The only compliance testing is found in the SOB, which is unenforceable. This testing indicates initial and annual performance tests and the use of PM as a surrogate, monitored by the PM CEMS. SOB at 28, Table 5.4. Lead is very variable in coal and can vary over an order of magnitude or more, depending upon the sources of the coal. The variability would be much greater than for a mine-mouth plant because multiple sources could supply the facility. Further, lead is not related to the ash content of coals and thus PM emissions would likely not be related to lead emissions.

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<sup>&</sup>lt;sup>6</sup> The Permit states the limit as 0.55 ton/yr, the SOB states the limit is 0.055 ton/yr, and the Application reports lead emissions as 0.15 ton/yr (0.035 lb/hr). It is unclear which is correct.

The Administrator must object to the permit because the lead limit is not enforceable for these reasons.

#### E. The Administrator Must Object to the Permit Because the PC Boiler Sulfuric Acid Mist Limit Is Not Enforceable.

The Administrator must object to the permit because the sulfuric acid mist limit is not enforceable. The permit sets a limit of 26.6 lb/hr based on a 30-day rolling average on sulfuric acid mist ("SAM"). Permit, p. 73, Condition 2.j. This limit is not enforceable for a number of reasons.

First, the permit fails to establish emission rates in units of mass per unit time for sulfuric acid mist, instead relying on the firing rates included in the unit descriptions, i.e., (lb/MMBtu)(MMBtu/hr) = lb/hr; however, descriptive information is not enforceable.

Second, the applicant's BACT analysis concluded that BACT is 26.6 lb/hr based on a 3 hour rolling average, to coincide with three 1-hour performance tests. Application, p. I-29. A 30-day rolling average cannot be determined from a 3-hour long stack test so the BACT SAM limit is not enforceable.

Third, the permit only requires CAM monitoring for SAM. This monitoring includes SO<sub>2</sub> CEMS plus an initial source test, weekly coal sampling with quarterly composites, and establishing a correlation between SO<sub>2</sub> and SAM and an indicator range. Permit, p. 73, Table 1. As discussed above, CAM monitoring cannot be used to assure compliance with BACT emission limits. The only compliance testing is in the SOB, which is unenforceable. Further, that compliance test indicates an initial performance test and the use of SO<sub>2</sub> as a surrogate, monitored by the SO<sub>2</sub> CEMS. SOB at 28, Table 5.4. SO<sub>2</sub> is not a good indicator of SAM. Sulfuric acid is related to SO<sub>2</sub>, but in a very complex, nonlinear manner. The amount of SAM that is formed depends on the duct SO<sub>2</sub> concentration at the inlet to the scrubber, the air heater and economizer

gas outlet temperatures, the coal SO<sub>2</sub> in lb/MMBtu, the SO<sub>2</sub> to SO<sub>3</sub> conversion rate of the boiler, the SO<sub>2</sub> to SO<sub>3</sub> conversion rate of the SCR, and the amount of SO<sub>3</sub> removed by the air heater, fabric filter baghouse, SO<sub>2</sub> scrubber, and WESP. All of these factors vary over time and in an unpredictable manner. Thus, measuring coal sulfur content or SO<sub>2</sub> at the stack conveys little information about accompanying SAM emissions.

The Administrator must object to the permit because the SAM limit is not enforceable for these reasons.

#### F. The Administrator Must Object to the Permit Because the PC Boiler Mercury Limit Is Not Enforceable.

The permit sets a limit of 13 x 10-6 lbs/MWh on mercury, based on a 12-month rolling average. This limit is not enforceable. First, the permit does not indicate whether the megawatt hours are gross or net. The SOB indicates gross, but the SOB is not enforceable. SOB at 28, Table 5.4. The difference can range 10-15 percent. Second, the averaging time is ambiguous and excessively long. It is unclear whether the limit is an annual average rolled monthly or an annual average rolled annually. Regardless, these averaging times are too long because an inspector cannot determine if they are being complied with. Compliance will be determined with a CEMS, which means hourly data will be available. Thus, the Administrator must object to the permit because the mercury limit is not enforceable.

#### G. The Administrator Must Object to the Permit Because the PC Boiler VOC Limit Is Not Enforceable.

The Administrator must object to the permit because the PC boiler VOC limit is not enforceable for a number of reasons. First, the permit fails to establish emission rates in units of mass per unit time for VOC instead relying on the firing rates included in the unit descriptions, i.e., (lb/MMBtu)(MMBtu/hr) = lb/hr; however, descriptive information is not enforceable.

Second, the permit sets a limit of 0.0032 lb/MMBtu on VOC emissions, based on a 30-day rolling average. Compliance with this limit "shall be demonstrated by compliance with Subsection 2(f) above," which is the CO emission limit. Permit, p. 73, Condition 2.i. The SOB clarifies that CO emissions are used as a surrogate for VOC emissions. SOB, p. 27, Table 5.4. This limit is not enforceable because CO and VOC are separate pollutants that are not directly related and are affected by different factors.

#### H. The Administrator Must Object to the Permit Because the PM/PM<sub>10</sub> Limits Are Not Enforceable.

The Administrator must object to the permit because the PM/PM<sub>10</sub> limits are not enforceable for a number of reasons. First, the permit relies on a PM continuous emissions monitoring system (CEMS) to assure continuous compliance with the PM/PM<sub>10</sub> limits. The PM CEMS only measures the filterable fraction of PM/PM<sub>10</sub>. Thus, the total PM/PM<sub>10</sub> limits in the permit are not continuously enforceable. The annual stack tests for PM/PM<sub>10</sub> are not adequate to assure continuous compliance.

Second, the permit fails to establish emission rates in units of mass per unit time for  $PM/PM_{10}$ , instead relying on the firing rates included in the unit descriptions, i.e., (lb/MMBtu)(MMBtu/hr) = lb/hr; however, descriptive information is not enforceable.

Third, the permit fails to require direct compliance monitoring of  $PM/PM_{10}$  on Unit 1 and instead relies on using opacity as an indicator for  $PM/PM_{10}$ , even where direct compliance monitoring using a PM CEMS is required for Unit 31.

Fourth, the permit sets a limit on particulate emissions comprising the sum of filterable and condensable particulates. Permit, p. 73, Condition 2.a. A PM CEMS will be used to determine compliance with this limit. *Id.*, Condition 4.e. The permit itself does not contain any additional monitoring to determine compliance with this limit. However, the SOB, which is

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unenforceable, indicates that initial and annual performance tests also would be conducted to determine compliance. SOB at 26, Table 5.4. The list of test methods in the "compliance/testing" column is also ambiguous and must be clarified.

The SOB suggests that an alternate Method 202 can be approved in the permit or any other approved alternative method can be used. This language is ambiguous and appears to grant authority to use any alternative method approved by any party. Test methods used to determine compliance with federally enforceable permit conditions must be approved by the U.S. EPA. There are currently no U.S. EPA approved alternative methods for measuring condensable PM/PM<sub>10</sub>.

Finally, the proposed limit on PM/PM $_{10}$  emissions from the cooling tower is not enforceable. The permit sets a BACT control efficiency with no supporting monitoring; contains no averaging time; does not specify testing frequency, methods or location; and does not require PM/PM $_{10}$  emission to be calculated and compared to an emission limit.

The drift rate of 0.001% in the permit is not enforceable as a practical matter. The permit does not specify any monitoring to determine if the proposed drift rate is being met. Drift rate is measured using a special drift test conducted by a certified test firm. These tests are commonly performed on cooling towers and are commercially available. The permit also does not specify a time period to demonstrate compliance with the drift rate, i.e., averaging time or the frequency for monitoring and reporting the drift rate. Particulate emissions coming out of the tower depend on the drift rate, circulating water flow rate, and total dissolved solids ("TDS") in the circulating water. Particulate emissions must be measured in the tower exhaust or calculated from the circulating water rate, TDS in the circulating water, and drift rate. The permit requires only that records be kept of water circulation and TDS, which by themselves are not adequate to determine

either drift rate or PM/PM<sub>10</sub> emissions. The permit does not require that water circulation be measured nor specify any testing frequency, testing methods, or testing locations.

In sum, the permit sets a BACT control efficiency, with no supporting monitoring, while the SOB contains monitoring to determine compliance with a BACT emission rate, which is not in either the SOB or the permit. This mix of conditions is not enforceable because they contain no averaging time; they do not require any monitoring of drift rate, circulating water rate, or circulating water TDS; they do not specify testing frequency, methods, or location; and they do not require that PM/PM<sub>10</sub> emission be calculated and compared to an emission limit. Thus, there is no way to assure compliance with cooling tower BACT.

The permit identifies two applicable requirements for the cooling towers, 401 KAR 63:010, Sec. 3 (fugitive emissions) and 401 KAR 51:017 (BACT). These are implemented by imposing operating and emission limits:

#### 1. Operating Limitations:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

#### 2. Emission Limitations:

- a) Pursuant to regulation 401 KAR 51:017, the cooling towers shall utilize 0.001% drift eliminators.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

The permit states that no testing is required to determine compliance with these limits, but the SOB indicates monthly measurement of total dissolved solids ("TDS") and circulating water. SOB at 31. The permit requires recordkeeping for these two parameters, but not their measurement. Permit, p. 73, Unit 41, Condition 5. This collection of conditions is contradictory and ambiguous and thus not enforceable.

The Administrator must object to the permit because the PM/PM<sub>10</sub> limits are not enforceable for these of reasons.

# I. The Administrator Must Object to the Permit Because the Permit Fails to Define the Terms "Startup and Shutdown" and "Good Combustion Control."

The Administrator must object to the permit because fails to define the term "good combustion control," rendering the term vague, ambiguous, and meaningless and rendering the conditions that use these terms and the permit unenforceable. The permit indicates that BACT for CO is "good combustion control." Permit, p. 73, Condition 1. The permit also indicates that "good combustion control" is one of the methods that will be used to control toxic substances. Permit, p. 73, Condition 2.n. The term "good combustion control" is not defined and thus is not enforceable. Combustion controls include a wide range of techniques, including staged combustion, excess air, low-NO<sub>x</sub> or ultra low-NO<sub>x</sub>, and combustion optimization systems. The file does not identify the specific combustion controls that would be used to assure the VOC BACT limit is continuously met. The Administrator must object to the he permit because it fails to define the term "good combustion control" and, as a result, is not practically enforceable.

## J. The Administrator Must Object to the Permit Because the Permit Contains Other Conditions That Are Not Enforceable.

The Administrator must object to the permit because it fails to include emissions limits, standards, compliance provisions, monitoring, record keeping and reporting requirements among other things that are enforceable and that assure compliance, in violation of 42 USC § 7661c(a) and 401 KAR 52:020. Such items rendering the permit unenforceable include the following:

 The permit fails to specifically require the use of monitoring data to assure continuous compliance with permitted levels of emissions for opacity and lead, which renders monitoring data mere description.

- The permit fails to define the term "startup and shutdown," rendering the term vague, ambiguous, and meaningless.
- The permit fails to specify the contents of LG&E's startup and shutdown plan, rendering such a plan vague, ambiguous, and meaningless.
- The permit fails on numerous occasions to identify what "records" must be maintained regarding the control equipment, rendering these requirements vague, ambiguous, and meaningless.
- The permit relies on manufacturer specifications and standard operating procedures to
  assure proper operation of air pollution control equipment. These specifications and
  procedures are not included in the permit or summarized in any fashion, thus
  rendering them meaningless.
- The permit does not identify the test methods that would be used to determine compliance with regulated pollutants and coal quality parameters. Some of the regulated pollutants are operationally defined by the test method, e.g., PM/PM<sub>10</sub>.
- The emissions caps on NO<sub>x</sub> and SO<sub>2</sub> are unenforceable due to the permit's lack of explanation regarding how emissions will be calculated during times when the CEMS are not measuring NO<sub>x</sub> and SO<sub>2</sub>, e.g., due to malfunction of the CEMS, startups and shutdowns when CEMS data may be inaccurate or incomplete, or other loss of CEMS data.
- The permit fails to ensure that the project's net increase in emissions of NO<sub>x</sub> and SO<sub>2</sub>, which according to the permit fall just below the PSD significance levels, continue to remain below the significance levels by omitting any on-going requirements to measure emissions of NO<sub>x</sub> and SO<sub>2</sub> from all sources that emit these pollutants, use

these measurements to calculate net emissions increases, compare the emission increases to the significance thresholds, and report the results.

#### IV. CONCLUSION

In sum, the Commonwealth of Kentucky, Environmental and Public Protection Cabinet's final Title V permit for the proposed source located at 487 Corn Creek, Bedford, Trimble County fails to meet the legal requirements of the CAA, 40 C.F.R. Part 70, and Kentucky's SIP, due to [BLANK]. Petitioners respectfully request that the Administrator object to the Title V Permit for the proposed source located at 487 Corn Creek, Bedford, Trimble County as required under Title V and 40 C.F.R. § 70.8(c)(1).

Respectfully submitted,

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On behalf of:

SAVE THE VALLEY

SIERRA CLUB

VALLEY WATCH

DATED: March 2, 2006

# Exhibit A

### SIERRA CLUB VALLEY WATCH SAVE THE VALLEY

### COMMENTS (REVISED)<sup>1</sup> ON THE LOUISVILLE GAS AND ELECTRIC COMPANY PROPOSED COAL-FIRED POWER PLANT, BEDFORD KENTUCKY PERMIT # V-02-043 REVISION 2

August 9, 2005

Prepared with assistance from J. Phyllis Fox, Ph.D., P.E.

<sup>&</sup>lt;sup>1</sup> These comments are updated from the August 8, 2005 version that we submitted to specifically reference and attach the HEARING OFFICER'S REPORT AND RECOMMENDED SECRETARY'S ORDER in the matter of <u>Sierra Club v. Environmental and Public Protection Cabinet</u>, dated August 9, 2005 (attachment G), add attachment F, and to correct various references to the attachments.

#### I. SUMMARY

Our organizations respectively request that the comment period for the proposed operating and construction permit for a new electrical generating unit at Louisville Gas and Electric's Trimble County power plant be extended for another sixty days. If the public comment period is not extended we request that the permit is denied because, as detailed below, it fails to meet the minimum health protection requirements of Kentucky and federal law.

#### II. SHORTCOMINGS IN THE PUBLIC PROCESS

The agency received this application on December 1, 2004. Approximately eight months later, after reviewing the application and conducting its own analysis, the agency issued a draft permit. The draft permit was announced in early July. We could not locate any information indicating when the agency announced the draft permit and when the comment period formally commenced or will end. The date triggering commencement of the public notice is not listed on the website. The website states: "[t]o be considered, any written comments must be postmarked within 30 days following the date of publication of this notice in the local paper."

www.air.ky.gov/homepage repository/Public+Hearings.htm. The agency's website does not state which newspaper it is referring to and whether any notice was ever published, and if so, on what date. That is not adequate notice.

The agency unfairly denied multiple requests for an extension of the public comment period. Following announcement of the draft permit representatives of our organizations requested an extension in order to receive, to review, and to comment on the administrative record relating to this project. These requests were summarily denied, except that the agency granted an additional two days for filing written comments. This unwillingness to grant an extension is highly prejudicial and unprecedented. We are unaware of any other state agency that has refused to grant a meaningful extension of time for the public to review and comment on a draft permit for a coal-fired power plant. For example, Illinois recently granted citizens an additional ninety days to comment on the proposed Peabody Energy Prairie State project. The magnitude of the Trimble project and the voluminous permit information all warrant careful consideration. Absent more time these comments do not reflect a review of the complete administrative record because there simply was inadequate time to conduct such a review.

In addition, our expert Dr. Fox did travel to Kentucky to review the project files, and key information appears to be missing from the agency files. The files that we reviewed did not contain the file for the SO<sub>2</sub> reduction nor any detailed emission calculations that support the netting analysis for either NOx or SO<sub>2</sub>. This problem cannot be resolved within the timelines established by the agency. We again urge your agency to allow meaningful public comment and extend the comment deadline for another sixty days. This will afford us with the opportunity to work with the agency to identify the information that appears to be missing from the publicly-accessible files and then sufficient time to review the complete file and prepare more detailed comments.

#### III. NEW SOURCE REVIEW IS TRIGGERED FOR NOX AND SO2

Trimble proposes to net out of New Source Review ("NSR") for NOx and SO<sub>2</sub> by obtaining voluntary creditable emission reductions from Trimble Unit 1 under 401 KAR 51:001 and 401 KAR 51:017. SOB at 3-6. Based on our analysis outlined below, the netting analysis overestimates the NOx and SO<sub>2</sub> emission reductions. Applying the proper calculations the net increase in NOx and SO<sub>2</sub> emissions due to the project exceed the significance thresholds of 40 ton/yr for NOx and SO<sub>2</sub>, and thereby PSD review is triggered.

#### A. The Netting Calculation Used the Wrong Baseline

The netting calculation used the wrong baseline in calculating creditable emission reductions. The Division proposes to allow Trimble to net out of PSD review for NOx and SO<sub>2</sub> by generating a net reduction in NOx and SO<sub>2</sub> at existing Unit 1. The Division used the calculation procedure for the actual-to-projected actual applicability test in the recently revised state NSR rule, 401 KAR 51:017, Sec. 1(4)(a)(1), rather than the procedure for netting in the recently revised NSR rule 401 KAR 51:001, Sec. 1(146). These state rules were revised to incorporate the December 2002 revisions to federal regulations at 40 C.F.R. § 52.21. 67 Fed. Reg. 80,186 (Dec. 31, 2002). These procedures are distinguishable. The EPA explained in the preamble to Federal Register that it was not revising the method used to perform netting and that the new actual-to-projected-actual applicability test does not apply to netting. *Id.* at 80,203-80,204. The Division erred by applying the actual-to-projected-actual applicability test to netting.

The "creditable emission reductions" from Unit 1 were determined as the difference between Unit 1's pre-change baseline actual emissions ("BAE") and post-change enforceable emission limits. The BAE was calculated as the emission rate, in tons per year, based on the actual emissions determined over a consecutive 24-month period during the 60-month period preceding the date on which an enforceable permit limit for SO<sub>2</sub> and NOx is taken. SOB at 5.

This is the wrong baseline. "Actual emissions" should have been used, rather than "baseline actual emissions." The claimed NOx reduction, which became effective January 1, 2005 (SOB at 3), was based on emissions that occurred in 2000-2001. The actual NOx emissions immediately prior to the reduction were much lower. Similarly, the claimed SO<sub>2</sub> reduction, which becomes effective January 1, 2006 (SOB at 3), was based on emissions that occurred in 2001-2002. The actual SO<sub>2</sub> emissions immediately prior to the reduction were much lower. If actual emissions are used to calculate the creditable emission reduction, the net increase in NOx and SO<sub>2</sub> emissions from Trimble Unit 2 exceed the PSD significance threshold of 40 ton/yr, triggering PSD review. This is true under both the new state NSR rule and the SIP-approved NSR rule for different reasons. 401 KAR 51:017.

#### 1. State NSR Rule

Under the new state NSR rule, NSR is triggered if a project "causes a significant emissions increase and a significant net emissions increase." 401 KAR 51:017, Sec. 1(4). The "baseline actual emissions" relied on by the Division to determine if a "net emission increase" had occurred is only used in the first prong of this test, to determine if a "significant emissions increase" has occurred when using the "actual-to-projected actual applicability test". 401 KAR 51:017, Sec. 1(4)(a)(1). It is not used to determine if a significant net emissions increase has occurred.

The second prong of this test calculates "net emission increase" pursuant to 401 KAR 51:001, Sec. 1(146). The "net emission increase" calculation, which the Division relied on to conclude Trimble netted out of NSR, is based on "actual emissions" not "baseline actual emissions." This subsection states that "actual emissions" as defined in 401 KAR 51:001, Sec. 1(2) does not apply to the term as used in KAR 51:001, Sec. 1(146). 401 KAR 51:001, Sec. 1(146)(h). The term "actual emissions" as used to determine a "net emission increase" is not defined anywhere else in the state version of 401 KAR 51:001 or 401 KAR 51:017. Thus, the plain language definition of the term "actual emissions" applies. "Actual" used as an adjective means "being, existing, or acting at the present moment; current" (Houghton Mifflin), "presently existing in fact and not merely potential or possible," or "being or existing at the present moment," (WordNet).<sup>2</sup>

The NOx and SO<sub>2</sub> emission reductions at Unit 1 claimed to offset the emission increases at new Unit 2 were not based on "actual" emissions within the plain meaning of this term. As discussed below, they were based on emissions that occurred 4 years before the reductions were enforceable. The "actual" emissions at the time of the claimed emission reductions were much lower than the historic emissions used to generate the credit. Thus, the emission reduction credit should have been smaller than claimed, resulting in a significant net emission increase of NOx and SO<sub>2</sub>.

#### 2. SIP-Approved NSR Rule

The Kentucky State Implementation Plan ("SIP") also includes an NSR regulation that is federally enforceable. To the extent there is any conflict between this SIP-approved regulation and the new state regulation, the SIP approved regulation is considered federal law and therefore trumps any conflicts with the new state regulation. The following comment is based on the SIP NSR rule posted on EPA Region 4's website.<sup>3</sup> To the best of our knowledge, this SIP NSR rule has not been modified and thus applies to Trimble Unit 2.

Under this SIP rule, NSR is triggered for major modifications that construct after September 22, 1982, emit a regulated pollutant, and are constructed in an attainment area. SIP 401 KAR 51:017, Sec. 2. A project is a major modification if it results in a significant net emission increase. SIP 401 KAR 51:017, Sec. 1(23). A significant net

<sup>&</sup>lt;sup>2</sup> http://www.answers.com/actual&r=67

<sup>&</sup>lt;sup>3</sup> http://www.epa.gov/region4/air/sips/ky/51~017.pdf

emission increase is defined nearly identical to State 401 KAR 51:017, Sec. 1(146), except the definition of "actual" is different. SIP 401 KAR 51:017, Sec. 1(3). The SIP version of 401 KAR 51:017 defines "actual emissions" to equal "the average rate, in tons per year, at which the unit actually emitted the pollutant during the two (2) year period which precedes the particular date and is representative of normal source operation." SIP 401 KAR 51:017, Sec. 1(1)(b).

Thus, the SIP version of 401 KAR 51:017 does not allow the use of any consecutive 24-months within a 60-month period preceding the date on which the enforceable limit is taken, as assumed by the Division. SOB at 5. The 60-month look back period used by the Division allowed the applicant to select the first 24-months of this period. The NOx and SO<sub>2</sub> emissions are higher during these first 24-months than any other consecutive 24-month period because emissions have been steadily declining to comply with NOx SIP Call and Acid Rain regulations. As demonstrated below, if the definition of "actual emissions" in the SIP version of the NSR rule is used, the creditable emission reductions of NOx and SO<sub>2</sub> would decline substantially and the project would not net out of NSR.

#### B. The NOx Emission Reduction Is Overestimated

The creditable NOx emission reduction was calculated by subtracting the Unit 1 NOx emission limit of 5,556 ton/yr (Permit, p. 4, Condition 2.e) from 7,041 ton/yr, the average NOx emissions from Unit 1 in the years 2000 and 2001. SOB at 6, Table 3.2. This results in a reduction of 1,485 ton/yr (7,041-5,556=1,485). At the outset we were unable to confirm the claimed baseline NOx emissions of 7,041 ton/yr relied on by the applicant. The EPA Acid Rain website reports 7,134.97 ton/yr in 2000 and 6,818.00 ton/yr in 2001. The average of these two values is 6,976 ton/yr. This discrepancy should be resolved.

Moreover, as discussed above, the wrong baseline was used. Actual emissions for purposes of netting should have been used. Actual emissions are those that occur either immediately prior or in the 2 years prior to the new NOx limit, which became effective January 1, 2005. Under the state NSR rule, the NOx emissions immediately prior to the effective data should be used. The NOx emissions in 2004 were 4,399 ton/yr, substantially lower than the 7,041 ton/yr assumed by the applicant. Under the SIP-approved NSR rule, the average NOx emissions in two prior years, 2003 and 2004, were 4,175 ton/yr, also substantially lower than the 7,041 ton/yr assumed by the applicant. Thus, actual baseline emissions were lower than the proffered permit limit of 5,556 ton/yr and no NOx reduction is warranted. The NOx emissions from the project are 1,523 ton/yr. SOB at 6, Table 3.3. Thus, the project triggers PSD for NOx.

Further, the claimed NOx reduction was required to comply with another regulatory program, the NOx SIP Call. Using these reductions to also net of PSD is double dipping. An SCR was installed on Trimble Unit 1 in 2002 to comply with the NOx SIP Call. The SCR reduces NOx emissions. Therefore, NOx emissions declined substantially between 2000, the first year of the two year baseline period used by the

applicant and 2004, the year immediately prior to the effective date of the permit limit. The reductions that occurred between 2002 and 2004 were achieved to comply with the NOx SIP Call in 40 CFR Part 96. Thus, these reductions cannot also be used to net out of PSD. NSR Manual at A.48.

### C. The NOx Emissions Do Not Approximate The Same Qualitative Significance for Public Health and Welfare

The state and SIP-approved NSR rules both require that a credible decrease in emissions have "approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change." SIP 401 KAR 51:017, Sec. 1(30)(f)(3); State 401 KAR 51:001, Sec. 1(146)(f)(3). To satisfy this requirement, the increases from the project should be offset by decreases at Unit 1 that occur in the same amount and at the same time. In other words, if the project emits 4.17 ton/day of NOx (Permit, p. 73, Condition 2(g)), the emission reduction at Unit 1 should provide 4.17 ton/day of NOx reduction each day. Absent such a provision Trimble may not net out of PSD for NOx.

An SCR was installed on Trimble Unit 1 in 2002 to comply with the NOx SIP Call, generate NOx emission reductions, and protect air quality in Kentucky and downwind states. Presumably these reductions were also used as part of the state's maintenance plan and reasonable further progress requirements to achieve compliance with the 1-hour ozone standard. Thus, this SCR has historically only operated during the ozone season. Since this SCR was installed, Trimble's ozone season NOx emissions have been much lower than during the balance of the year. See, for example, the 2004-2005 data in attachment F. The record we reviewed failed to examine all of the reasons for Trimble reducing NOx emissions and assessing whether those reasons preclude use of the reductions in a netting calculation.

The applicant proposes to achieve the 1,485 ton/yr NOx emission reduction at Unit 1 through a combination of increased removal efficiency and increased SCR operating time. SOB at 5. These NOx emission reductions do not approximate the NOx emission increases in terms of protecting public health and welfare. Based on historic data summarized in attachment F, the majority of the NOx reduction is likely to occur by operating the SCR during the non-ozone season because the SCR is currently running at close to design capacity to comply with the NOx SIP call. In turn, this means a marked increase in NOx emissions during the ozone season, precisely the time when increased NOx emissions would have their greatest impact on ozone levels.

Thus, the NOx emission reduction proposed to offset the NOx emission increase from the project will not occur in the same amount and at the same time as the emission increases from project. Instead, Trimble will result in an increase in ozone levels downwind of Trimble in the summer months. This will result in an increase in the multitude of human health and welfare effects associated with elevated levels of ozone. Therefore, the proposed NOx reductions will have less significance for public health and

welfare as opposed to the proposed NOx increases which will cause higher ozone levels. This is unlawful.

#### D. The SO<sub>2</sub> Emission Reduction Is Overestimated

The creditable  $SO_2$  emission reduction was calculated by subtracting the Unit 1  $SO_2$  emission limit of 4,822 ton/yr (Permit, p. 4, Condition 2.f) from 8,047 ton/yr, the average  $SO_2$  emissions from Unit 1 in the years 2001 and 2002. SOB at 6, Table 3.2. This results in a reduction of 3,225 ton/yr (8,047 – 4,822 = 3,225).

However, as discussed above, the wrong baseline was used. Actual emissions for purposes of netting should have been used. Actual emissions are those that occur either immediately prior or in the 2 years prior to the new SO<sub>2</sub> limit, which will allegedly become effective January 1, 2006. Under the state NSR rule, the SO<sub>2</sub> emissions immediately prior to the effective data should be used. The SO<sub>2</sub> emissions in 2004 were 4,725 ton/yr, substantially lower than the 8,047 ton/yr assumed by the applicant. Thus, actual baseline emissions were lower than the proffered permit limit of 4,822 ton/yr, and no SO<sub>2</sub> reduction is warranted. The SO<sub>2</sub> emissions from the project are 3,225 ton/yr. SOB at 6, Table 3.3. Thus, the project triggers PSD for SO<sub>2</sub>.

Further, the claimed  $SO_2$  reduction was required to comply with another regulatory program, the Acid Rain Program. The  $SO_2$  emissions from Unit 1 have consistently declined since 1999, from 14,664 ton/yr to 4,725 ton/yr, to comply with the Acid Rain Program, 40 CFR Part 73. See annual totals in Attachment A. Using these Acid Rain reductions to also net out of PSD is double dipping. The choice of baseline years that are not immediately prior to the effective date of the  $SO_2$  permit limit, or which are not otherwise adjusted to account for future regulatory requirement, cannot also be used to net out of PSD. NSR Manual at A.48.

Finally, the proposed SO2 reduction from Unit 1 that is proposed to be used as a creditable decrease is not federally enforceable at this time. From the statement of basis it appears that Trimble has applied for a permit revision to limit its SO2 emissions effective January 1, 2006. SOB at 3. Absent an enforceable limit this SO2 reduction cannot be used for purposes of netting. Any creditable emission decrease should be included in the draft PSD/Title V permit and thereby become federally enforceable.

#### IV. THE PERMIT DOES NOT REQUIRE BACT

The Permit sets BACT limits for the PC boiler, auxiliary boiler, cooling tower, coal blending facility, material handling operations, ash barge loading fly ash silos, a backup diesel generator, and an emergency diesel fire water pump. We believe that some of these limits should be lower, as set out below. Due to the shortness of time for these comments, we have focused on the PC Boiler, Auxiliary Boilers, and Cooling Tower.

#### A. BACT For The PC Boiler

The permit sets BACT emission limits for PM/PM10, CO, H<sub>2</sub>SO<sub>4</sub>, and fluoride emissions from the PC boiler.

#### NOx And SO<sub>2</sub> Emissions From The PC Boiler

The Permit did not set BACT limits for NOx and SO<sub>2</sub> emissions from the PC boiler because the Division concluded that the project nets out of PSD review. However, as discussed above, the Division's netting analysis appears to be erroneous. The project would result in a net increase in SO<sub>2</sub> and NOx emissions of greater than 40 ton/yr. Thus, a BACT analysis should be prepared for NOx and SO<sub>2</sub>, the Permit should be revised to include NOx and SO<sub>2</sub> BACT limits, and a new draft permit should be re-noticed for public review and comment. The Division cannot rely on the BACT analysis performed by the applicant in an earlier version of the Application because that analysis is stale. Lower NOx and SO<sub>2</sub> emission limits are achievable than the limits proposed in the applicant's prior BACT analysis.

#### PM/PM10 Emissions From The PC Boiler

The permit sets a BACT emission limit on "particulate emissions" of 0.018 lb/MMBtu (filterable and condensable). Permit, p. 73, Condition 2.a. There are two problems with this limit.

First, "particulate emissions" is not defined. It is unclear whether the limit is set on particulate matter regardless of particle size ("PM") or particulate matter with an aerodynamic diameter less than 10 microns ("PM10") or both. The SOB and application suggest the limit is set on PM and PM10. SOB at 26, Table 5.4; Application, p. 3-1. However, the SOB and Application are not enforceable. BACT limits for particulate matter must be set for both because PSD significance thresholds exist for both. 401 KAR 51:001, Sec. 1(221). Thus, the Permit should be clarified to indicate that the regulated pollutants are PM and PM10.

Second, lower PM/PM10 limits are achievable and were incorrectly eliminated as BACT by the applicant. Ap., Appx. I. The permits for the following facilities have lower PM/PM10 emission limits than those established for Trimble:

- Northampton, PA: 0.0088 lb/MMBtu (1-hr)
- Indeck-Elwood, IL: 0.015 lb/MMBtu (3-hr block)
- Nevco-Sevier, UT: 0.0154 lb/MMBtu (24-hr rolling)

The applicant identified the first listed limit, 0.0088 lb/MMBtu, but rejected it for a number of reasons that we believe are incorrect.

First, the applicant argues that Northampton is much smaller and uses a different combustion technology. Ap., p. I-14. This is irrelevant because the physical and chemical characteristics of flue gas stream and the particulate removal device are similar. The ash content in the Northampton fuel is much higher than the ash content of Trimble's

fuel, which means higher inlet PM concentrations and a more efficient baghouse than required for Trimble. Thus, Northampton is a worst-case.

The fact that a baghouse is used on a CFB, rather than a PC boiler, is not determinative for purposes of a BACT. The underlying combustion method, CFB or a PC boiler, is irrelevant if the gas streams are similar and can be controlled using the same control technologies, as here. NSR Manual, pp. B.10, B.11, B.16 ("The fact that a control option has never been applied to process emission units similar or identical to that proposed does not mean it can be ignored in the BACT analysis if the potential for its application exists.").

Further, baghouses are routinely used to control PM/PM10 from both CFBs and PC boilers. The EPA routinely lumps CFBs and PC boilers when establishing nationwide emission standards for particulate matter. 70 FR 9706 (Feb. 28, 2005). The EPA's comments on the Longview, WV facility, a large PC boiler, for example, recommended that West Virginia consider the PM BACT limits for two CFBs, Northampton and JEA Northside, in its BACT analysis for a PC boiler.

Second, the applicant asserts that the Northampton PM/PM10 limit is filterable only, based on secondhand information from West Virginia that the testing was performed using "modified Method 5." Ap., p. 1-15. This is incorrect. The stack tests and Pennsylvania's summary of these tests indicate that the limit is total, not filterable. The Northampton limit has been confirmed in two stack tests --August 1995 (0.0012 lb/MMBtu)<sup>4</sup> and February 2001 (0.0045 lb/MMBtu).<sup>5</sup> These values are total, comprising the sum of filterable plus condensable measured by EPA/DAPER Method 5. Pennsylvania, and several other states, adopted the original EPA Method 5, which includes the backhalf.

#### 3. Visible Emissions

The Permit sets a limit on opacity of 20% based on a 6-minute average. Permit, p. 73, Condition 2.c. This limit is set pursuant to 401 KAR 59.016, Sec. 3(2) and is part of the New Source Performance Standards ("NSPS") for new electric steam generating units. The 20% opacity limit is over 20 years old and is not based on the performance of modern particulate control systems.

The definition of BACT includes a visible emissions standard. 401 KAR 51:001, Sec. 1(25). Opacity is a measure of the degree to which emissions from a source reduce the transmission of light. In other words, opacity is a measure of visible emissions from the source. Opacity can be measured with a continuous opacity monitor and is commonly used as a surrogate to ensure compliance with other pollutants, including

<sup>&</sup>lt;sup>4</sup> Clean Air Engineering, Report on Emissions Testing Performed for Bechtel Power Company CFB Stack and Dust Collectors, Northampton, Pennsylvania, November 3, 1995.

<sup>&</sup>lt;sup>5</sup> SGF Consulting Services, Inc., Compliance Test Report for the Measurement of Particulate Emissions, Northampton Generating Company, L.P., Title V Permit #48-00021, February 2001.

particulate matter. The Permit requires the use of a continuous monitoring system for opacity from the PC boiler. Permit, p. 73, Condition 4.a.

The record does not contain a BACT determination for opacity. The opacity level that corresponds to the PM/PM10 BACT emission rate should be established for opacity. However, the relationship between opacity and PM/PM10 is variable and should be determined for each individual facility. Thus, an interim limit should be established based on the lowest permitted opacity level for a similar facility. Several coal-fired boilers have lower opacity limits including Springerville in Arizona (15%), the Sevier Power Company—Sigurd plant in Utah (10%), Intermountain Power in Utah (10%), and Plum Point Energy in Arkansas (10%). West Virginia limits opacity from coal-fired boilers to 10%.

The Permit should be revised to include a BACT limit for visibility expressed as an opacity limit of 10% based on a 6-minute average. The Permit should also require that an optimization study be conducted within the first 6 months of operation to establish the opacity level that corresponds to the PM/PM10 BACT emission level. This opacity level shall be established as BACT for visible emissions from the new PC boiler.

#### 4. Startups And Shutdowns Excluded From PC Boiler BACT Limit

The Permit excludes periods of startup and shutdown from all emission limits except those limits expressed as tons per year. Permit, p. 73, Condition 2.p. Thus, these periods are excluded from the BACT limits for PM/PM10 (3-hr average), CO (30-day rolling average), voc (30-day rolling average), sulfuric acid mist (30-day rolling average), and fluorides (30-day rolling average).

The SOB clarifies that "the owner or operator shall utilize good work and maintenance practices and manufacturer's recommendations to minimize emissions during, and the frequency and duration of, such startup and shutdown events. The Division concurs that these practices and the supercritical design of boiler constitute BACT for startup and shutdown operations of the new SPC boiler." SOB at 23. Presumably, this refers in part to Section E of the Permit.

BACT emission limits must be met on a continual basis at all levels of operation. Emissions can be higher during startups and shutdowns (less than 50% load) because the pollution control equipment may not operate at peak efficiency or may not operate at all, e.g., the SCR. Startups and shutdowns are part of normal operation and the emissions that occur during these periods should be included in the BACT analysis and limited in the permit. In re Tallmadge Energy Center, Order Denying Review in Part and Remanding in Part, PSD Appeal No. 02-12 (EAB May 21, 2003) sip op. at 24 ("BACT")

<sup>&</sup>lt;sup>6</sup> See, e.g., Memorandum from John B. Rasnic to Linda M. Murpy January 28, 1993; Memorandum from Kathleen M. Bennett to Regional Administrators, Re: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15, 1983; Memorandum from Kathleen M. Bennett to Regional Administrators, Re: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1983

requirements cannot be waived or otherwise ignored during periods of startup and shutdown"); In re RockGen Energy Center, 8 E.A.D. 536, 553-55 (EAB 1999) (holding that PSD permits may not contain blanket exemptions allowing emissions in excess of BACT limits during startup and shutdown); In re Indeck-Niles Energy Center, Order Denying Review, PSD Appeal No. 04-01 (EAB September 30, 2004) at 16, note 9.

The Division relies on the general duty rule in Permit Section E for startup and shutdown periods. This rule did not arise out of a top-down BACT analysis and is no substitute for specific BACT limits. The general duty rule does not explain exactly how emissions would be minimized during startups and shutdown, but rather would use monitoring results, review of operating and maintenance procedures, manufacturer's recommendations on minimizing emissions, and inspection. The operating and maintenance procedures and manufacturer's recommendations are not in the permit file we reviewed and thus have not been subject to public review.

Presumably, these plans would be developed in the future. However, the Permit does not require that they be submitted to the agency for approval or be subject to public notice, review, and appeal, as they must be if they are to satisfy BACT. Tallmadge, slip op. at 26. Further, the Permit does not specify what conditions might be included in the plans or indicate what criteria would be used in approving the plans, or even that they would be approved. RockGen, 8 E.A.D. at 553.

The permit file we reviewed contains no evidence that the Division considered ways to eliminate or reduce excess emissions during startup and shutdown, beyond the specification of plans that would be developed in the future. Instead the crucial emissions elimination/reduction analysis has been assigned to the permitee, to be conducted in the future, without any approval whatsoever. This scheme is not acceptable under the CAA. Tallmadge, slip op at 26-27; RockGen, 8 E.A.D. 536, 551-555. The DAQ must describe the design, control, and methodological, or other changes that are appropriate for inclusion in the Permit to minimize allowed excess emissions during startup and shutdown. Tallmadge, slip op. at 27.

We recommend that the BACT analysis be revised to set limits that include periods of startup or shutdown, or expanded to set separate limits that apply during periods of startup and shutdown. Tallmadge, slip op. at 28. This analysis should seek to minimize these emissions by evaluating options such as heating the flue gas during startup.

#### 5. Separate Limits Required For Various Coal Types

The project will burn two types of coal – eastern bituminous and a blend of eastern bituminous and western subbituminous coal. Ap., p. 2-3; Permit, p. 73, Unit 31 Description. The BACT emission limits, however, appear to be based on the worst-case fuel, the eastern bituminous coal. The BACT emission limits may be different, and most notably, much lower for some pollutants, e.g., SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, for the blend than the eastern bituminous coal. The BACT limits should be set at a level that reflects the lowest

emission rate achievable and that may dictate the fuel blend that should be required for this facility.

#### B. Auxiliary Boiler

#### 1. Clean Fuel

The auxiliary boiler will burn No. 2 fuel oil. The facility includes six gas turbines. Thus, clearly, there is a source of natural gas at the site. Natural gas is BACT for the auxiliary boilers when it is available, as here.

#### C. BACT For The Cooling Tower

The Permit sets a BACT limit for PM/PM10 emissions from the cooling tower as 0.001% drift eliminators. Permit, p. 73, Unit 41, Condition 2. The drift rate is the percent of the circulating water that is allowed to escape into the air. The smaller the number the better the control and the lower the PM emissions. This limit is inconsistent with the definition of BACT, is not BACT for the new cooling tower, and is not enforceable. Each of these issues is discussed below.

#### 1. The Proposed Limit Is Inconsistent With The Definition Of BACT

The Permit does not set a PM/PM10 emission limit for the new cooling tower. BACT means "an emissions limitation []." 401 KAR 51:001, Sec. 1(25). The Division may only impose a "design, equipment, work practice, or operational standard or combination of standards approved by the cabinet if: 1. The cabinet determines technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emission standard infeasible." 401 KAR 51:001, Sec. 1(25)(c). The Division has not demonstrated any constraints to the setting of a specific PM/PM10 emission limit for the cooling tower. The Application calculates PM10 emissions from the new cooling tower as 0.34 lb/hr. We are not aware of any constraint to the imposition of a PM/PM10 emission limit for the cooling tower. Thus, the Permit should be revised to establish a PM/PM10 emission limit for the new cooling tower.

#### 2. The Proposed Drift Efficiency Is Not BACT

New Unit 2 will use the existing natural draft cooling tower, which is currently being used to cool Unit 1. A new cooling tower will be built to replace the cooling demand of Unit 1 currently supplied by the existing natural draft tower. The subject Permit proposes a 0.001% drift eliminator as BACT for the new cooling tower for Unit 1. This is not BACT for the new cooling tower.

The BACT analysis acknowledges many similar cooling towers that have been permitted at 0.0005% drift. Ap., p. I-30. However, the BACT analysis is fundamentally flawed. Ap., Appx. I, Sec. 8.2.

First, it only evaluated a 0.001% eliminator for the new tower. It did not evaluate a high efficiency drift eliminator (0.0005%). The selected option, existing tower for Unit 2 and new tower for Unit 1, equipped with a 0.0005% eliminator would remove more PM/PM10 and thus should have been evaluated as the top option.

Second, the cost analysis is defective. It allocates 100% of the cost of the cooling system to the control of PM, rather than the cost of the control method itself, i.e., the drift eliminator. This would be like including the cost of the boiler in a cost effective analysis for an SCR. A high efficiency drift eliminator by itself is highly cost effective. However, if one includes the cost of the cooling tower, which is required to cool the condensate, not control PM emission, the costs are not cost effective.

Third, the cost analysis is not supported. The design basis, battery limits, and costs of individual components should be identified and supported.

Finally, high efficiency drift eliminators are widely used on coal fired power plants. The Application identifies four. Ap., p. I-30. We are aware of many others, including Intermountain, UT; Newmont, NV; Rocky Mountain Power, MT; Comanche Generating Station, CO; and the proposed Indeck-Elwood, IL. When a control alternative has been widely used, as here, it can only be eliminated as BACT if a demonstration is made that unusual circumstances exist that distinguish the source from all others. No such demonstration has been made and we believe none is likely.

Thus, putting aside dry cooling for the purposes of this comment, we conclude that BACT for the new cooling tower is a high efficiency drift eliminator designed to achieve a 0.0005% drift rate.

#### 3. The Cooling Towers Limits Are Not Enforceable

The Permit identifies two applicable requirements for the cooling towers, 401 KAR 63:010, Sec. 3 (fugitive emissions) and 401 KAR 51:017 (BACT). These are implemented by imposing operating and emission limits:

#### 1. Operating Limitations:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

#### 2. Emission Limitations:

- a) Pursuant to regulation 401 KAR 51:017, the cooling towers shall utilize 0.001% drift eliminators.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

The Permit states that no testing is required to determine compliance with these limits, but the SOB indicates monthly measurement of total dissolved solids ("TDS") and circulating water. SOB at 31. The Permit requires recordkeeping for these two parameters, but not their measurement. Permit, p. 73, Unit 41, Condition 5. This collection of conditions is contradictory and ambiguous and thus not enforceable.

The drift rate of 0.001% in the Permit is not enforceable as a practical matter. The Permit does not specify any monitoring to determine if the proposed drift rate is being met. Drift rate is measured using a special drift test conducted by a certified test firm. These tests are commonly performed on cooling towers and are commercially available. The Permit also does not specify a time period to demonstrate compliance with the drift rate, i.e., averaging time or the frequency for monitoring and reporting the drift rate.

Particulate emissions coming out of the tower depend on the drift rate, circulating water flow rate, and total dissolved solids ("TDS") in the circulating water. Particulate emissions must be measured in the tower exhaust or calculated from the circulating water rate, TDS in the circulating water, and drift rate. The Permit requires only that records be kept of water circulation and TDS, which by themselves are not adequate to determine either drift rate or PM/PM10 emissions. The Permit does not require that water circulation be measured nor specify any testing frequency, testing methods, or testing locations.

In sum, the Permit sets a BACT control efficiency, with no supporting monitoring, while the SOB contains monitoring to determine compliance with a BACT emission rate, which is not in either the SOB or the Permit. This mix of conditions is not enforceable because they contain no averaging time; they do not require any monitoring of drift rate, circulating water rate, or circulating water TDS; they do not specify testing frequency, methods, or location; and they do not require that PM/PM10 emission be calculated and compared to an emission limit. Thus, there is no way to assure compliance with cooling tower BACT.

#### V. PORTIONS OF THE PERMIT ARE NOT ENFORCEABLE

#### A. Compliance Provisions Are In the SOB But Not The Permit

Most of the procedures that would be used to determine compliance with Permit conditions are summarized in the SOB, but are not included in the Permit. These include the initial and periodic stack testing for PM/PM10, VOCs, fluoride, sulfuric acid mist, mercury, and lead emissions from the PC boiler. SOB, pp. 26-28, Table 5.4. The Permit itself contains the sulfuric acid mist and fluoride monitoring, but includes it in Section B.4.j in Table 1, CAM Monitoring Approach. The Preamble to the CAM regulations makes it clear that compliance with CAM indicator provisions does not make an applicable requirement enforceable. 62 FR 54,900-54,947.

The SOB is not an enforceable document. The purpose of the Title V program is to include all of the provisions, including compliance provisions, in a single document, the Title V Permit. Thus, we recommend that the specific compliance provisions now

<sup>&</sup>lt;sup>7</sup> We are citing to the version that is available on EPA's CAM website at <u>www.epa.gov/ttn/emc/cam.html</u>.

found only in the SOB be moved into the Permit and that the Permit clearly state that these provisions are intended to enforce subject Permit limits.

### B. CAM Compliance Provisions Are Not Adequate To Ensure Compliance With Permit Limits

The Permit includes CAM monitoring for two pollutants, sulfuric acid mist and fluorides. The following subsection comments on the substance of the proposed indicator monitoring approach. The Permit appears to rely on this CAM monitoring to assure compliance with the BACT limits on sulfuric acid mist and fluorides. SOB, pp. 27-28, Table 5.4. This section comments on the use of CAM monitoring to assure compliance with permit limits.

The CAM monitoring requirements do not assure compliance with the sulfuric acid mist and fluoride BACT limits. Compliance with CAM indicator provisions, such as proposed in the Trimble Permit, does not make an applicable requirement, e.g., a BACT limit, enforceable. 62 FR 54,900-54,947.8

The EPA has objected to Title V permits in Region 4 for failure to include explicit statements that the indicators are not set as enforceable limits. For example, in the Tampa Electric Company's F.J. Gannon Station case, the EPA objected to the Title V permit, stating:

While the permit does include parametric monitoring of emission unit and control equipment operation in the O&M plans for these units... the parametric monitoring scheme that been specified is not adequate. The parameters to be monitored and the frequency of monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of normal operating time. The Department should set the appropriate percentage of the operating time would serve as trigger for this testing require.

U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Tampa Electric Company, F.J. Gannon Station, Permit No. 0570040-002-AV. This theme will be

<sup>&</sup>lt;sup>8</sup> We are citing to the version that is available on EPA's CAM website at www.epa.gov/ttn/emc/cam.html.

repeated below for each parameter that is monitored through an indicator because none of the proposed indicators are set as enforceable limits.

Thus, unless the Permit explicitly states that an exceedance of an indicator is a violation of the underlying applicable requirement, the indicator does not assure that the underlying requirement is enforceable, it only provides a reasonable assurance of compliance. The indicator approach proposed by DAQ to assure compliance with Permit limits is probative. Compliance must be determined by a performance test or other similar data in which actual stack emissions are measured.

Finally, the CAM section of the Permit only addresses sulfuric acid mist and fluoride. We believe that CAM monitoring also should be required for other pollutants, including total PM/PM10 (the CEMS only measures filterable) and lead emissions from the PC boiler.

#### C. The PC Boiler Limit on Toxic Substances Are Not Enforceable

The Permit states that compliance with the limits on PM/PM10, SO<sub>2</sub>, CO, and Hg shall constitute compliance with 401 KAR 63:020 with respect to toxic substances. Permit, p. 73, Condition 2.o. This condition assumes that all of the toxic substances emitted by the project are related to these four pollutants and that the emission limits on these four pollutants are low enough to assure that emissions of toxic substances are not harmful to health and welfare of humans, animals and plants. 410 KAR 63:020, Sec. 3. There are two problems with these assumptions.

First, the file we reviewed contained no evidence that the Division has identified the specific toxic substances that would be emitted by Trimble, quantified their emissions, and performed a risk assessment to determine if the emissions of these substances are harmful to health and welfare of humans, animals and plants.

Second, the file we reviewed contained no evidence that there is any relationship between these four regulated pollutants and the unidentified toxic substances they are designed to control. Based on regression analysis of coal quality data in the Thoroughbred and cases, most of the toxic substances of concern are not related to these four pollutants. Dioxins, mercury, and selenium, for example, are not related to SO<sub>2</sub>, PM/PM10, NOx, or CO emissions. Further, there is no evidence that the specific limits imposed on PM/PM10, SO<sub>2</sub>, CO, and Hg are low enough to assure that emissions of all toxic substances are not harmful to health and welfare of humans, animals, and plants.

Thus, we recommend that the Division prepare a human health and ecological risk assessment to determine the impact of project emissions on the health and welfare of humans, animals, and plants. This could be done as part of the U.S. EPA's obligation to consider impacts on endangered species. See below. The pollutants and emission limits used in this assessment should be established as Permit limits.

#### D. The PC Boiler Lead Limit Is Not Enforceable

The Permit sets a limit on lead of 0.55 ton/yr based on a 12-month rolling total. Permit, p. 73, Condition 2.m. This limit is not enforceable.

First, the averaging time is ambiguous and excessively long. It is unclear whether the limit is an annual average rolled monthly or an annual average rolled annually. Regardless, these averaging times are too long because an inspector cannot determine if they are being complied with.

Second, the limit is slightly less than the PSD significance threshold of 0.6 ton/yr. 401 KAR 51:017, Sec. 1(221)(a). If emissions exceed 0.6 ton/yr, BACT for lead would be required. Thus, the new unit is a synthetic minor for lead. Synthetic minor limits generally require both an emission limit and a production limit to assure that emissions remain below the significance threshold. Thus, we recommend that the Permit be modified to limit the amount of coal than can burned and the lead content of the coal.

Third, the Permit states the limit as 0.55 ton/y, the SOB states the limit is 0.055 ton/yr, and the Application reports lead emissions as 0.15 ton/yr (0.035 lb/hr). It is unclear which is correct.

Finally, the Permit itself does not require any testing to determine if the lead limit is met. The only compliance testing is found in the SOB, which indicates initial and annual performance tests and the use of PM as a surrogate, monitored by the PM CEMS. SOB at 28, Table 5.4. Lead is very variable in coal and can vary over an order of magnitude or more, depending upon the sources of the coal. The variability would be much greater than for a mine-mouth plant because multiple sources could supply the facility. Further, lead is not related to the ash content of coals and thus PM emissions would likely not be related to lead emissions.

Thus, we recommend that the proposed testing in the SOB be included in the Permit and be supplemented with daily coal sampling, composited and analyzed monthly for lead as the primary compliance method. If indicator monitoring is retained, we recommend that a study be conducted to establish a relationship between lead and PM. The relationship should be used to establish the level(s) of PM that assure compliance with the lead limit and used to predict lead emissions. The relationship also should be confirmed at least annually to assure that it continues to apply. The Permit should be modified to state that an exceedance of this level is a per se violation of the underlying lead limit. Otherwise, the stipulated indicator monitoring does not assure compliance with the lead limit.

#### D. The PC Boiler Sulfuric Acid Mist Limit Is Not Enforceable

The Permit sets a limit of 26.6 lb/hr based on a 30-day rolling average on sulfuric acid mist ("SAM"). Permit, p. 73, Condition 2.j. This limit is not enforceable.

First, we note that the applicant's BACT analysis concluded that BACT is 26.6 lb/hr based on a 3 hour rolling average, to coincide with three 1-hour performance tests.

Ap., p. I-29. We recommend that the averaging time be reduced to a 3-hour period because a 30-day rolling average cannot be determined from a 3-hour long stack test.

Second, the Permit only requires CAM monitoring for SAM. This monitoring includes SO<sub>2</sub> CEMS plus an initial source test, weekly coal sampling with quarterly composites, and establishing a correlation between SO<sub>2</sub> and SAM and an indicator range. Permit, p. 73, Table 1. As discussed above, we are concerned that CAM monitoring cannot be used to assure compliance with BACT emission limits. The only compliance testing is in the SOB, which indicates an initial performance test and the use of SO<sub>2</sub> as a surrogate, monitored by the SO<sub>2</sub> CEMS. SOB at 28, Table 5.4.

We support the indicator approach if appropriately implemented. However, we have some concerns about the proposed monitoring.

First, we are concerned that SO<sub>2</sub> is not a good indicator of SAM. Sulfuric acid is related to SO<sub>2</sub>, but in a very complex, nonlinear manner. The amount of SAM that is formed depends on the duct SO<sub>2</sub> concentration at the inlet to the scrubber, the air heater and economizer gas outlet temperatures, the coal SO<sub>2</sub> in lb/MMBtu, the SO<sub>2</sub> to SO<sub>3</sub> conversion rate of the boiler, the SO<sub>2</sub> to SO<sub>3</sub> conversion rate of the SCR, and the amount of SO<sub>3</sub> removed by the air heater, fabric filter baghouse, SO<sub>2</sub> scrubber, and WESP. All of these factors vary over time and in an unpredictable manner. Thus, measuring coal sulfur content or SO<sub>2</sub> at the stack conveys little information about accompanying SAM emissions.

Thus, we recommend that the Permit be modified to require a study to establish a relationship between SO<sub>2</sub> and SAM. This relationship will likely require other variables, such as temperature and coal sulfur content, to reasonably predict SAM from SO<sub>2</sub>. The relationship should be used to establish the level(s) of SO<sub>2</sub> that assure compliance with the SAM limit and used to permit SAM levels on a routine basis. The relationship should be confirmed at least annually to assure that it continues to apply. The Permit should be revised to that any other variables required to predict SAM be monitored, recorded, and reported. Further, we recommend that the Permit be modified to state that an exceedance of a SO<sub>2</sub> level(s) is a per se violation of the underlying SAM limit. Otherwise, the stipulated indicator monitoring does not assure compliance with the SAM limit.

Second, coal sampling is proposed. The Permit does not identify the parameter(s) that would be monitored in the coal, the location where the sample(s) would be collected (mine, pulverizer), the sampling methods that would be used, the test methods that would be used, or how the resulting data would be used to determine compliance with a SAM limit. These should all be specified in the Permit and subject to public review. We also believe that weekly samples composited quarterly is not adequate to assure continuous compliance with a BACT limit. A minimum of daily samples should be collected and analyzed for at least sulfur, heat content, and ash content. This level of sampling is routinely conducted at coal plants and should be reported to the Division to demonstrate compliance with Permit limits.

#### E. The PC Boiler Mercury Limit Is Not Enforceable

The Permit sets a limit of 13 x 10<sup>-6</sup> lbs/MWh on mercury, based on a 12-month rolling average. This limit is not enforceable. First, the Permit does not indicate whether the megawatt hours is gross or net. The SOB indicates gross, but the SOB is not enforceable. SOB at 28, Table 5.4. The difference can range 10-15 percent. Second, the averaging time is ambiguous and excessively long. It is unclear whether the limit is an annual average rolled monthly or an annual average rolled annually. Regardless, these averaging times are too long because an inspector cannot determine if they are being complied with. Compliance will be determined with a CEMS, which means hourly data will be available. Thus, the Permit should be revised to clarify whether gross or net was intended and to specify a shorter averaging time, no longer than 24-hours.

#### F. The PC Boiler VOC Limit Is Not Enforceable

The Permit sets a limit of 0.0032 lb/MMBtu on VOC emissions, based on a 30-day rolling average. Compliance with this limit "shall be demonstrated by compliance with Subsection 2(f) above," which is the CO emission limit. Permit, p. 73, Condition 2.i. The SOB clarifies that CO emissions is used as a surrogate for VOC emissions. SOB, p. 27, Table 5.4. This limit is not enforceable because CO and VOC are separate pollutants that are not directly related and are affected by different factors.

We support the indicator approach if appropriately implemented. The Permit should require a study be conducted to establish a relationship between CO and VOC. This relationship should be used to establish the level(s) of CO that assure compliance with the VOC limit and used to predict VOC levels. The relationship should be confirmed at least annually to assure that it continues to apply. The Permit be modified to state that a violation of a specific level(s) of the CO surrogate constitutes a per se violation of the underlying VOC limit.

#### G. The PC Boiler PM/PM10 Limit Is Not Enforceable

The Permit sets a limit on particulate emissions comprising the sum of filterable and condensable particulates. Permit, p. 73, Condition 2.a. A PM CEMS will be used to determine compliance with this limit. *Id.*, Condition 4.e. The Permit itself does not contain any additional monitoring to determine compliance with this limit. However, the SOB indicates that initial and annual performance tests also would be conducted to determine compliance. SOB at 26, Table 5.4. This additional testing should be moved into the Permit to assure that the PM/PM10 limits are enforceable.

The list of test methods in the "compliance/testing" column is ambiguous and should be clarified. We recommend that this testing be modified to address the following: (1) eliminate Method 9 (which is used to determine opacity, not PM/PM10); (2) clarify that Method 5 shall be used to determine total filterable PM; (3) to clarify that Methods 201 or 201A shall be used to determine filterable PM10; and (4) to clarify that

Method 202 shall be used to determine condensable PM/PM10 until EPA approves an alternate.

The SOB suggests that an alternate Method 202 can be approved in the permit or any other approved alternative method can be used. This language is ambiguous and appears to grant authority to use any alternative method approved by any party. Test methods used to determine compliance with federally enforceable permit conditions must be approved by the U.S. EPA. There are currently no U.S. EPA approved alternative methods for measuring condensable PM/PM10.

#### H. Good Combustion Control Is Not Defined

The Permit indicates that BACT for CO is "good combustion control." Permit, p. 73, Condition 1. The Permit also indicates that "good combustion control" is one of the methods that will be used to control toxic substances. Permit, p. 73, Condition 2.n. The term "good combustion control" is not defined and thus is not enforceable. Combustion controls include a wide range of techniques, including staged combustion, excess air, low-NOx or ultra low-NOx, and combustion optimization systems. The file that we reviewed does not identify the specific combustion controls that would be used to assure the VOC BACT limit is continuously met. The Permit should be revised to define the term "good combustion control" so that it is practically enforceable.

### VI. U.S. EPA HAS NOT COMPLIED WITH THE ENDANGERED SPECIES ACT

According to the U.S. Fish and Wildlife Service Kentucky has forty-two species that are listed on the federal endangered species list. This list includes 33 animals and 9 plants. Based on the information we have reviewed there does not appear to have been any consultation between U.S. EPA and the U.S. Fish and Wildlife Service at this stage in the proceedings to ensure that the proposed Trimble project will not adversely impact these listed species.

Section 7 of the Endangered Species Act requires every federal agency "to insure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence" of any endangered or threatened species or adversely modify critical habitat. 16 U.S.C. § 1536(a)(2). To accomplish this substantive requirement, Section 7 imposes a procedural duty on each federal agency to consult with the FWS (or the National Marine Fisheries Services in cases involving marine species) before engaging in any discretionary action which "may affect" a protected species. 50 C.F.R. § 402.14(a); see 16 U.S.C. § 1536(a)(2); Natural Res. Defense Council v.

 $<sup>\</sup>underline{\underline{http://ecos.fws.gov/tess\_public/servlet/gov.doi.tess\_public.servlets.UsaLists?usMap=1\&status=listed\&state} = \underline{KY}$ 

Houston, 146 F.3d 1118, 1125 (9<sup>th</sup> Cir. 1998); Sierra Club v. Babbitt, 65 F.3d 1502, 1504-05 (9<sup>th</sup> Cir. 1995).

Federal agencies are required to review their actions "at the earliest possible time to determine whether any action may affect listed species or critical habitat." 50 C.F.R. § 402.14(a). In addition, the FWS may independently request a federal agency to enter into consultation "if [the FWS] identifies any action of that agency that may affect listed species or critical habitat and for which there has been no consultation." *Id.* "The purpose of the consultation procedure is to allow the Service to determine whether the federal action is likely to jeopardize the survival of a protected species or result in the destruction or adverse modification of its critical habitat and, if so, to identify reasonable and prudent alternatives which will avoid the action's unfavorable impacts." *Sierra Club v. Babbitt*, 65 F.3d at 1505; *see* 16 U.S.C. § 1536(b)(3)(A).

There are only two recognized exceptions to the requirement of formal consultations in cases where an agency action "may affect" listed species. These are: (1) when, as a result of the preparation of a biological assessment under 50 C.F.R. § 402.12, or as a result of informal consultation with the Service under § 402.13, "the federal agency determines, with the written concurrence of the Director, that the proposed action is not likely to adversely affect any listed species or critical habitat;" and (2) when a preliminary biological opinion, issued after early consultation under § 402.11, is confirmed as the final biological opinion. 50 C.F.R. § 402.14(b) (emphasis added). Accordingly, if an agency proposes to authorize an activity in an area that "contains threatened or endangered species" it may forego Section 7 consultation only if it determines that its action will not "affect" listed species, and the FWS expressly concurs with that determination. Section 7 further prohibits the "irreversible or irretrievable commitment of resources" during and "before \* \* \* initiat[ing] formal consultation." Houston, 146 F.3d at 1125; 1128 n.6.

U.S. EPA has a mandatory duty to review the proposed Trimble project for compliance with the ESA. Because U.S. EPA cannot delegate its ESA consultation obligations it must necessarily have reserved that authority when it approved the Kentucky PSD program. A state that is administering a SIP approved PSD permit program may not issue a final PSD permit until such time as U.S. EPA has completed its consultation obligations and the results of any consultation have been incorporated into the permitting process. The situation is the same for SIP-approved and SIP-delegated PSD programs. The delegation agreement between Region 10 and the State of Washington requires that "[i]n order to assist EPA in carrying out its responsibilities under Section of the Endangered Species Act (ESA) ... for federal PSD permits, [the state] shall: ... [r]efrain from issuing a final PSD permit until EPA has notified [the state] that EPA has satisfied its obligation, if any, under the ESA ...." Agreement for Partial Delegation of the Federal Prevention of Significant Deterioration (PSD) Program of the United States Environmental Protection Agency, Region 10 to the State of Washington Department of Ecology (March 3, 2003). Kentucky cannot issue the Trimble PSD permit until such time as U.S. EPA has fulfilled its consultation obligations.

There are multiple examples of how the proposed Trimble plant could impact endangered plants and animals. As demonstrated by the recent ESA consultation conducted for the proposed Indeck-Elwood coal plant, air emissions from coal plants can impact endangered plants and animals in several ways, including acid-contaminated rain and nitrogen deposition changing the vegetation composition and driving out endangered plant species. Plants are particularly at risk because the pH of the rain close to the proposed Indeck power plant is estimated to be as low as 2.6, akin to vinegar. These estimates do not consider raindrops falling on vegetation and as the acidic raindrops evaporate the acidity increases even more. Attached in support of this comment are four documents, the study conducted by Indeck's consultants, an addendum to that study, U.S. EPA's summary of the impacts and FWS's review of that information. This example is not intended to be exhaustive. The first step in the analysis has to be to identify what endangered plants and animals reside within the zone of potential impacts from this coal-fired power plant.

### VII. THERE IS NO INDICATION THAT THE DIVISION CONSIDERED ALTERNATIVES TO PERMITTING A LARGE COAL PLANT

The records we reviewed do not indicate that the Division considered whether or not energy efficiency, renewable energy, or a natural gas-fired power plant could individually, or in combination eliminate the need for a new, large coal-fired power plant. We urge the Division to conduct an analysis of whether these cleaner, safer, and more cost-effective options for meeting our energy needs.

The PSD program has three central features that advance its general purpose of preventing increases of air pollution that a state finds undesirable. These include the BACT requirements, the prevention of ambient air quality deterioration provisions, and a robust public participation and state decisionmaking process. Section 165(a) of the Act prohibits construction of major stationary sources in PSD areas unless an applicant demonstrates that these and other requirements have been met. 42 U.S.C. § 7475(a).

#### USEPA has provided a detailed explanation of the BACT provision:

The technology-forcing component of the PSD program provides that proposed facilities are subject to the "best available control technology" for each pollutant subject to regulation under the Act that is emitted from such facilities. 42 U.S.C. § 7475(d)(4). Congress granted permitting authorities broad discretion to determine BACT in a manner consistent with the environmental protection goals of the PSD program, allowing considering of "energy, environmental, and economic impacts." Specifically, the legislative history demonstrates that Congress authorized the concerns of the community regarding the overall impact of the source on air quality to be factored into the BACT components of the PSD permitting decision.

[W]hen an analysis of energy, economics, or environmental considerations indicates that the impact of a major facility could alter the character of that community, then the State could, after considering those impacts, reject the application or condition it within the desires of the State or local community. Flexibility and State judgment are the foundations of this policy.

See S. Rep. No. 127, 95<sup>th</sup> Cong., 1<sup>st</sup> Sess. 31 (1977) reprinted in 3 Senate Comm. on Environment and Public Works, 95<sup>th</sup> Cong., 2d Sess., A Legislative History of the Clean Air Act Amendments of 1977, at 1405 (1978).

Section 165(a)(2) establishes the obligation of a permitting agency to consider, and an opportunity for the public to comment on, alternatives to major new sources of air pollution. For attainment areas, section 165(a)(2) prohibits construction of a new major emitting facility unless "a public hearing has been held with opportunity for interested persons \* \* \* to appear and submit written or oral presentations on the air quality impact of such source, <u>alternatives thereto</u>, control technology requirements, <u>and other appropriate considerations</u>." 42 U.S.C. § 7475(a) (emphasis added).

The CAA and the PSD regulations establish a robust and meaningful public participation framework that requires IEPA to consider "alternatives" (42 U.S.C. § 7475(a)) to major sources of air pollution and "a careful evaluation of the consequences of such a decision," indicating that alternatives actually be considered. 42 U.S.C. § 7470(5).

USEPA has taken the position repeatedly that energy efficiency, other alternatives, and the need of a project are all factors that can and must be considered by a PSD permitting authority if raised during the public comment process. In 1996 USEPA filed a brief in <a href="Ecoelectrica">Ecoelectrica</a>, 7 E.A.D. 56 (EAB 1997), in which it stated:

Energy conservation is central to meaningful air pollution prevention initiatives, and energy conservation considerations are cognizable under the PSD program. Further the EAB has recognized the legal authority under the PSD program to consider alternatives to a proposed source in <a href="Hawaiian Commercial & Sugar Company">Hawaiian Commercial & Sugar Company</a>, 4 EAD at 99-100, and Old <a href="Dominion Electric Cooperative">Dominion Electric Cooperative</a>, 3 EAD at 793-794. These precedents logically encompass the legal discretion to consider energy conservation as an alternative to a proposed source.

Response of EPA Region II and EPA Office of Air and Radiation to Mr. Arana's Petition for Review, Ecoelectrica LNG Import Terminal and Cogeneration Project, (Dec. 24, 1996). Although the Board did not require consideration of need in that case, the Board did not foreclose review when the state refuses to do so.

[T]he Board did not mean to address the issue of whether, and under what circumstances, the Board could consider a challenge based on alternate means of meeting energy needs. Rather, as in <u>Kentucky Utilities</u> and as in this case, the Board merely meant to suggest that review under 40 C.F.R. § 124.19(a) was not warranted because the need for the power from a proposed facility would 'more appropriately' be addressed by the responsible State authority.

#### Ecoelectrica 7 E.A.D. at 74 n.25.

Gregory Foote wrote in his thoughtful article <u>Considering Alternatives: The Case for Limiting CO2 Emissions From New Power Plants Through New Source Review</u> that power plants warrant special scrutiny in the PSD permitting process:

Because the function of any single plant typically is to add to a common pool of electricity supply, the threshold question of need should never be ignored in deciding whether to issue a permit. ... Coal-fired plants in particular merit extra scrutiny because of their tremendous size, longevity, capital and operating costs, demands on fuel suppliers and transmission lines, and adverse environmental impacts. All these public policy concerns are best addressed by reading the CAA as providing no vested right to build a coal-fired plant in any form, and as requiring that every decision to do so only be made after careful consideration of each important aspect of the consequences of that decision. As discussed below, this reading is also the best one under the law.

The threshold question in considering any prospective new or modified electricity generating plan fired by fossil fuels is why the plant should be constructed at all: obviously, it is preferable from the air quality standpoint to rely on renewable energy and more efficient use of existing resources than construct any new fossil-fuel plant.

#### 34 ELR 10642, 10657-58 (July 2004).

...

In sum, the Clean Air Act affords the Division significant authority to protect its State's air resources and it is not required to blindly issue permits for sources of air pollution that will have significant public health, economic, and environmental impacts for decades into the future.

### VIII. THE MODELING MUST CONSIDER PEAK NOX LIMITS THAT MAY OCCUR

It is not clear from the record that the maximum short-term NOx emissions, i.e. the combination of emissions from Unit 1 and 2, were used in the modeling for ensuring compliance with the NAAQS and Class 1 requirements.

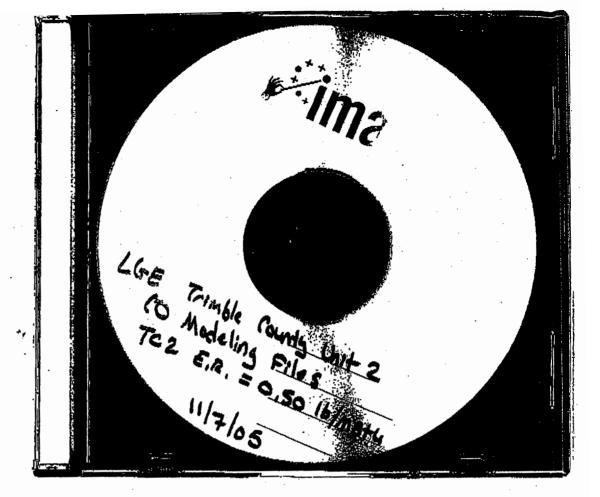
## IX. THE PEABODY THOROUGHBRED DECISION CONFIRMS MANY SHORTCOMINGS IN THE TRIMBLE DRAFT PERMIT

Given the hearing examiner's recommendation in the Peabody Energy Thoroughbred matter dated August 9, 2005 (attachment G), we again respectfully request that the Trimble permit is re-noticed for public comment. Many of the issues petitioners raised in the Peabody matter successfully also apply in this Trimble proceeding and we request the opportunity to submit additional comments raised by the hearing examiner's decision.

#### **ATTACHMENTS**

- A. EPA, Clean Air Markets-Trimble 1995-2003 emissions data
- B. Cambridge Environmental Inc., and Epsilon Associates (Indeck's consultants), <u>Indeck Elwood Energy Center Ecological Risk Assessment</u>, April 2005 (92 pp + 164 pp appendices)
- Cambridge Environmental Inc., and Epsilon Associates, <u>Supplemental data</u> request regarding the ecological risk assessment of the Indeck Elwood facility, May 9, 2005 (55 pp)
- D. Letter from Pamela Blakely, US EPA to John Rogner, US FWS, summarizing consultation findings, June 7, 2005 (11 pp)
- E. Letter from John Rogner, US FWS to Pamela Blakely, US EPA concluding the consultation process, June 9, 2005 (4 pp)
- F. NOx CEMS data, Trimble 2004-2005
- G. HEARING OFFICER'S REPORT AND RECOMMENDED SECRETARY'S ORDER in the matter of Sierra Club v. Environmental and Public Protection Cabinet, dated August 9, 2005.

## Exhibit B



## **Exhibit C**

#### COMMONWEALTH OF KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET FILE NO. DAQ-27602-042 PERMIT NO. V-02-043 R2

SIERRA CLUB, VALLEY WATCH, INC. AND SAVE THE VALLEY, INC.,

PETITIONERS

٧.

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

and

LOUISVILLE GAS AND ELECTRIC COMPANY RESPONDENTS

#### DECLARATION OF PHYLLIS FOX

- I, Phyllis Fox, hereby declare and state:
  - 1. I reside at 2530 Etna St., Berkeley, California 94704.
  - 2. I have masters and doctorate degrees Environmental Engineering from the University of California at Berkeley. In addition, I am a registered professional engineer in Arizona, California, Georgia, Florida, Washington, and

I am also a Diplomat of the American Wisconsin. Academy of Environmental Engineers, certified in air pollution control. I have over 35 years of experience in environmental engineering, including working on the design of power plants, participating in and managing research programs on various energy processes, developing and employing emission monitoring techniques, and participating in the permitting of hundreds of industrial facilities, including over 80 electric generating stations producing more than 44,000 MW of electricity in over 20 states. 1981, I have worked as a consulting engineer with my own business in California, working in several major areas - air pollution control and air quality impact analysis, water pollution control, water analysis and hazardous waste. More specifically, I have been involved in preparing and reviewing hundreds of air permits involving BACT, netting, emission calculations, enforceability, and other types analyses. This work has involved a wide range of industrial processes and pollution control systems including emissions of NOx, SO2, PM/PM10, sulfuric acid mist, carbon dioxide, volatile organic compounds, trace metals, and other pollutants.

- 3. In July 2005, I became formally involved as Petitioners' expert in reviewing the Kentucky Environmental and Public Protection Cabinet's ("Cabinet") proposed combined Title V/Prevention of Significant Deterioration ("PSD")/Title IV Phase II Acid Rain/NOx SIP Call Permit No. V-02-043 ("the Permit") to be issued to Respondent Louisville Gas & Electric Company ("LG&E").
- 4. In July 2005, I was informed by Petitioner Sierra Club that the Club had made a request for files related to the proposed Permit. Due to the inadequacy of the documents produced in response to Sierra Club's request, which consisted of an incomplete permit application and no supporting materials, I decided to go in person to review the file. I made an appointment for July 29, 2005. On that day, I arrived at the Cabinet's office at 803 Schenkel Lane, Capitol Complex B, Frankfort, Kentucky. There I was given what Cabinet representatives Tom Adams, Ben Markin and Mary Hawkins alleged to be the entire file. This file consisted of the application in a large binder and a box full of unsorted and disorderly documents, some of

which had nothing to do with the proposed Trimble PSD permit.

5. going through what was produced, concluded that it was incomplete. For example, I found information in the file regarding claimed no creditable reductions of sulfur dioxide emissions and no detailed emission calculations for nitrogen oxides sulfur dioxide that support the netting or calculations. Notably missing from the file that the Cabinet provided to me was the minor permit revision supporting the creditable application emission decrease of sulfur dioxide that was submitted by LG&E to the Cabinet on April 29, 2005, which the Cabinet claims was on file in the public record. Response to Comments, Division Response to U.S. EPA Region 4's PSD Comment A.1. I then pressed Mr. Adams, a permit technical consultant for the Cabinet, and Mr. Markin, the permit engineer, for the remainder of the relevant files. In response, Mr. Adams and Mr. Markin referred me to Mary Hawkins, the file clerk responsible for production, who assured me that I had the complete file consisting of all documents available for public review.

- 6. On the same day at the Cabinet's Frankfort office, I began copying pages of greatest interest to carry home, as public comments were due a week later. However, midway through my file review, the Cabinet's copying machine broke down. I then tagged pages that I wanted on a priority basis and requested that they be copied and rushed to me as soon as possible, given the impending comment deadline. I received copies of the tagged pages from the Cabinet during the third week in August, some days after the Cabinet processed my request on August 15, 2005, and nearly two weeks after Petitioners had filed comments and the comment period had closed. Exhibit E, Disposition of Request for Public Records.
- 7. Also missing from the documents provided to me during my visit to the Frankfort office were LG&E's startup and shutdown plan, as well as the operating and maintenance procedures and manufacturer's recommendations for the proposed unit's equipment. The Cabinet has not made these items available to me, or to my knowledge to any Petitioner or other member of the public, at any point during or outside of the

public comment period.

- 8. During the same visit to the Frankfort office, in addition to my requests related to the proposed Permit, I asked the Cabinet for a complete copy of the application submitted by Cash Creek Generation LLC for an Integrated Gasification Combine Cycle facility. I received the application from the Cabinet several months later.
- 9. On or around the first week of August 2005, I was informed by Bruce Nilles that the Sierra Club had requested a 45 day extension of the comment period. Mr. Nilles subsequently informed me that the Cabinet had denied the request. On August 8, 2005, I emailed the Cabinet to verify when comments were due and was told that the agency would accept comments until the close of business on August 10, 2005. Exhibit O, Email from Phyllis Fox to Tom Adams and reply.
- 10. Due to the Cabinet's refusal to extend the comment period further, I had to prepare my comments without access to the complete file, missing most notably adequate support for the netting claims,

without a complete copy of the application, and without the copies of tagged pages that I requested from the Cabinet, which I received significantly after the close of the comment period. I had less than two weeks to review the information that I had and to prepare comments. In comparison, the Cabinet received the application from LG&E on December 1, 2004 and issued the proposed Permit in the summer of 2005. Thus, relative to me, Petitioners and other members of the public, the Cabinet had abundant time in which to review the proposed unit.

11. The reviewing agency is the sole source for the full information needed to learn about and comment on air quality permits. The above-listed failures by the Cabinet with respect to permit files severely hampered my ability to raise all pertinent issues related to the proposed Trimble PSD permit, and thus to participate in this proceeding as a member and representative of the affected public. My concerns with the document production and the lack of an extension period and how these factors negatively impacted my ability to comment on the Permit are noted in the comments that I helped draft for Sierra Club,

Save the Valley and Valley Watch, that were submitted to the Cabinet on August 8, 2005 and revised August 9, 2005. Exhibit A.

The short period for public review and comment on the proposed Trimble Unit limited my ability to raise all relevant issues posed by the permit. The omission for regarding the basis the of information respondents' netting calculations prevented me from verifying their calculations. Likewise, the absence of CD-ROM containing modeling data meant respondents' findings on NAAQS violations could not be reviewed and critiqued. As noted in comments on the Trimble permit submitted by the Petitioners that I helped draft, the lack of time overall limited the depth and completeness of my submitted comments. addition, I was unable to submit any comments on the proposed facility's coal blending facility, material handling operations, backup diesel generator emergency diesel fire water pump, although my initial review showed that the Permit's BACT analyses were not adequate for these items. Finally, the lack of an extension prevented from me reviewing incorporating into my comments the administrative order on the Thoroughbred case that was released one day after the public hearing in the present case. See Hearing Officer's Report and Recommended Secretary's Order in the matter of Sierra Club v. Environmental and Public Protection Cabinet File No. DAQ-26003-037 and DAQ-26048-037, dated August 9, 2005.

- 13. The Cabinet's performance in providing access to supporting permit information is substandard compared to other state and federal agencies that I have sought records from, including five U.S. EPA regions, over 20 separate California air districts, and air districts 30 other states, including in over Kentucky's neighbors. The lack of complete files significantly disadvantages hampers and permit review commenting. It is difficult to write meaningful comments without fully understanding the basis of an agency's decision.
- 14. In addition, the Cabinet's failure to meaningfully extend the comment period beyond the minimum required 30 days, particularly given the failure to provide requested information and the complex nature of the case, is unusual and is

inconsistent with both the Cabinet's own practice in other cases and that of numerous other state and federal agencies. See, e.g., Exhibits I, J, and K. In the Thoroughbred case, for example, the Cabinet granted over 100 days for public review, during two separate public comment periods. Each of the two 30-day comment periods was extended, the first 20 days, the second 30 days. Exhibit I. When the subject of a permitting matter is highly technical and complex, as here, it is common to allow a minimum of 45 days and common to grant even longer extensions to accommodate the time constraints of members of the public who are not subject matter experts and who typically work in other capacities.

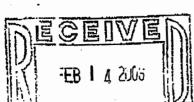
15. It is my belief that the proper remedy in this case would be to have the Cabinet provide all of the relevant permit information and reopen the public comment period for an additional 45 days. Cabinet were to do so, I and other members of public would have adequate time review to the information and submit more detailed comments on the items included in Petitioners' August 9, 2005 comments, as well as comments on the items noted above that I had to omit from the August 2005 comments due to time constraints.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on March 2, 2006 at Berkeley, California.

Phyllis Fox

### **Exhibit D**



COMMONWEALTH OF KENTUCKY
NVIRONMENTAL AND PUBLIC PROTECTION CABINET
FILE NO. DAQ-27602-042

FILED

FEB 1 3 2006

Office of Administrative Hearing

SIERRA CLUB, VALLEY WATCH, INC., and SAVE THE VALLEY, INC.,

PETITIONERS,

VS.

PREHEARING CONFERENCE REPORT

AND

ORDER SCHEDULING INTER ALIA

FORMAL ADMINISTRATIVE HEARING

E VVIRONMENTAL AND PUBLIC PROTECTION CABINET A 2d LOUISVILLE GAS AND ELECTRIC COMPANY,

RESPONDENTS.

\*\*\*\* \*\*\*\*

THIS PREHEARING CONFERENCE REPORT AND ORDER pertains to a Prehearing Conference held on February 9, 2006, in the Main Conference Room of the Office of Acministrative Hearings. Appearing on the behalf of the Petitioners, Sierra Club, Valley Watch, Inc., and Save the Valley, Inc. (collectively the "Petitioners" or "Sierra Club") were the Hon. W. He my "Hank" Graddy, IV and Hon. Meleah Geertsma. The Hon. Robin Thomerson represented the Environmental and Public Protection Cabinet ("Cabinet"). The Hon. John "Jack" C. Bender and the Hon. Robert J. Ehrler appeared for the Respondent, Louisville Gas and Electric Company ("LG&E").

At issue in this proceeding is a Petition for Administrative Review ("Administrative Petition"), filed by the Petitioners on December 16, 2005, in which they challenge the November 17, 2005, determination of the Cabinet's Division of Air Quality ("DAQ") to issue a Title V /

I'SD permit to LG&E, technically a combined Title V / PSD / Title IV Phase II Acid Rain / NOx SIP Call Permit, No. V-02-043, Revision No. 2, hereinafter, "the Permit". The Administrative I etition is quite comprehensive in nature, raising 27 Counts in which the adequacy of Cabinet's review of the Permit was extensively challenged. In their prayer for relief, the Petitioners request that the Hearing Officer recommend to the Secretary that DAQ had exceeded its statutory and regulatory authority in issuing the permit; that the issuance of the Permit, and the provisions contained therein are arbitrary, capricious and contrary to law and fact; that the permit issued to L3&E does not prevent, abate and control all air pollution as required by Kentucky Law; and that for these reasons, the Permit be revoked.

Both the Cabinet and LG&E have filed Answers and Responses in which they generally deny the allegations presented by the Petitioners and in which they request that the Petitioners' Petition be dismissed and the issuance of the Permit be affirmed.

Also at issue in this proceeding was the Respondents' Joint Proposed Scheduling Order and the Petitioners' Response to that proposal. After some discussion as to the Petitioners' As ministrative Petition, the issues presented therein, and the logistics by which this matter will be considered, the parties were able to reach an agreement as to a scheduling order and other related matters. The Hearing Officer will also note that at this time the Respondents were of the opinion that this matter should not be referred to mediation under the provisions of 400 KAR 1:090 Section 7. However, as discovery in this matter proceeds, there remains the possibility that some of the issues raised in the Petitioners' Petition might be resolved through mediation, and upon request, the Hearing Officer will schedule a referral to mediation.

Taking the foregoing into consideration and being fully advised,

#### IT IS HEREBY ORDERED as follows:

#### Formal Hearing Schedule

A formal Administrative Hearing on the issues presented in the Petitioner's Administrative Petition shall be held September 12, 2006, through September 29, 2006, weekends excluded, in the Auxiliary Conference Room, Office of Administrative Hearings, 3:3-36 Fountain Place, Frankfort, KY 40601, Telephone No. 502.564.7312, and thereafter will resume on October 9, 2006, through October 27, 2006, or until completed. The Formal Administrative Hearing will begin at 9:00 a.m. ET each day EXCEPT THAT any hearing date fa ling on a Monday will begin at 1:30 p.m. ET. This Formal Administrative Hearing is as signed FIRST case status. Failure to appear may result in an action adverse to the party failing to appear.

#### Pre-Hearing Scheduling Provisions

- 2. Subject to a claim of privilege, the Cabinet shall provide to the Petitioners for inspection at the Cabinet's offices by no later than February 15, 2006, a complete copy of the subject permit administrative record, including any and all correspondence between LG&E and the Cabinet relating to the subject permit application. If requested, the Cabinet shall provide to the Petitioners copies of all or any part of the administrative record at a cost of \$0.10 per page and the actual copying cost for maps and plan sheets.
- 3. By February 15, 2006, the Respondents shall file with the Office of Administrative Hearings and shall serve on the Respondents a list of each person who had a significant substantive role in preparing or reviewing the subject permit application and eva uating, drafting, or issuing the proposed permit. Respondents shall provide the name and

### **Exhibit E**

#### COMMONWEALTH OF KENTUCKY

#### REQUEST TO INSPECT PUBLIC RECORDS RE KRS CH. 61

#### REQUEST

	DATE8/1.5/05
TO: Duran for Ou Disalt	
I request to inspect the following document(s):	
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Number of copies of each document requested @ 10¢ a	
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	Signature Phyllis Forl 2530 Elne St
-	Company
	Address Phone
DISPO	DSITION
The following disposition was made of the above reques	st: Upwed + copied.
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agent 30, 2001 Letter from LEPE	requests definencies from DAD 1/30/0
	May Thukus
	Signature of Gustodian
	Agency
	· 4
	Amount Received
	Data Data

### **Exhibit F**

FROM:

# COMMONWEALTH OF KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET FILE NO. DAQ-27602-042 PERMIT NO. V-02-043 R2

SIERRA CLUB, VALLEY WATCH, INC. AND SAVE THE VALLEY, INC.,

PETITIONERS

٧.

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

and

LOUISVILLE GAS AND ELECTRIC COMPANY

RESPONDENTS

#### DECLARATION OF JOAN S. LINDOP

- I, Joan S. Lindop, hereby declare and state:
  - 1. I reside at 12907 Sunnybrook Drive, Prospect, Kentucky 40059.
  - 2. I have been a member of the Cumberland (Kentucky) Chapter of the Sierra Club since 1989 and am currently a member, serving as the Co-Chair of the Greater Louisville Sierra Club and Cumberland Chapter delegate to the Midwest Regional Conservation Committee ("MRCC").

FROM:

3. As a member and in my current position, I have been active on coal plant and air quality issues. For example, over the past four years I have participated in annual or biannual workshops sponsored by MRCC on air quality in the Midwest region. One focus of these meetings has been the contribution of coal plants to air quality pollution. In the past three years. I have participated in advocacy efforts to pass healthful air quality standards in the Air Pollution Control District for the metropolitan Louisville area.

4. Around the beginning of June 2005, I became aware of Louisville Gas & Electric's ("LG&E") proposed new Trimble unit through reading several articles in the Louisville Courier Journal. I spent the remainder of June trying to find information about the proposed new unit. My activities included searching the internet and calling the Environmental and Public Protection Cabinet ("Cabinet") on or around the 24<sup>th</sup> of June. When I first spoke to the cabinet at the end of June, an agency representative in the Frankfort office told me that the permit application was available for public

inspection in Bedford, the seat of Trimble County. I then called the City of Bedford for directions and was told that obtaining the permit application would be easier if I went to Frankfort.

- 5. I went to the Cabinet's website during the first week of July to obtain more information about the permit. The website made only a general reference to the publication of notice regarding the permit, but did not list the local paper in which the Cabinet published the notice, the date on which the notice appeared in the local paper, or the date on which the public comment period would end.
- 6. On or around July 18, 2005, I again called the Cabinet in Frankfort to ask about getting access to the permit application. At this time, the Cabinet told me that I would need an appointment to see the application and that the agency was very busy. I then spoke to Mary Hawkins, the file clerk in charge of the permit application, and requested a copy of the application. Mary told me that there were a lot of document requests being made of the Cabinet and that it would be at least two weeks only a few days

before the end of the comment period - before I could receive a copy of the permit application. When I offered to make my own copy, Mary told me no and that she would make the copy. After hanging up with Mary, I called a friend of mine who works within the Cabinet and explained the difficulties that I was having with obtaining the permit information from the Cabinet. He said that he would ask the appropriate people if I could receive the application on a more expedited basis. Later that day, I received a call from Mary saying that she could have a copy of the application ready for me the next morning if I came to the Frankfort office prepared to pay for the copy by check.

7. On July 20, 2005, I traveled to the Cabinet's Frankfort office. There I asked for the permit application file and was given a copy of LG&E's application for a combined Title V/Prevention of Significant Deterioration ("PSD")/Title IV Phase II Acid Rain/NOx SIP Call Permit ("Permit") for the addition of a new unit at its generating facility in Trimble County. The application was 682 pages; I then mailed the application to Bruce Nilles at the Sierra

Club's office in Chicago, located at 200 N Michigan Avenue. Neither during this visit nor at any other time did the Cabinet give me any materials supporting the application. As a layperson, I did not know to make a specific request for specific supporting materials, but relied on the Cabinet to give me all of the relevant permit information. Exhibit P, Email from Joan Lindop to Bruce Nilles.

- 8. On July 23, 2005, two weeks before the public hearing on the permit scheduled for August 8, 2005, I sent a letter to John Lyons, the Director of the Cabinet's Department of Air Quality. Exhibit H, Letter from Joan Lindop to John Lyons. The letter stated that I believed the public comment period for the permit was to end August 7<sup>th</sup>, one day before a public hearing on the permit was to be held in Bedford. The letter asked for a 45 day extension of the comment period for the submission of public comment.
- 9. I called Mr. Lyons on or around July 25, 2005 to confirm receipt of my extension request and to obtain an answer to my request. As Mr. Lyons did not answer my call, I left a message regarding the extension with

his administrative assistant.

10. On July 26, 2005, I sent Mr. Lyons an email asking Mr. Lyons to confirm when the comment period on the permit was to end and stating my understanding that a public hearing was to occur in Bedford on August 8<sup>th</sup> - after the close of the comment period. Mr. Lyons tersely responded by sending an email reply three hours later, confirming that the comment period was to close at 4:30 on August 5<sup>th</sup>. He also confirmed in this email that "the public is on the 8<sup>th</sup>, @6:30." Exhibit Q, Email from Joan Lindop to John Lyons and reply. At the time of his email reply, Mr. Lyons had not responded directly to either my written extension request or my phone message about the request.

11. On or around July 26, 2005, Don Newell, an employee of the Cabinet, called to let me know that Greater Louisville Group Sierra Club could comment on the permit up until the evening of August 9, 2005, one day after the public hearing. Mr. Newell did not state whether the Cabinet considered the acceptance of comments after the hearing an official extension of the comment period.

- 12. I attended the August 8<sup>th</sup> public hearing, along with Eleanor Self, a member of the Greater Louisville Group Sierra Club's Executive Committee. I do not recall the Cabinet announcing at the meeting that the agency would accept public comments until the evening of the 8<sup>th</sup>, nor to the best of my knowledge did the agency otherwise publish notice of this new deadline.
- 13. Sierra Club and other two non-profit organizations, Valley Watch, Inc. and Save the Valley, Inc., submitted joint comments on August 8, 2005 and revised comments on August 9, 2005. Exhibit A. In the comments, we asked for a 60-day extension of the comment period. The comments detail "Shortcomings in the Public Process," including lack of clarity on the beginning and end of the comment period, the failure to grant a meaningful extension and extensions granted in other states, and the provision of incomplete the comments, "the project files. Дs noted in magnitude of the Trimble project and the voluminous permit information all warrant careful consideration. Absent more time these comments do not reflect a review of the complete administrative record because

there simply was inadequate time to conduct such a review." A later section of the comments focusing on the Best Available Control Technology analysis notes that "[d]ue to the shortness of time for these comments, we have focused on" three out of eight relevant facility components.

- 14. As a resident of Kentucky deeply concerned with the quality of the air that the citizens of Kentucky breathe. T found the opportunity for participation in the Trimble permitting decision to be seriously deficient. Kentucky has one of the highest cancer rates in the nation, so I am trying to follow air quality issues related to health. I generally read the Louisville Courier Journal, I get emails from other concerned citizens in the area and I listen to the local NPR station, but I was not aware of the first public hearing on the proposed Trimble unit.
- 15. Once I became aware of the Trimble permit, I made every effort to obtain the permit file as quickly as possible so that I and other concerned citizens within the Sierra Club could participate in the permit process. At each step of the way, I felt confused,

frustrated, and unwelcome. The Cabinet not only provided me with incomplete information, it did so on an extremely delayed basis and only after much resistance. Had I not had a personal contact within the agency (as many people do not), based on the agency's own representation I would have received the permit application less than a week before the close of the comment period. With a personal contact, I still only had less than twenty days to review and comment on a highly complex, lengthy - and incomplete - permit file. The disorder, omissions of important information, insufficient departmental resources and overall avoidance of my requests during this process systemic reluctance towards evidence а participation. This obstructionist attitude prevented me and other concerned citizens from raising relevant objections to the Trimble PSD permit.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on March 2, 2006

Joan S. Lindop

### Exhibit G

----Original Message-----

From: Ecoserve1@aol.com [mailto:Ecoserve1@aol.com]

**Sent:** Wednesday, July 27, 2005 1:38 PM

To: John.Lyons@ky.gov

Subject: Request for extention of comment period-Trimble County

Mr. John Lyons Division of Air Quality

I am writing to ask for a minimum 45 day extension to the comment period for the Trimble County power plant expansion. With so many new sources being proposed that the Commonwealth has had to hire outside consultants to do their work, it is obvious that those of us in the private sector face similar but more defined time constraints.

Trimble County is a very large and antiquated facility designed to serve areas outside of Kentucky. Please grant this extension in the public interest.

Thank you.

John Blair, president Valley Watch, Inc.

800 Adams Avenue Evansville, IN 47713 812-464-5663

In accordance with title 17 U. S. Code, Section 107, this material is distributed without profit to those who have expressed a prior general interest in receiving similar information for research and educational purposes.

### Exhibit H

23 July 2005

John Lyons, Director Division of Air Quality Frankfort, Kentucky 502-573-3787

Re: LG&E Draft Permit, Trimble II

Mr. Lyons:

I believe that the public comment period for the proposed Trimble Co plant ends August 7, the day before the August 8 hearing in Bedford. The proposal has only come to our attention in the last two weeks.

We are requesting an additional 45 days for public comment.

Joan Lindop, Co-Chair Greater Louisville Group Sierra Club

### **Exhibit I**

#### AIR QUALITY PERMIT NOTICE

### PERMIT ISSUANCE TO A MAJOR SOURCE SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION (PSD/TV)

Thoroughbred Generating Station
1380 Thoroughbred Dr., Central City, Kentucky 42330
Plant I.D. # 021-177-00077
Application Log # 53619

Thoroughbred Generating Company, LLC has applied to the Kentucky Division for Air Quality for a permit to construct and operate a pulverized coal fired base load electric generating station to be located in Muhlenberg County, Kentucky. The plant will produce electricity and will emit criteria, regulated and hazardous air pollutants. Air quality regulations for prevention of significant deterioration of air quality which define increments of allowable air quality degradation will apply. Increment consumption has been predicted by EPA approved dispersion models to be as follows:

Pollutant	$PM_{10}$		Sulfur Dioxide			Nitrogen Dioxide
Averaging Time	Annual arithmetic mean	24 hour maximum	Annual arithmetic mean	24 hour maximum	3 hour maximum	Annual arithmetic mean
Increment Allowable	17	30	20	91	512	25
Predicted Consumption	1.69	8.17	1.57	20.95	112.4	0.76

The Kentucky Division for Air Quality is also proposing to issue a draft Acid Rain phase II Permit to Thoroughbred Generating Company, LLC in accordance with the Title IV, Acid Rain Program (40 CFR parts 72 and 76). The designated representative for the plant is Mr. K.E. Allen.

The draft permit will include a notice of Maximum Achievable Control Technology (MACT) Approval for Hazardous Air Pollutants that are emitted during coal combustion Documentation to support the determination will be available for public inspection and comment. Additionally, compliance assurance monitoring required by 40 CFR 64 has been addressed in the permit.

On February 18, 2002, the Division received notification from the United State Department of the Interior (DOI), that based on their review and analysis of material received on January 2, 2002, they believed that the proposed emissions from Thoroughbred Generating would have an adverse impact on visibility at Mammoth Cave National Park. Subsequent modeling provided to DOI and the Division demonstrated that there would be no impact greater than 10% any day over a three year period, and only 2 days greater than 5% over that period. Based on that analysis, the Division does not concur that Thoroughbred Generating would have an adverse impact on Mammoth Cave National Park.

Copies of the Division's draft permits, Notice of MACT approval and supporting information are available for inspection by the public during normal business hours at the following locations:

Division for Air Quality, 803 Schenkel Lane, Frankfort, KY;

Division for Air Quality Owensboro Regional Office, 3032 Alvey Park Drive West, Suite 700, Owensboro,

The Kentucky Division for Air Quality held initial public hearing on February 12,2002. Comments on the initial draft permit has warranted a second public hearing at 6:30 p.m. CST on July 25, 2002, at the Muhlenberg North High School cafeteria, 501 189 Bypass Road, Greenville, KY 42345. U.S. EPA will review the proposed permit and has 45 days following receipt to submit comments. To be considered, any written comments must be postmarked within 30 days following the date of this notice. Comments should be sent to Mr. Allan Elliott at the above Frankfort address. All relevant comments will be considered in issuing the final permit. Further information can be obtained by calling Mr. Koorosh Farhoudi at (502) 573-3382. Requests for copies of the permit or relevant permit information may be obtained by contacting Marty Hawkins at the above Frankfort address.

The Commonwealth of Kentucky does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services and provides, upon request, reasonable accommodation including auxiliary aides and services necessary to afford individuals an equal opportunity to participate in all programs and activities. Materials will be provided in alternate format upon req

#### CONTAINS CONFIDENTIAL INFORMATION

# COMMONWEALTH OF KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET FILE NO. DAQ-26003-037 FILE NO. DAQ-26048-037

SIERRA CLUB, VALLEY WATCH, INC., LESLIE BARRAS, HILARY LAMBERT, and ROGER BRUCKER,

PETITIONERS,

v.

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET, and THOROUGHBRED GENERATING COMPANY, LLC,

RESPONDENTS.

RESPONDENT THOROUGHBRED GENERATING COMPANY, LLC'S POST-HEARING BRIEF

Telefax:

Carolyn M. Brown GREENEBAUM DOLL & MCDONALD PLLC 300 West Vine Street, Suite 1100 Lexington, Kentucky 40507 Telephone: (859) 231-8500

(859) 255-2742

Kevin J. Finto
Harry M. Johnson, III
Penny A. Shamblin
HUNTON & WILLIAMS LLP
951 East Byrd Street
Richmond, Virginia 23219
Telephone: (804) 788-8200
Telefax: (804) 899-8218

COUNSEL FOR RESPONDENT THOROUGHBRED GENERATING COMPANY, LLC

#### F. Comments on the Revised Permit Application

On December 3, 2001, EPA submitted initial comments on the revised Permit Application, which covered most of the issues raised previously. On December 5, 2001, the NPS submitted comments regarding BACT and the air quality analysis.

On December 12, 2001, TGC submitted extensive responses to the comments on the revised Permit Application, including information on the control equipment, flow diagrams, Class I and Class II modeling, a coal washing analysis, and response from Earth Tech (Joe Scire) to the NPS comments. Joint Ex. 56.

On a related matter, on December 17, 2001, DAQ issued its "Cumulative Assessment of the Environmental Impacts Caused by Kentucky Electric Generating Units (the "Cumulative Assessment") in response to the Governor's Executive Order 2001-771. Joint Ex. 11. The report found that TGC and the other proposed electric generating units would not cause adverse impacts on public health. *Id.* at 6.

In December 2001, the NRDC submitted comments regarding EPA's and DAQ's failure to require consideration of integrated gasification combined cycle ("IGCC") or circulating fluidized bed ("CFB") technology. TGC responded to these comments in a letter dated January 25, 2002, indicating that CFB and IGCC are not suitable alternatives for pulverized coal technology and are not BACT because they would require the redesign of the project. TGC Ex. 185 at Att. 10.

#### G. The First Draft Permit

On December 28, 2001, DAQ issued a draft permit for TGS based on the October 26 revised Permit Application and subsequent information. Joint Ex. 2 at Att. E. A public notice was also issued that announced the initial public comment period and initial public hearing. Joint Ex. 3 at Att. D.

During the initial public comment period, TGC submitted additional modeling information in response to questions from NPS and EPA. Most notably, on February 5, 2002, Earth Tech submitted a report indicating that an error in meteorological data used for the Class I modeling grossly overstated the predicted impacts from TGS. Joint Ex. 51 at 2. The report concluded that modeling based on accurate weather data showed TGS would not cause adverse impacts. *Id*.

The public comment period began January 9, 2002. Joint Ex. 17 at Red 93. DAQ announced an extension of the comment period for an additional 20 days (until February 28, 2002) to allow the public additional time to review the modeling. *Id*.

#### H. Agency Reaction to the First Draft Permit

On February 14, 2002, NPS filed an "adverse effect on visibility" letter based on prior modeling (before the error was corrected). Shaver Ex. 28 at 2 (attached to Pet. Ex. 167). NPS said it would review the new modeling, which it said appeared to show significantly less impact. *Id.* at 1. On February 26, 2002, EPA forwarded to DAQ detailed comments on the initial draft Permit. Pet. Ex. 23.

TGC filed extensive responses to all public and Agency comments on February 28, 2002 (TGC Ex. 185), March 10, 2002 (Joint Ex. 44; TGC Ex. 39), and May 10, 2002. Joint Ex. 41.

#### I. The May 29, 2002 Permit Addendum

On May 14, 2002 representatives of EPA, DAQ and TGC met to discuss outstanding issues on the Permit in order to develop a plan for reaching closure. 12/4/03 Hearing Tr. 144 (Tickner). In response to inquiries from DAQ, EPA, and NPS, TGC filed an addendum to its Permit Application on May 29, 2002 that contained a refined BACT, CAM, and MACT analysis along with additional information on modeling. Joint Ex. 33.

#### J. The Second Draft Permit

On June 19, 2002, DAQ issued a revised draft Permit for TGC. Joint Ex. 6. The second public notice indicated the public comment period would run for 30 days and a public hearing would be held on July 25. Joint Ex. 24. In response to public and agency comments, TGC submitted additional modeling in support of a short-term SO<sub>2</sub> limit of 0.41 lbs/mmBtu. Joint Exs. 22, 23. At the second public hearing, DAQ announced an extension of the public comment period until August 24, 2002. Cab. Ex. 18 at 2.

#### K. Addressing Concerns of the National Park Service

On August 8, 2002, TGC representatives met with Fran Mainella of NPS and members of her staff to work out technical issues related to the short-term SO<sub>2</sub> limit. She indicated at the meeting that TGC and NPS staff should work out the technical details. After several discussions on those issues, on August 22-23, TGC and NPS exchanged letters in which TGC committed to reduce the 0.41 lbs SO<sub>2</sub>/mmBtu short-term limit based on two years of operating data with a target of 0.23 lbs/mmBtu. Joint Exs. 18, 19. The Federal Land Manager ("FLM") withdrew the adverse impact finding. Joint Ex. 19 at 1. On September 16, 2002, TGC filed another response to comments from the public and from the various agencies. Joint Ex. 17.

#### L. The Final Permit

On October 11, 2002. DAQ issued the Permit. Joint Ex. 6. It incorporated the short-term  $SO_2$  limit and commitment for reevaluation. It also included a lower  $NO_x$  limit than proposed in the draft.

#### M. EPA's Requested Clarification

On November 6, 2002, EPA asked for clarification on two minor points to assure that (1) the SO<sub>2</sub> short-term limit could only go down and not up as a result of the reevaluation and (2) the PSD required provisions would not expire with the Title V permit in five years. TGC Ex. 217 at

### Exhibit J



WWW. epal

Rod R. Blagoje

**Public Notices** 

Note: By order of the Hearing Officer comment period has been extended to May 21, 2004.

Note: By order of the Hearing Officer comment period has been extended to June 21, 2004.

Note: By order of the Hearing Officer comment period has been extended to July 12, 2004.

Note: By order of the Hearing Officer comment period has been extended to July 27, 2004.

Note: By order of the Hearing Officer comment period has been extended to August 27, 2004.

#### **Notice of Public Hearing and Comment Period**

#### Proposed Issuance of a Construction Permit/PSD Approval to Prairie State Generating Company, LLC

Prairie State Generating Company, LLC, 701 Market Street, Suite 781 in St. Louis, Missouri, has requested a permit from the Illinois Environmental Protection Agency's (Illinois EPA) Bureau of Air to construct a new coal-fired power plant on Marigold Road, off of Washington County Highway 12 approximately 5 miles east northeast of Marissa. The plant would have two coal-fired boilers for a total capacity of about 1500 MW of electricity (net output). As a source of emissions, the plant is required to have a permit from the Illinois EPA prior to beginning construction. The plant would be a major source of emissions pursuant to the federal Prevention of Significant Deterioration rules, 40 CFR 52.21. The Illinois EPA is accepting comments on the proposed permit.

The Illinois EPA's Bureau of Air will hold a public hearing on March 22, 2004 at 7:00 p.m. at the Marissa High School, 300 School View Drive in Marissa. The hearing will be held to receive comments and answer questions from the public prior to making a final decision concerning the permit application. The hearing will be held under the Illinois EPA's "Procedures for Permit and Closure Plans," 35 IAC 166, Subpart A. Lengthy comments and questions should be submitted in writing. Requests for interpreters (including sign language) must be made by March 8, 2004. Any questions about hearing procedures or requests to address special needs should be made to the Hearing Officer, Re: Prairie State Generating, Illinois EPA, 1021 N. Grand Ave. E., P.O. Box 19276, Springfield, IL 62794-9276, 217/782-5544.

Written comments must be sent to the Hearing Officer and be postmarked by midnight, April 21, 2004 unless otherwise specified by the Hearing Officer. Written comments need **not** be notarized.

The plant would be a major source of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic material (VOM), sulfur dioxide (SO2) and particulate matter (PM). For these pollutants and other PSD pollutants emitted in significant amounts, the plant must use Best Available Control Technology (BACT). BACT for the coal boilers has been proposed as low-NOx combustors and good combustion practices, accompanied by add-on selective catalytic reduction, electrostatic precipitation, flue gas desulfurization (scrubbing) and wet electrostatic precipitation. As USEPA has not yet adopted applicable rules for Maximum Achievable Control Technology (MACT), the plant is also subject to a case-by-case determination of MACT for emissions of hazardous air pollutants (HAPs), including mercury. The above measures would also provide effective control of the

emissions of HAPs from the boilers.

Prairie State submitted air quality analyses to show that the proposed plant would not violate PSD increments or National Ambient Air Quality Standards (NAAQS). NAAQS are standards for pollutant concentration in the air established by USEPA to be protective of public health and welfare. Increments are additional standards under the PSD rules that protect air quality from significant deterioration. The analyses show that the plant would not have significant impacts for CO and NO2. For the SO2 and PM, the results of the increment analyses are provided below. The analyses also show that the proposed plant would not cause or significantly contribute to violations of the NAAQS.

### Results of PSD Increment Analysis (microgram/cubic meter)

Pollutant Ave. Period	Class II Increment		Class I Increment*	
	Max. Consumed	Allowed	Max. Consumed	Allowed
SO2 3-Hr	99.7	512	10.3	25
SO2 24-Hr	15.2	91	4.1	5
PM10 24-Hr	19.7	30	Insignificant	10
PM10 Annual	5.0	17	Insignificant	5

<sup>\*</sup>Applicable in the Wilderness Area in the Mingo National Wildlife Refuge in southeastern Missouri.

The U.S. Fish and Wildlife Service has submitted information to the Illinois EPA for this hearing about the proposed plant's potential impacts on the Mingo Wilderness Area, including background information about the Mingo Wilderness Area and an analysis of the visibility modeling submitted for this area by Prairie State. These documents are available at the repositories listed below and are further addressed by the Illinois EPA in the project summary prepared for this application.

In conjunction with this permit, the Illinois EPA is also proposing to issue an Acid Rain Permit and a Budget Permit for the proposed plant, to address requirements under the federal Acid Rain program and Illinois's NOx Trading program. Under the Acid Rain program, Prairie State's designated representative is currently Mr. Lars Scott.

Persons wanting more information may review the Illinois EPA's project summary and draft permit at www.epa.gov/region5/air/permits/ilonline.htm (under All Permit Records, PSD, New). These documents along with the application may also be reviewed at the Marissa Public Library, 212 N. Main St. in Marissa and the Illinois EPA's offices at 2009 Mall St. in Collinsville, 618/346-5120 and 1340 N. Ninth St., Springfield, 217/782-7027 (please call ahead to assure that someone will be able to assist you).

For information or requests about the application or draft permit, please contact: Brad Frost, Community Relations, Illinois EPA, 1021 N. Grand Ave. E., P.O. Box 19506, Springfield, IL 62794-9506, 217/782-2113 or 217/782-9143 TDD.

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### STATE OF ILLINOIS ILLINOIS ENVIRONMENTAL AGENCY

IN THE MATTER OF: )	
Proposed Issuance of a Construction Permit ) and Prevention of Significant Deterioration ) Approval and Acid Rain and Budget Permits for ) Prairie State Generating Company near ) Marissa, Illinois )	DLC:
<u>ORDER</u>	
A public hearing regarding the above captioned matter Illinois. This matter had been set to receive written cor 21, 2004. However, there was significant interest by m Close of Record date. In addition, Prairie State would public when it submits its Screening Level Ecological completed as part of its work to respond to Illinois' Enconsideration, the Hearing Officer, pursuant to authori 166.191, hereby orders that the Comment Period in thi April 21, 2004 to May 21, 2004.	nments until the Close of Record on April embers of the public in extending the like to have the opportunity to alert the Risk Assessment (SLERA), an activity dangered Species Act. After due ty set forth at 35 Ill. Adm. Code Section
Date: April 15, 2004	

Charles E. Matoesian, Hearing Officer

### STATE OF ILLINOIS ILLINOIS ENVIRONMENTAL AGENCY

IN THE MATTER OF:	)	
	)	
	)	
Proposed Issuance of a Construction Permit	)	
and Prevention of Significant Deterioration	)	DLC:
Approval and Acid Rain and Budget Permits for	)	
Prairie State Generating Company near	) .	
Marissa, Illinois	)	
	)	

#### **ORDER**

A public hearing regarding the above captioned matter was held March 22, 2004 in Marissa, Illinois. This matter had been set to receive written comments until the Close of Record on April 21, 2004. However, there was significant interest by members of the public in extending the Close of Record date. In addition, Prairie State wanted to have the opportunity to alert the public when it submitted its Screening Level Ecological Risk Assessment (SLERA), an activity completed as part of its work to respond to Illinois' Endangered Species Act. After due consideration, the Hearing Officer, pursuant to authority set forth at 35 Ill. Adm. Code Section 166.191, ordered that the Comment Period be extended from April 21, 2004 to May 21, 2004. Due to continuing interest by the public, the Hearing Officer orders that the Comment Period in this matter be further extended from May 21, 2004 to June 21, 2004.

Date: May 18, 2004

Charles E. Matoesian, Hearing Officer

#### STATE OF ILLINOIS ILLINOIS ENVIRONMENTAL AGENCY

IN THE MATTER OF:	)	
	)	
	)	
Proposed Issuance of a Construction Permit	)	
and Prevention of Significant Deterioration	)	DLC:
Approval and Acid Rain and Budget Permits for	)	
Prairie State Generating Company near	)	
Marissa, Illinois	)	
•	)	
		-

#### **ORDER**

A public hearing regarding the above captioned matter was held March 22, 2004 in Marissa, Illinois. This matter had been set to receive written comments until the Close of Record on April 21, 2004. However, there was significant interest by members of the public in extending the Close of Record date. In addition, Prairie State wanted to have the opportunity to alert the public when it submitted its Screening Level Ecological Risk Assessment (SLERA), an activity completed as part of its work to respond to Illinois' Endangered Species Act. After due consideration, the Hearing Officer, pursuant to authority set forth at 35 Ill. Adm. Code Section 166.191, ordered that the Comment Period be extended from April 21, 2004 to May 21, 2004. A second extension was granted until June 21, 2004. Due to continuing interest by the public, the Hearing Officer orders that the Comment Period in this matter be further extended from June 21, 2004 to July 12, 2004.

Date: June 22, 2004

Charles E. Matoesian, Hearing Officer

### STATE OF ILLINOIS ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:	)	
	)	
	)	
Proposed Issuance of a Construction Permit	)	
and Prevention of Significant Deterioration	)	DLC:
Approval and Acid Rain and Budget Permits for	)	
Prairie State Generating Company near	)	
Marissa, Illinois	)	
	)	

#### **ORDER**

A public hearing regarding the above captioned matter was held March 22, 2004 in Marissa, Illinois. This matter had been set to receive written comments until the Close of Record on April 21, 2004. However, there was significant interest by members of the public in extending the Close of Record date. In addition, Prairie State wanted to have the opportunity to alert the public when it submitted its Screening Level Ecological Risk Assessment (SLERA), an activity completed as part of its work to respond to Illinois' Endangered Species Act. After due consideration, the Hearing Officer, pursuant to authority set forth at 35 Ill. Adm. Code Section 166.191, ordered that the Comment Period be extended from April 21, 2004 to May 21, 2004. A second extension was granted until June 21, 2004. A third extension was granted until July 12, 2004. Due to continuing interest by the public, the Hearing Officer orders that the Comment Period in this matter be further extended from July 12, 2004 to July 27, 2004.

Date: July 12, 2004

Charles E. Matoesian, Hearing Officer

### STATE OF ILLINOIS ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:	)	
	)	
	)	
Proposed Issuance of a Construction Permit	)	
and Prevention of Significant Deterioration	)	DLC:
Approval and Acid Rain and Budget Permits for	)	
Prairie State Generating Company near	)	
Marissa, Illinois	)	
	)	

#### **ORDER**

A public hearing regarding the above captioned matter was held March 22, 2004 in Marissa, Illinois. This matter had been set to receive written comments until the Close of Record on April 21, 2004. However, there was significant interest by members of the public in extending the Close of Record date. In addition, Prairie State wanted to have the opportunity to alert the public when it submitted its Screening Level Ecological Risk Assessment (SLERA), an activity completed as part of its work to respond to Illinois' Endangered Species Act. After due consideration, the Hearing Officer, pursuant to authority set forth at 35 Ill. Adm. Code Section 166.191, ordered that the Comment Period be extended from April 21, 2004 to May 21, 2004. A second extension was granted until June 21, 2004. A third extension was granted until July 12, 2004. Yet another extension was granted until July 27, 2004. However, a typographical error on the Illinois Environmental Protection Agency's website listed a Close of Record date of August 27, 2004. In order to assure equity, and to resolve any sense of confusion, the Hearing Officer orders that the Comment Period in this matter be further extended from July 27, 2004 to August 27, 2004.

Date: July 27, 2004

Charles E. Matoesian, Hearing Officer

### Exhibit K

#### Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois

Project Summary for a
Construction Permit Application from
City Water Light and Power for
Dallman Unit 4
Springfield, Illinois

Site Identification No.: 167120AAO

Application No.: 04110050

Date Received: November 18, 2004

#### Schedule:

Public Comment Period Begins: February 4, 2006

Public Hearing: March 22, 2006

Public Comment Period Closes: April 21, 2006

#### Illinois EPA Contacts:

Permit Analyst: Shashi Shah

Community Relations Coordinator: Brad Frost

## **Exhibit** L

Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

The Commission directs, pursuant to Section 4.34(b) of the Regulations (see Order No. 533 issued May 8, 1991, 56 FR 23108, May 20, 1991) that all comments, recommendations, terms and conditions and prescriptions concerning the application be filed with the Commission within 60 days from the issuance date of this notice. All reply comments must be filed with the Commission within 105 days from the date of this notice.

Anyone may obtain an extension of time for these deadlines from the Commission only upon a showing of good cause or extraordinary circumstances in accordance with 18 CFR 385.2008.

All filings must (1) bear in all capital letters the title "PROTEST", "MOTION TO INTERVENE", "NOTICE OF INTENT TO FILE COMPETING APPLICATION," "COMPETING APPLICATION," "COMMENTS," "REPLY COMMENTS," "RECOMMENDATIONS," "TERMS AND CONDITIONS," or "PRESCRIPTIONS;" (2) set forth in the heading the name of the applicant and the project number of the application to which the filing responds; (3) furnish the name, address, and telephone number of the person protesting or intervening; and (4) otherwise comply with the requirements of 18 CFR 385.2001 through 385.2005. All comments, recommendations, terms and conditions or prescriptions must set forth their evidentiary basis and otherwise comply with the requirements of 18 CFR 4.34(b). Agencies may obtain copies of the application directly from the applicant. A copy of any protest or motion to intervene must be served upon each representative of the applicant specified in the particular application. A copy of all other filings in reference to this application must be accompanied by proof of service on all persons listed in the service list prepared by the Commission in this proceeding, in accordance with 18 CFR 4.34(b) and 385.2010.

#### David P. Boergers,

Secretary.

[FR Doc. 01-9298 Filed 4-13-01; 8:45 am] BILLING CODE 6717-01-M

### ENVIRONMENTAL PROTECTION AGENCY

[FRL-6966-2]

Notice of Approval of Prevention of Significant Deterioration (PSD) Permits to Elk Hills Power, LLC. (Permit No. SJ-99-02), Pastoria Energy Facility (Permit No. SJ-99-03), and Blythe Energy Project, LLC (Permit No. SE-00-01)

AGENCY: Environmental Protection Agency (EPA). ACTION: Notice.

**SUMMARY:** EPA Region 9 is hereby providing notice that it issued PSD permits to Elk Hills Power, LLC., Pastoria Energy Facility, and Blythe Energy Project, LLC.

The permit (Authority to Construct) for Elk Hills Power, LLC. was issued on February 5, 2001. Since no comments were received during the public comment period and the proposed draft permit conditions were not changed in the final permit, the final permit became effective immediately. This proposed power plant, located about 25 miles west of Bakersfield, California, will have a nominal electrical output of 500 MW and will be fired on locally-produced natural gas from the Elk Hills Oil and Gas Field. The proposed facility is subject to PSD for Nitrogen Oxides (NO<sub>x</sub>) and Carbon Monoxide (CO). The permit includes the following Best Available Control Technology (BACT) emission limits: NO<sub>x</sub> at 2.5 ppmvd (based on 1-hour averaging at 15% O2), and 4 ppmvd CO (based on 3-hour averaging at 15%  $O_2$ ). The BACT requirements include use of Selective Catalytic Reduction (SCR) or SCONOX for the control of NOx emissions, and use of catalytic oxidation combined with good combustion design and operation for the control of CO emissions. Continuous emission monitoring is required for NOx, CO and O2. The facility is also subject to New Source Performance Standards, Subparts A and GG, and the Acid Rain program under title IV of the Clean Air Act.

The permit (Authority to Construct) for Pastoria Energy Facility was issued on February 12, 2001. Since no comments were received during the public comment period and the proposed draft permit conditions were not changed in the final permit, the final permit became effective immediately. This proposed power plant is located in the southern part of Kern County, has a rated output of 750 MW, and will be fired on natural gas. The proposed facility is subject to PSD for Nitrogen

Oxides (NOx), Sulfur Oxides (SOx), and CO. The Best Available Control Technology (BACT) requirements include use of XONON Catalytic combustion to meet NOx and CO emission limits. The permit includes the following emission limits: NOx at 2.5 ppmvd (based on 1-hour averaging at 15% O<sub>2</sub>), and 6 ppmvd CO (based on 3hour averaging at 15% O2). If XONON is not available, the facility may use Selective Catalytic Reduction (SCR) and also catalytic oxidation combined with good combustion design and operation for the control of CO emissions. The facility is limited to the use of pipelinequality natural gas to limit SO, emissions. Continuous emission monitoring is required for NOx, CO and opacity and the facility is also subject to New Source Performance Standards, Subparts A and GG, and the Acid Rain program under title IV of the Clean Air Act.

The permit (Authority to Construct) for Blythe Energy Project, LLC was issued on March 5, 2001. Since no comments were received during the public comment period, and the proposed draft permit conditions were not changed in the final permit, the final permit became effective immediately. This proposed power plant, located near the city of Blythe, California, will have a nominal electrical output of 520 MW and will be fired on natural gas. The proposed facility will be subject to PSD for Nitrogen Oxides, Carbon Monoxide, and Particulate Matter (PM<sub>10</sub>). The permit includes the following Best Available Control Technology (BACT) emission limits: NOx at 2.5 ppmvd (based on 1-hour averaging at 15% O2), 5 ppmvd CO (8.4 ppmvd for loads between 70-80% of full load and during duct firing) (based on 3-hour averaging at 15%  $O_2$ ), and PM<sub>10</sub> at 11.5 lbs/hr. The BACT requirements include use of Selective Catalytic Reduction (SCR) for the control of NOx emissions, good combustion control for CO emissions, and a combination of good combustion control and natural gas for the control of PM<sub>10</sub> emissions. Continuous emission monitoring is required for NOx, CO and opacity and the facility is also subject to New Source Performance Standards, Subparts A and GG, and the Acid Rain program under title IV of the Clean Air Act.

FOR FURTHER INFORMATION CONTACT: If you have any questions or would like a copy of the permits, please contact Nahid Zoueshtiagh at (415) 744–1261 for Elk Hills; Ed Pike at (415) 744–1211 for Pastoria Energy Facility; or Duong Nguyen at (415) 744–1142 for Blythe. You may also contact us by mail at:

## Exhibit M



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105

December 21, 2005

IN REPLY AIR-3 REFER TO: SE 04-01

Nader Mansour Mountainview Power Company, LLC 2492 West San Bernardino Avenue Redlands, CA 92374

Re: Modification to PSD Permit SE 04-01 for Mountainview Power Company, LLC

Dear Mr. Mansour:

In accordance with the provisions of the Clean Air Act, as amended (42 U.S.C. 7401 et seq.), the Environmental Protection Agency (EPA) has reviewed your request of September 16, 2005 to modify your PSD permit as initially issued by the South Coast Air Quality Management District (SCAQMD) on May 24, 2001 for the construction and operation of a natural gas-fired power plant in Redlands, CA, and as revised by the EPA on May 20, 2005.

A request for public comment regarding this action was published in the *San Bernardino County Sun* on November 14, 2005; EPA did not receive any comments. Therefore, EPA is finalizing the permit modification as proposed, with the exception of one minor change. When the modification was initially proposed, EPA erroneously indicated that the daily NOx emission limit of Condition X.F.3. is to be calculated on a rolling 24-hour basis. However, EPA's intent was to require calculation on a calendar day basis. Therefore, EPA is making this change now.

Although EPA has made the above-described minor change to the proposed PSD permit, this action does not constitute a significant change from the proposed action set forth and offered for public comment. The Consolidated Permit Regulations (40 CFR Part 124) require that the Agency notify the applicant and all interested parties of the permit issuance and advise them of the process for petitioning the Environmental Appeals Board of the Environmental Protection Agency to review the permit decision. Because the Agency received no comments requesting a change to the draft permit conditions, this permit shall become effective immediately upon issuance. For more information on the petition procedures, please refer to 40 CFR §124.19 and the Web site for EPA's Environmental Appeals Board (http://www.epa.gov/eab).

If you have any questions regarding this matter, please contact Kathleen Stewart of our Permits Office at (415) 947-4119.

Sincerely,

Original signed by Matt Haber for

Deborah Jordan Director Air Division

#### Enclosure

cc: Victor Yamada, MVP
Bob Wyman, Latham & Watkins
Gary Rubenstein, Sierra Research
Peter Venturini, CARB
Barry Wallerstein, SCAQMD
John Yee, SCAQMD
Emmanuel Ruivivar, SCAQMD
Trent Procter, USFS

Trent Procter, USFS Donna Stone, CEC Mike Bianchi, USFWS

## Exhibit N

From: John.Lyons@ky.gov [mailto:John.Lyons@ky.gov]

Sent: Wednesday, July 27, 2005 3:32 PM

To: Ecoserve1@aol.com

Cc: Donald.Newell@ky.gov; Ben.Markin@ky.gov; James.Morse@ky.gov; John.Horne@ky.gov

Subject: RE: Request for extention of comment period-Trimble County

Mr. Blair, thank you for your request. However, the Division must deny your request and the public comment period will close at the presently scheduled time.

----Original Message----

From: Ecoserve1@aol.com [mailto:Ecoserve1@aol.com]

Sent: Wednesday, July 27, 2005 1:38 PM

To: John.Lyons@ky.gov

Subject: Request for extention of comment period-Trimble County

Mr. John Lyons Division of Air Quality

I am writing to ask for a minimum 45 day extension to the comment period for the Trimble County power plant expansion. With so many new sources being proposed that the Commonwealth has had to hire outside consultants to do their work, it is obvious that those of us in the private sector face similar but more defined time constraints.

Trimble County is a very large and antiquated facility designed to serve areas outside of Kentucky. Please grant this extension in the public interest.

Thank you.

John Blair, president Valley Watch, Inc.

800 Adams Avenue Evansville, IN 47713 812-464-5663

In accordance with title 17 U. S. Code, Section 107, this material is distributed without profit to those who have expressed a prior general interest in receiving similar information for research and educational purposes.

## **Exhibit O**

**From:** Phyllis Fox [mailto:phyllisfox@gmail.com] **Sent:** Monday, August 08, 2005 10:05 AM

To: Bruce Nilles

Subject: Fwd: Trimble

I think we just got a 2 day extension.

----- Forwarded message -----

From: Morse, James (EPPC DEP DAQ) < James. Morse@ky.gov >

Date: Aug 8, 2005 8:01 AM

Subject: RE: Trimble

To: "Adams, Tom (EPPC DEP DAQ)" < Tom. Adams@ky.gov >, "phyllisfox@gmail.com"

<phyllisfox@gmail.com>

We will accept comments until close of business on 8/10/05

----Original Message----

From: Adams, Tom (EPPC DEP DAQ)
Sent: Monday, August 08, 2005 10:38 AM
To: Morse, James (EPPC DEP DAQ)

Subject: FW: Trimble

----Original Message-----

From: Phyllis Fox [mailto: phyllisfox@gmail.com]

Sent: Monday, August 08, 2005 9:26 AM

To: Tom.Adams@ky.gov Subject: Re: Trimble

We were actually wondering when we have to submit, e-mail before midnight? Posted anytime today? Handed in at the public hearing? Faxed to your office before midnight? Or some other time?

### **Exhibit P**

From: Joan Lindop [mailto:jlindop@bellsouth.net]

Sent: Monday, July 11, 2005 8:15 PM To: bruce.nilles@sierraclub.org

Cc: Leslie B

Subject: RE: Toxic Air in Metro Louisville

Bruce, Do we have \$\$ to copy these voluminous papers? I don't imagine I know enough to choose what is important -

Joan

## Exhibit Q

From: Joan Lindop [mailto:jlindop@bellsouth.net]

Sent: Tuesday, July 26, 2005 11:26 AM

To: 'Bruce Nilles'; John Blair; 'Steve Henry'; Sarah Lynn C; lesliebarras@insightbb.com; Joe Bina

Subject: FW: LGE proposed Trimble plant

Mr Lyons has not answered my letter requesting an extension nor my phone call but look at this:

joan

----Original Message----

From: Lyons, John (EPPC DEP DAQ) [mailto:John.Lyons@ky.gov]

**Sent:** Tuesday, July 26, 2005 11:41 AM

To: 'Joan Lindop'

Cc: Markin, Ben (EPPC DEP DAQ)

Subject: RE: LGE proposed Trimble plant

4:30 on August 5<sup>th</sup>. Yes the public is on the 8<sup>th</sup>, @6:30.

----Original Message----

From: Joan Lindop [mailto:jlindop@bellsouth.net]

Sent: Tuesday, July 26, 2005 8:52 AM

To: john.lyons@ky.gov

Subject: LGE proposed Trimble plant

Mr. Lyons,

When does the comment period end for this plant? I understand there is a public hearing in Bedford August 8<sup>th</sup>.

j Lindop, Louisville