



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

April 7, 2008

John Lyons, Director
Division of Air Quality
Department for Environmental Protection
803 Schenkel Lane
Frankfort, Kentucky 40601-1403

Dear Mr. Lyons:

Thank you for the opportunity to review the pre-hearing draft of Kentucky's Regional Haze State Implementation Plan (SIP) dated March 3, 2008.

Enclosed are our comments on Kentucky's Prehearing Regional Haze SIP.

We appreciate your transmittal of this package for our consideration. If you have questions regarding this letter, please contact Heidi LeSane of the Region 4 staff at (404) 562-9074.

Sincerely,

A handwritten signature in black ink that reads "Richard A. Schutt".

Richard A. Schutt
Chief
Air Planning Branch

Enclosure

Comments on Kentucky's March 3, 2008, Pre-Hearing Draft Regional Haze SIP

Key Comments:

The following comments must be addressed in the final SIP to meet the requirements of the regional haze regulations and/or SIP completeness and approvability criteria.

1. Best Available Retrofit Technology (BART) Limits in the SIP:

In the prehearing package, the proposed BART controls for five facilities are summarized in Table 7.5.3-1 in Section 7.5.3, p.62-64 of the SIP narrative, and in Table 9.1 of SIP Appendix L on pages 24-26. The BART limits and associated compliance schedules are required to be in the SIP per 40 CFR 51.308(e): "*The State must submit an implementation plan containing emission limitations representing BART and schedules for compliance with BART . . .*". Therefore, the SIP must include the specific emission limits (and supporting information for those limits) and compliance schedules for BART for the two facilities not currently subject to federal consent decrees (CDs). These limits must be in a form that can be enforced by both the Commonwealth and EPA.

For the three facilities installing controls for BART to meet federally enforceable emission limits contained in CDs, the Commonwealth may rely on the federal CDs to establish emission limits that are federally enforceable. The BART limits established pursuant to federal CDs, and the conditions necessary to support those limits, do not need to be incorporated into the SIP, unless any changes are made to the limits. Emission limits from the CDs must be placed in each facility's title V permit prior to the expiration date of its CD.

2. BART Compliance Dates:

- a) 40 CFR 51.308(e)(1)(iv) requires each implementation plan to include: "*A requirement that each source subject to BART be required to install and operate BART as expeditiously as practicable, but in no event later than 5 years after approval of the implementation plan revision.*" Please clarify the timeframe for compliance with BART.
- b) Section 9.4 on page 27 of SIP Appendix L notes that in accordance with a federal CD, one of the BART controls may not be installed until December 2015, which is likely to fall outside the allowable time window for BART compliance provided in 40 CFR 51.308(e)(1)(iv). For example, if EPA uses the full 18 months allowed under the Clean Air Act to take final action on a SIP received in May 2008, five years from November 2009 is November 2014. We encourage the Commonwealth to work with the facility to install the flue gas desulfurization (FGD) scrubber for Big Sandy Unit 2 as expeditiously as practicable.

3. Legal Authority: In the final SIP submittal, please include evidence as required per Appendix V of 40 CFR part 51 that the Commonwealth has the necessary legal authority

under Kentucky law to adopt and implement the Regional Haze implementation plan, including the BART limits.

4. Dates of Adoption and Effectiveness: The text in Section 7.5.3 of the SIP narrative and Section 9.1 of SIP Appendix L indicates that the BART controls for all the sources are targeted to be adopted into title V permits in 2008, and that these BART limits will be taken to public notice. The final SIP submittal must provide evidence that the regional haze plan, including the BART limits, is adopted and effective in accordance with Appendix V of 40 CFR part 51. Additional clarification is needed to address when the BART limits and supporting conditions will be officially adopted by and effective in the Commonwealth for each of the facilities.

Recommended Changes:

The following comments should be addressed in the final SIP to clearly provide the State's methodology and rationale for the analyses and conclusions presented.

SIP Narrative – Main Report:

1. General: We recommend that the SIP narrative provide a summary of the BART emission limits and the compliance schedules associated with them for all five facilities installing controls for BART. If the BART limits and supporting conditions are provided elsewhere in the document, this should be clearly identified.
2. Section 2.1 and 2.3:
 - a) Section 2.3 of the SIP narrative references Appendix B.2 for more information on how the new IMPROVE equation is used to estimate natural background. However, none of the documents in Appendix B discuss where the data (i.e., PM_{2.5} species concentration data) used in the new IMPROVE equation was obtained and how it was used in the equation for the Kentucky Class I areas. Please clarify.
 - b) Please provide a citation in section 2.1 and/or section 2.3 for the location of the 20 percent best and worst days used in the technical analyses for the Kentucky Class I areas.

Appendix L:

E.ON US Mill Creek Station: Please further clarify the basis for limiting controls for BART (sorbent injection) to the larger two units versus all four units. The cost per ton and cost per deciview for the two larger units that are being controlled are very similar to that for the smaller two units that are not being controlled (see table on page 142 of appendix L.11). Further, the dollars per deciview (\$/dv) cited is similar to that for controls under the Clean Air Interstate Rule (CAIR) rule.

Suggested Clarifications

The following comments are suggested clarifications that would be helpful to more clearly portray the information presented.

SIP Narrative – Main Report:

1. Section 1.5, p.5: This section states that procedures for continuing consultation with the Federal Land Managers (FLMs) are required per 40 CFR 51.308(i), however, no such procedures are outlined in this section. Rather, Section 1.5 describes the consultation procedures used to date to engage other states, FLMs, and others. Section 11 on page 87 in the fourth paragraph appears to provide continuing FLM consultation procedures as required by 40 CFR 51.308(i). We suggest that Kentucky clearly identify what is intended to constitute its continuing FLM consultation procedures.
2. Section 3.1, page 15: Figure 3.1-1 presents the Uniform Rate of Progress Glide Path for the 20 percent worst days at the Mammoth Cave Class I area. These figures reference a “Method 1 Prediction” for the reasonable progress assessment. However, Figure 3.1-1 does not present the modeled reasonable progress goals. It is suggested that the “Method 1 Prediction” entry in the legend be deleted. To avoid confusion, we suggest deletion of “Reasonable” in the title of Figure 3.1-1 on page 15.
3. Section 7.2.4, Figures 7.2.4-1 and 7.2.4-2, pages 46-47: Figures 7.2.4-1 and 7.2.4-2 present the Uniform Rate of Progress Glide Path for the 20 percent worst days and 20 percent best days at the Mammoth Cave Class I area, respectively. In the legend, these figures reference a “Method 1 Prediction” for the reasonable progress assessment. However, the text does not describe what is meant by Method 1. We suggest a clarification of Method 1 in the text.
4. Section 10, p. 86: The text appears ambiguous regarding the Commonwealth’s approach to addressing MANE-VU's request with respect to a 28 percent reduction in non-EGU sulfur dioxide (SO₂) emissions for the first planning period. We suggest that the Commonwealth’s approach be clarified.

Appendix L:

Appendix L Summary: The summary document to Appendix L is very useful and informative. Kentucky is commended for the good work done to organize the appendices. Much, if not all, of the discussion in the introductory summary document to Appendix L on how the BART requirement was met, (i.e., exemption volatile organic compound emissions, contribution threshold, sources exempted, etc.), could be moved to the SIP narrative starting in section 7.5.1. It is a very well documented discussion of the BART modeling.