



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

Air Resources Division

P.O. Box 25287

Denver, CO 80225



January 25, 2008

N3615 (2350)

Mr. John S. Lyons, Director
Department for Environmental Protection
Kentucky Environmental and Public Protection Cabinet
803 Schenkel Lane
Frankfort, Kentucky 40601

Dear Mr. Lyons:

On December 17, 2007, the Commonwealth of Kentucky requested comment on a draft implementation plan describing its proposal to improve air quality regional haze impacts at mandatory Federal class I areas across your region. We appreciate the opportunity to work closely with the Commonwealth through the initial evaluation, development, and, now, subsequent review of this plan. Cooperative efforts such as these ensure that, together, we will continue to make progress toward the Clean Air Act's goal of natural visibility conditions at our National Parks and Wilderness Areas for future generations.

This letter acknowledges that the U.S. Department of the Interior, National Park Service Air Resources Division (NPS) and the U.S. Fish and Wildlife Service, Branch of Air Quality (FWS) have received and conducted a substantive review of your proposed State Implementation Plan (SIP) revisions to address Regional Haze Rule requirements under the federal regulations 40 CFR 51.308(i)(2).

We complement the Commonwealth on its draft SIP which we found to be clear and well-organized. The document and accompanying materials address the eight major topics we noted as important for our review in our August, 2006 letters sent to all States. While we see no major problems with the draft SIP, we provide comments in the enclosure which we request the Commonwealth to address before submitting final SIP documentation to the U.S. Environmental Protection Agency (EPA). Please note, however, that only the EPA can make a final determination about the document's completeness, and therefore only the EPA has the ability to approve a SIP revision.

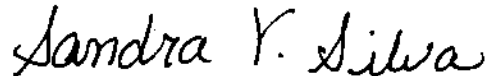
We look forward to your response, as per section 40 CFR 51.308(i)(3). For further information, please contact Bruce Polkowsky (NPS) at (303) 987-6944 or Tim Allen (FWS) at (303) 914-3802.

Again, we appreciate the opportunity to work closely with the Commonwealth of Kentucky and compliment you on your hard work and dedication to significant improvement in our nation's air quality values and visibility.

Sincerely,



Christine L. Shaver
Chief, Air Resources Division
National Park Service



Sandra V. Silva
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Enclosure

cc:

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National Park Service and U.S. Fish and Wildlife Service Comments Regarding Kentucky Draft Regional Haze Rule State Implementation Plan

On December 17, 2007, the Commonwealth of Kentucky submitted a draft Regional Haze Rule State implementation plan (SIP), pursuant to the requirements codified in /Federal rule at 40 CFR 51.308(i)(2), to the U.S. Department of the Interior. The air program staffs of the National Park Service (NPS) and the U.S. Fish and Wildlife Service (FWS) have conducted a substantive review of the Kentucky draft plan, and provide the comments listed below.

We applaud the Kentucky Division of Air Quality (KYDAQ) for developing a SIP that is responsive to the key policy areas that we identified as important in our August 1, 2006, letter. Our comments below are grouped according to those policy areas. We particularly appreciate the inclusion of the emissions summary, modeling approach and model performance in the body of the SIP narrative. We also appreciate the KYDAQ's acknowledgment of improvements on the least impaired days that result from the adopted long-term strategy. We offer the following comments in the spirit of cooperation to improve on the items already contained in the draft SIP. We look forward to the Commonwealth's response as per section 40 CFR 51.308(i)(3). For further information regarding these comments, please contact Bruce Polkowsky (NPS) at (303) 987-6944 or Tim Allen (FWS) at (303) 914-3802.

General Comment

The draft SIP, dated November 30, 2007, was titled "Pre-Hearing Draft, Regional Haze State Implementation Plan for Kentucky's Class I Area." While we agree that Kentucky is only responsible for setting reasonable progress goals for its mandatory Federal class I area, the SIP prepared for this second phase of the Environmental Protection Agency (EPA) visibility protection regulations must address Kentucky's impacts on other States' mandatory Federal class I areas as well. We suggest a change in the title as follows: "Regional Haze State Implementation Plan for Visibility Protection." A similar comment would apply to the title of Section 7.0 on page 39 of the draft. The Long-Term Strategy should address all mandatory Federal class I areas impacted by emissions from Kentucky sources, as determined by the KYDAQ in cooperation with neighboring states.

Baseline, Natural Condition, and Uniform Rate

Pages 7 through 15 of the draft SIP review the baseline, natural conditions estimates and uniform rate of progress assessment for Mammoth Cave National Park (NP). We appreciate that KYDAQ utilized the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) assessments, since that contributes to consistency across the region in establishing the basis for control strategy decisions and associated establishment of reasonable progress goals for the individual mandatory Federal class I areas.

Emissions Inventories

Pages 16 through 22 review the emissions related to visibility conditions found at Mammoth Cave NP. We agree with KYDAQ's emphasis on understanding the sources of sulfur dioxide emissions in this first SIP given the overwhelming contribution of sulfate to light extinction at Mammoth Cave NP and the other mandatory Federal class I areas that are most affected by emissions from Kentucky. Even with the emphasis on sulfur dioxide emissions, we appreciate the inclusion of Table 4.1.6-1 which establishes baseline emissions for all pollutants and will provide a means to track emissions and assess progress of the visibility protection program in the future. We note that later, in Section 7 of the draft SIP, KYDAQ includes Tables 7.2.3-1 and 7.2.3-2 containing projected emissions for 2009 and 2018, respectively. We request KYDAQ repeat the 2002 baseline inventory numbers in Section 7 as well, so the reader can easily understand the differences between the current emissions and projected future emissions expected to result from implementation of the Long-Term Strategy.

Reasonable Progress Goals and Long-Term Strategy including Best Available Retrofit Technology (BART)

As already noted, Section 7.2.3 would be improved by including the baseline 2002 emissions inventory summary table. We appreciate the complete discussion for BART eligible sources in the narrative of the draft SIP. We concur with KYDAQ's conclusion to require emissions reductions to address inorganic condensable particulates at the five sources subject to BART.

We concur with KYDAQ's use of back trajectory analyses and residence time plots to develop sulfate extinction-weighted residence time plots and define the geographic areas with highest probability of influencing the mandatory Federal class I areas on the worst visibility days. We request that KYDAQ supplement the assessment presented on pages 66 through 73 with a limited discussion of similar work done by VISTAS for mandatory Federal class I areas in Missouri, West Virginia and Virginia which included some areas of Kentucky within the area of influence. On page 77, the draft notes that no Kentucky sources in the area of influence determined by VISTAS for Mingo National Wildlife Refuge in Missouri were identified as contributing one percent or more of the Q/d time RTMax. If this is true for Kentucky sulfur dioxide sources located within the VISTAS areas of influence for the mandatory Federal class I areas in the other states listed here, we request KYDAQ place that conclusion in the SIP narrative.

On page 77 under "Step 5: Evaluate the four factors" KYDAQ concludes that it is not "equitable to require non-EGUs [non-Electric Generating Units] to bear a greater economic burden than EGUs for a given control strategy." We request that KYDAQ expand this discussion to explain the basis for determining the economic burden to non-EGUs. If this is based on a cost per ton (or cost per deciview) of sulfur dioxide controlled, KYDAQ should declare that threshold in the SIP narrative and provide the supporting information for its sources that are located in any area of influence as determined by the VISTAS assessments.

In that same section, KYDAQ also states that one non-EGU source was exempted from BART as a justification for no further control under the Long-Term Strategy. This is not a sufficient justification, since that source may have cost-effective reduction options that constitute “reasonable progress.” Under the factors to be considered for inclusion in a Long-Term Strategy, KYDAQ’s use of the VISTAS process for identification already addressed a “threshold” for contributing to visibility impairment. The KYDAQ should base its decision on the other factors, particularly cost, if it exceeds the “burden for non-EGUs” as noted above. We request KYDAQ expand its rationale regarding the conclusion that no additional sulfur dioxide controls represent “reasonable progress” on page 77 in light of these comments.

We did not find any reference in the Long-Term Strategy to the importance of addressing visibility impacts as part of a New Source Review/Prevention of Significant Deterioration (NSR/PSD) permitting program. The cornerstone of the Kentucky Long-Term Strategy is EPA’s Clean Air Interstate Rules (CAIR). There is significant uncertainty regarding the location of expected emission reductions from existing EGUs and the location of emissions from new EGU facilities under implementation of CAIR. Thus, we believe that a strong permit review program is critical for assuring reasonable progress during the first SIP implementation period. A strong NSR/PSD program provides for easy tracking of new source emissions to compare with actual emissions reduction as they occur during the 10-year plan. A strong program would require the highest level of emissions controls at new facilities and assure that the location of new emissions not negate the visibility improvements expected to result from the CAIR program. We also note that the VISTAS modeling, while incorporating some emissions projections for new EGU development in Kentucky, does not specifically address some permitted, but not yet constructed, new power generation facilities within the Commonwealth. A specific link between the NSR/PSD program and the visibility Long-Term Strategy would provide a mechanism to “true-up” emissions as part of the 5-year reporting and assessment requirement of the regional haze rule. We request that KYDAQ discuss the linkage between the visibility Long-Term Strategy and the Commonwealth’s NSR/PSD program in the SIP narrative.

On page 76 of the draft plan, KYDAQ commits to checking the 2018 projections at the time of the periodic report that is due in approximately five years. That check would be to assure that the Kentucky emissions are on track to meet or exceed the 2018 projections included in the SIP. The Commonwealth should indicate what actions it would take if its assessment for the periodic report indicates that its emissions are likely not to meet the 2018 projections. The KYDAQ should indicate that it might re-evaluate the four factors at that time to re-assess the Long-Term Strategy or implement new control measures to meet the 2018 projections, or implement some combination of these or other options.

Verification and Contingencies

Since KYDAQ is relying almost exclusively on implementation of CAIR and other Federal rules, as noted above, we view a commitment to emissions reporting and a statement of options for addressing its emission shortfalls at the 5-year review as critical to verifying the Long-Term Strategy and assuring reasonable progress. As discussed

above, establishing a link between the NSR/PSD program and the Long-Term Strategy also provides a means to verify that progress is being made toward improved visibility conditions during the 10-year implementation period of this first plan as new or modified sources are permitted.

Coordination and Consultation

We note that there is a conclusion statement in Section 10, on page 82, that KYDAQ evaluated the impact of Kentucky sources on mandatory Federal class I areas in neighboring states and determined that no additional reasonable control measures are needed. The communications between KYDAQ and its counterpart in other States that document that those other States believe Kentucky is meeting their requests for support in assuring reasonable progress, should be summarized in the SIP narrative.

We commend KYDAQ for evaluating the Mid Atlantic–Northeast Visibility Union (MANE-VU) request regarding sulfur dioxide control at specific EGU facilities. However, the MANE-VU request also included assessment of additional sulfur dioxide reductions at non-EGU facilities. If KYDAQ has concluded that no additional reductions are reasonable at this time, the SIP narrative should address that conclusion. The SIP should indicate if KYDAQ is working with other States and EPA on their initiative to develop a unified approach toward emissions of large industrial boilers.