



United States
Department of
Agriculture

Forest
Service

Ouachita
National
Forest

P.O. Box 1270
Hot Springs, AR 71902

File Code: 2580-2

Date: January 31, 2008

Mike D. McDaniel
Secretary
Department on Environmental Quality
P.O. Box 4301
Baton Rouge, LA 70821-4301

Dear Secretary McDaniel:

On November 21, 2007, the State of Louisiana submitted a proposed State implementation plan (SIP) describing its proposal to improve air quality regional haze impacts at mandatory Class I areas across your region. Technical appendixes that are referenced in the SIP were received from the State on November 26, 2007. We appreciate the opportunity to work closely with the State 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 all of our most pristine National Parks and Wilderness Areas for future generations.

The U.S. Department of Agriculture, U.S. Forest Service, received and has conducted a substantive review of your draft Regional Haze Rule implementation plan, which you are preparing in fulfillment of your requirements under the federal regulations 40 CFR 51.308(i)(2). You have met your requirement to give the FLM 60 days to review. Please note, however, that only the U.S. Environmental Protection Agency (EPA) can make a final determination regarding the document's completeness and, therefore, ability to receive federal approval from EPA.

As outlined in a letter sent to each State in October, 2006, our review focused on eight basic content areas. The content areas reflect priorities for the Federal Land Manager agencies, and we have enclosed comments associated with these priorities. Note that we have highlighted comments in bold face that discuss what we consider to be major concerns of the proposed SIP that we believe warrant additional consultation prior to final adoption of the Louisiana Regional Haze Plan. The Forest Service air quality staffs stand ready to work with you towards resolution of these issues. We look forward to your response, per section 40 CFR 51.308(i)(3). For further information, please contact Judith Logan at (501) 321-5341.



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

Sincerely,

/s/Bill Pell
(for)Norman G. Wagoner
FOREST SUPERVISOR

Enclosure

cc: Chuck Carr Brown, Cheryl Nolan, Jennifer Mouton, Annette Sharp, Patrick Cummins, Guy Donaldson, Joe Kordzi, Chris Pease, Meredith Bond, Vivian Aucoin

Enclosure

Forest Service Technical Comments on Louisiana's Department on Environmental Quality (LDEQ) Draft Regional Haze State Implementation Plan (SIP)

Overall Comments

As stated in our letter, we appreciate the opportunity to work with your agency through the initial evaluation, development, and, now, subsequent review of this plan. To facilitate review, we have formatted in **bold** text those items that are of significant concern to the US Forest Service and we request additional consultation with LDEQ staff on these issues before final adoption of the Louisiana SIP.

Reasonable Progress and Long Term Strategy

The State cites a report submitted to CENRAP from Alpine Geophysics as the sole response to the mandatory four factor analysis and the conclusion of reasonable controls. The Alpine document provides general information in support of each State and makes suggestions of controls that should be considered. Although supportive, the report does not constitute a replacement to the State's obligation to evaluate the factors and to draw conclusions of controls that may be reasonable. This obligation should not be limited to State or regional averages of costs for all sources or by specific pollutant.

The State has access to analysis produced by CENRAP and VISTAS that establishes the significant source "areas-of-influence" (AOI). These geographical areas have been established by the RPOs to document the locations of sources that have the highest potential to impair visibility at each Class I area. Through use of these AOIs, the State has the opportunity to focus its 4 factor and reasonable progress evaluations to the most significant area. In addition, all estimates of cost benefit (i.e. dollars per ton) should be based on these areas or at individual sources within this area.

Inter-State Consultation

In addition to establishing AOIs, the State should discuss and identify contribution of visibility impairment emissions from areas outside the State of Louisiana. This should include apportionment information developed by the RPOs regarding Mississippi, Alabama, and off shore Gulf emissions.

The State should present consultation documentation on that apportionment with the other State and Gulf permitting authorities. Clearly identifying these attributions also assists in future requirements to assess the progress to Breton during the States mid-term review process in 5 years.

BART – Determinations

The State does not provide sufficient information to fully evaluate BART steps or provide a conclusion on the sources requiring BART determinations. In cases where BART is being established through other programs (i.e. consent decree), the State must

show that the final action results in controls that would be at or better than those achieved through a full BART evaluation.

Due to the proximity of Breton, discussion of BART controls may extend into other permitting control areas and should be identified in the BART section and followed through inter-State consultation.

Executive Summary

Page ES-2, paragraph 3. LA states that CALPUFF modeling, assumed to be conducted by LA on a source-by-source basis, shows the facilities in central and Northern LA bear no impact to visibility at Caney Creek Wilderness. However, LA does not indicate if these sources have a significant, cumulative impact, and whether these specific sources should be considered under reasonable progress.

Chapter 1: Background on the Regional Haze Rule

Page 1-4, Section 1-3, paragraphs 4 & 5. LA states that during triennial reviews, emission inventories of LA's stationary sources within 100 km of Breton have been performed. LA is praised for including point sources within Mississippi as part of their 2003 triennial review. However, in future reviews associated with LA's proposed long term strategy, the Forest Service requests that emission inventories from stationary sources within 300 km of Breton be reviewed from all states for potential visibility impacts to Breton.

Page 1-4, Section 1-4. While this section states that 40 CFR Section 51.308(d) directs each state to address regional haze for Class I areas both inside and outside its political boundaries, facilities in central and Northern LA are deemed by LA to be not responsible for visibility impacts to Class I Areas outside LA. CALPUFF modeling is cited with little reference. CALPUFF modeling in support of BART modeling does not present a convincing case.

Chapter 2: General Planning Provisions

Chapter 3: Regional Planning

Chapter 4: State, Tribe and Federal Land Manager Consultation

Page 4-1, LA states, "Louisiana is committed to continue to coordinate and consult with FLMs...". The rule suggests that States develop an on-going consultation plan as opposed to the simpler commitment. Please provide more information on topic and time line regarding Louisiana's continued consultation process with states, tribes, and FLMs through the regional haze review and revision process.

Chapter 5: Assessment of Baseline and Estimate of Natural Conditions in Class I Areas

Page 5-1. Discussion is provided regarding missing data from the Breton IMPROVE site. A process is described to back-fill missing data from other non-missing locations through the use of a contractor. Recently, CIRA in connection with the IMPROVE

committee updated basic current and natural calculations using substitute data for station with missing data. The most current values of these calculations are presented on the CIRA/VIEWS website. Because LA and CIRA/VIEWS data may be different, LA should review and potentially adopt the new figures.

Chapter 6: Monitoring Strategy

Section 6.1, page 6-2, paragraph 3. LA suggests that an IMPROVE monitor to replace that destroyed by Hurricane Katrina be relocated to a site near Lake Catherine, St. Bernard Parish, over 80 km from Breton, by January, 2008. LA should include a summary of its analysis to chose this location, and conduct a similar analysis to locate the IMPROVE monitor in closer proximity to Breton, including an unprecedented option to locate the monitor near Gulf Port, Mississippi, approximately half the distance to Breton relative to the Lake Catherine site.

Section 6.2, page 6-4. The State suggests a complete reliance on the IMPROVE monitoring network with no description of alternative monitoring efforts or utilization of substitute data. The Regional Haze Rule implies that states are required to track progress regardless of the status of federally funded monitoring programs. Although we share LA's interests in maintaining IMPROVE, LA should still provide additional discussion and alternatives on tracking regional haze progress.

Chapter 7: Emission Inventory

This chapter on emission inventory provides good definition information but falls short of a comprehensive summary of the resulting final inventories used in support of the SIP. Some information provided in the modeling section goes into more detail about the performance, base and future inventories. This type of discussion should be included in Chapter 7, and provide a comprehensive summary without the need to fully investigate the highly technical appendix D.

Section 7.1, page 7-1, paragraph 2. The Forest Service understands that the reference to four general categories of emission sources relates to anthropogenic sources. However, to the casual reader, without some reference to biogenic emissions within the Overview Section, the existing reference may not be complete enough in relation to the section devoted to biogenic sources later in the Chapter.

Page 7-3, Table 7.1 and Table 7.2. These tables provide very basic data on emission levels with little to no discussion. It would be important to address whether data provided represents LA specific or regional levels and why, if sulfur emissions are discussed throughout the draft document as the primary visibility pollutant, that projections of sulfur emissions or going up overall. It is especially interesting that point and area sources of sulfur are on the increase. Also, biogenic emissions should also be included in these tables for completeness and ease of comparison.

Chapter 8: Modeling Assessment

Section 8.3, page 8-2. As stated before, the emission inventory subsection of 8.3 provides more specific information about inventories than the inventory chapter but still lacks

sufficient detail to summarize the final inventories used in support of the SIP.

Section 8.4. Sulfate and organic carbon performance is termed good on page 8.3. However, on page 8-4, the Breton performance is described as “mixed” and sulfate performance as “...almost always greatly over predicted.” These descriptions are confusing and inconsistent, and should be reconsidered. This is followed by figure 8-1 on page 8-5 that appears to contradict the statements by showing model predictions as almost always greatly under predicting when compared to monitored values, leading to the possibility that utilizing controls as proposed in the draft SIP, may leave Breton farther from the URP in 2018 than predicted. The figure also references use of the “typical O₂g” inventory when model performance should be looking at the “performance” inventory.

Page 8-6. LA does not identify which version of IPM is utilized. It is assumed either version 3.0 or 2.1.9 was utilized. This should be clarified.

Page 8.6. It is stated that CAIR and EGU BART controls from Oklahoma, Arkansas, Kansas and Nebraska were included in Base G model simulations. LA should clarify if these BART determinations have been made (presumptive or a declared level) or whether BART as proposed has no additional controls. This information source does not appear in the consultation section.

Page 8-7, Figure 8.2. This figure with associated text provides a comparison of future model prediction vs. the Uniform Rate of Progress. LA should describe what “method 1 Prediction” means, and provide a thorough discussion on the use of RRFs that we assume are incorporated in these graphics.

Chapter 9: Best Available Retrofit Technology (BART)

Section 9.1, page 9-2. LA states that “Consistent with Guidelines, LDEQ did not evaluate emissions of VOC and ammonia in BART...” The guidance suggests alternative methods for addressing VOCs and ammonia other than CALPUFF modeling but does suggest addressing these pollutants. Please expand your discussion on why VOCs and ammonia would not need further evaluation.

Section 9.3, page 9-4. LA states, “Modeling results shown in Figure 9.1 indicate that there are seven Class I areas that experience an impact over 1.0 deciview...” However, Figure 9.1 is a graph of extinction in inverse megameters at Breton alone. The seven Class I areas impacts at over 1.0 dv are listed later in this Section.

Pages 9-4 & 9-5. The discussion to provide an initial screening to BART sources is a blend of a minimum 1dv impact, development of an “artificial model”, and analysis of trajectories to determine significance. These may have no basis in BART. The artificial model approach may be significance, but too little information is presented to confirm that. Also, please indicate the coordinates of the source used in the “artificial model.”

Pages 9-7 & 9-8. Supplementary artificial model examples are presented and used to

eliminate BART eligibilities. Please provide additional information to support this inclusion, including discussion on how selected emission characteristics represent “worst-case” scenarios, and would prevent examples of more distance sources from showing higher impacts than the example set. Also, because the back trajectories in Figures 9.2 and 9.3 indicate even one day residence within LA corresponding to the 20% worst days, it is not reasonable to conclude that those BART facilities in LA show no impact to either Sipsey or Mammoth Cave.

Page 9-11, Table 9.4. This table shows facilities subject to BART. However, no BART decisions are presented by LA.

Page 9-14, Figure 9.6 appears to be a repeat of Figure 9.4. A 2003 based figure is likely.

Chapter 10: Reasonable Progress Goals

Section 10.2, page 10-3. It is suggested that Appendix H shows that essentially OTW/OTB plans are reasonable for Louisiana. The Appendix represents a contractor’s opinion/recommendation on the broad CENRAP area. It is appropriate for LA to cite portions of the document, but it can not constitute a response to reasonableness onto itself.

Page 10-4, It is suggested that control costs for it would be as low as \$1696/ton reduction. However, it is not clear whether LA is referring to NO_x or SO₂ reductions. LA makes no statement of why this is not reasonable. Did the State conduct any source or category specific analysis on cost/benefit? Please provide analyses for in-state facilities.

Chapter 11: Long-Term Strategy

Page 11-2. LA suggests that models are used in a relative sense. As requested, please provide a discussion in an appropriate section about use of RRFs.

Section 11.4, page 11-3, paragraph 3. LA stated that “ongoing air pollution control programs were sufficient to meet RPGs through 2018.” Based on previous comments, this statement has not been demonstrated.

Page 11-3, paragraph 4. LA suggests that LDEQ does not have primacy with smoke management plans, and therefore needed information in not provided in the draft SIP. It has been customary in other states for the agency delegated to respond to regional haze requirements to work with their smoke planning agency to include information on how the State currently addresses or plans to address the potential effects of visibility impairment at Class I areas due to smoke. Does the plan treat Class I areas as sensitive receptors to smoke, and if so, how will potential visibility impacts be addressed?

Page 11-4. LDEQ makes statements about double counting of Gulf emissions on Breton. This clearly implies that Gulf emissions have significance. The State provided no information on emission apportionment from off-shore sources. This source category is poorly described by the RPO or LA, yet appears to be significant. Please include a more

thorough discussion regarding Gulf emissions.

Chapter 12: Comprehensive Periodic Implementation Plan Revisions and Adequacy Determinations

The Forest Service requests that LA include a statement in this Chapter committing to future consultation with the FLMs.