

## *Appendix O.3*

### **Georgia EPD Responses to FLM Comments on Draft Prehearing SIP**

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### Georgia EPD Responses to Federal Land Manager Comments on the Draft Prehearing SIP

#### Responses to U.S. Forest Service Comments

1. page V – For the 20 percent worst days the Reasonable Progress goal should be 7.45 and not 7.47; and the deciview (dv) improvement needed by 2064 should be 12.02 dv and not 12.00.

**Response:** *This comment appears to pertain to the deciview improvement values given for the Cohutta Wilderness Area on page v of the Executive Summary. EPD believes that the 7.47 value is correct. Table 2.3-1 identifies the baseline visibility as 30.25 dv and Figure 8.0-1 shows the reasonable progress goal to be 22.78 dv. The actual deciview targets have been added to the table on page v for clarity.*

2. page 4 – Joyce Kilmer, Tennessee should be identified as Joyce Kilmer – Slickrock Wilderness Area, North Carolina and Tennessee.

**Response:** *Revised as requested.*

3. page 6 (2<sup>nd</sup> paragraph) – Here and elsewhere in the document the following statement can be removed: “Note that on July 11, 2008 ...”

**Response:** *Revised as requested.*

4. page 11 – We concur with using the New IMPROVE equation.

**Response:** *Noted – no change required.*

5. page 12 (1<sup>st</sup> paragraph) – We would recommend the following phrase, “The 20 percent best visibility days at the Southern Appalachian sites ...” be changed to “The 20 percent best visibility days at Cohutta Wilderness ...”

**Response:** *Revised as requested.*

6. page 14 (1<sup>st</sup> paragraph) – Should read as “... wildfires or prescribed fires.”

**Response:** *Revised as requested.*

7. page 15 (3<sup>rd</sup> paragraph) – Please add to the end of the 1<sup>st</sup> sentence “... in comparison to the former IMPROVE equation.”

**Response:** *Reworded for clarification.*

8. page 17 – The values in Figure 3.1-1 should be listed to only two decimal places.

**Response:** *Corrected.*

9. page 24 – there is no image on Figure 4.2-1. (SO<sub>2</sub> emissions in 2002 in the VISTAS States).

**Response:** *Corrected.*

10. page 40 – We recognize the lack of IMPROVE data contributed to assessing model performance at Cohutta Wilderness and we concur with the methods in Appendix B to substitute data from Great Smoky Mountains National Park on the days the Cohutta monitoring site was missing data.

**Response:** *Noted – no change required.*

11. page 46 – We are recommending that the Smoke Management Plan (SMP) document should not be included in Appendix H.10, but instead a reference should be made (as was done on page 103) that Georgia does operate under a SMP. Our concern is that Georgia may lose maximum flexibility to modify the SMP on an as needed basis without having to go through a SIP revision, or waiting for long periods of evaluation such as prescribed by the Regional Haze review cycle. As stated in the pre-draft SIP, we concur with your finding that wildland fire emissions are not a significant contributor to visibility impairment at the Class I areas and further emission reduction techniques from prescribed fires are not needed before 2018. Based upon this finding, it appears the current prescribed fire smoke management techniques implemented in Georgia are adequate to protect visibility in the Class I areas. If you concur, we suggest your agency note this finding in the final SIP. Also, you may want to note that your agency and the Georgia prescribed fire community are continuing to work together to refine the smoke management techniques to address ecological, human health and welfare needs.

**Response:** *The Smoke Management Plan has been removed as suggested. The plan is still referenced from Subsection 7.8 of the narrative and from Subsection 10.2 of Appendix H.*

12. page 50 – Figure 7.2.4-1 please remove “ew IMPROVE Al\_orith” from the graphic.

**Response:** *Corrected.*

13. page 70 (1<sup>st</sup> paragraph) – Please delete the words “... most current ...” and just say “... were developed using the Base G VISTAS 2002 base year ...”

**Response:** *Revised as requested.*

14. We are recommending the VISTAS Area of Influence (AOI) electronic spreadsheet that includes all sources be included in the Appendices. Appendix H.5 only includes the BART eligible sources.

***Response:*** *The VISTAS Area of Influence (AOI) electronic spreadsheet that includes all sources is already included in the SIP. Please see Appendix H.2*

15. We agree that the Reasonable Progress approach used in this first Regional Haze SIP is a good approach and we appreciate the State of Georgia utilizing a lower Q/d (source emissions divided by distance to the Class I area) value in comparison to other southeastern states.

***Response:*** *Noted – no change required.*

16. The pre-draft SIP does not discuss how emissions from all significant stationary sources in Georgia will affect visibility in Class I areas outside of Georgia; specifically Joyce Kilmer-Slickrock, Linville Gorge, Shining Rock and Sipsey Wildernesses. The information is contained in the VISTAS Area of Influence (AOI) analyses and it would be appropriate to discuss how emission changes planned for all of Georgia sources (not only BART sources) will affect visibility at Class I areas in other states. There are three sections of the Regional Haze Rule that we believe support our request:

- a. 51.308 (d)(3) Long term strategy. "Each State... must submit a long-term strategy that addresses regional haze visibility impairment...for each mandatory Class I Federal area located outside the State which may be affected by emissions from the State. The long-term strategy must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by States having mandatory Class I Federal areas."
- b. 51.308 (d) (3) (i) "Where the State has emissions that are reasonably anticipated to contribute to visibility impairment in any ... Class I area located in another State..., the State must consult with the other State(s) in order to develop coordinated emission management strategies."
- c. 51.308 (d) (3) (ii) "If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process."

Section 10, 'InterState Consultation', should include a list of Georgia sources the AOI identified as having a potential to impact the Class I areas in Alabama and North Carolina. The list also needs to include the pollution reductions that are anticipated at each source before 2018.

**Response:** Added Tables 10-1 thru 10-7 documenting the impact from Georgia's point sources on Joyce Kilmer-Slickrock (NC), Shining Rock (NC), Great Smoky Mountains (NC/TN), Sipsey Wildernesses (AL), Cape Romain (SC), Swanquarter (NC), and St. Marks (FL). All other Class I areas showed contributions from Georgia point sources of less than 0.5%. A table (7.6.1-1) of Georgia EGUs for which CAIR constitutes reasonable progress was added to Section 7.6.1. The table presents the emissions reductions expected prior to 2018. The pollution reductions associated with sources going through four-factor analysis are already presented in Section 7.6.

17. page 114 – We are recommending that the year the first 5-year progress report will be completed also be included in the first paragraph.

**Response:** The second paragraph of Section 11.0 (Comprehensive Periodic Implementation Plan Revisions) states that EPD “commits to submitting a report on reasonable progress to US EPA every five years following the initial submittal of the SIP” as required by 40 CFR 51.308(g). Because the date of the initial submittal to EPA (and EPA's approval) is unknown at this time, EPD is reluctant to specify the year for the first progress report. EPD feels that the current statement in Section 11.0 is satisfactory.

## **Responses to U.S. Fish and Wildlife Service and National Park Service Comments**

### **[1]\* International Impairment**

On page 58, a modified glide slope is presented. This glide slope is based on removing the international emissions. However, the international component was not removed from the natural conditions. The result effect is minor, but should be corrected in the final version of the SIP.

\* The comment number in brackets was assigned by Georgia EPD for ease of reference. There were no comment numbers in the package of comments from FWS/NPS.

**Response:** *In accordance with EPA recommendations, EPD did not alter the uniform rate of progress glide slope. Since the natural conditions for visibility does not include international components, EPD believes it would be inappropriate to remove them from the glide slope. EPD did alter the location where the future model projection falls with respect to the uniform rate of progress glide slope.*

### **[2] Best Available Retrofit Technology (BART) and Reasonable Progress (RP)**

On page 78, the draft SIP states, “In accordance with Environmental Protection Agency guidance, emission units subject to BART review are not subject to reasonable progress goal review.” The State does have the option of requiring additional controls, if BART is not sufficient enough to reach reasonable progress goals.

**Response:** *EPD has changed the wording of this statement to better reflect the wording used on page 4-2 of EPA’s June 1, 2007 memorandum “Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program” by the Office of Air Quality Planning and Standards.[EM]*

### **[3] Smoke Management Plan**

On page 103, the Smoke Management Plan (SMP) should be referenced in a summary paragraph and the SMP should be included as an Appendix to the SIP. The summary paragraph should include whether the SMP is voluntary or mandatory and whether the SMP includes Class I areas as a sensitive receptor. Additionally, some basic statements should be included as to whether emissions from fire are anticipated to shrink, stay the same, or increase over the ten year planning period. It is recommended that the SMP should be referenced in a manner that does not require SIP updates each time the SMP is updated.

**Response:** *EPD concurs and has removed the SMP from the appendix and the reference to the appendix containing the SMP.*

**[4] Construction Activity**

The draft SIP does not contain a discussion on State limits on emissions resulting from construction activity. This is a required element of the Regional Haze SIP.

***Response:*** Section 7.8 of the SIP narrative and Section 10.2 of Appendix H have been revised to address emissions from construction activities. Georgia's Rules for Air Quality Control include requirements for precautions to prevent fugitive dust from becoming airborne and also limit the opacity of fugitive emissions to less than 20 percent. The requirements of rule 391-3-1-.02(n) include preventive measures for construction activities and are deemed adequate to satisfy the directive in section 308(d)(3)(v)(B) of the Regional Haze rule.

**[5] Impact on out-of-State Class I areas**

The draft SIP should contain a few statements on Georgia's impact on out-of-State Class I areas.

***Response:*** Added Tables 10-1 thru 10-7 documenting the impact from Georgia's point sources on Joyce Kilmer-Slickrock (NC), Shining Rock (NC), Great Smoky Mountains (NC/TN), Sipsey Wildernesses (AL), Cape Romain (SC), Swanquarter (NC), and St. Marks (FL). All other Class I areas showed contributions from Georgia point sources of less than 0.5%.

**[6] Best Available Retrofit Technology (BART) Provisions of the Georgia Regional Haze SIP**

Appendix H of the Georgia Regional Haze State Implementation Plan – Draft (RH SIP) contains BART Exemption Modeling Reports for a number of facilities, but such reports are not included for eight BART-eligible sources. They are: DSM Chemicals North America, Georgia Pacific-Brunswick Cellulose, Owens Corning, PCA, PCS Nitrogen, Prayon, Inc., Rayonier and Tronox/Kerr-McGee. Please provide these reports in the record as evidence to confirm that none of the above facilities impact any Class I area by 0.5 deciviews or greater.

***Response:*** Reports for the above mentioned facilities have been added and placed in the folder called BART Protocols and Exemption Modeling reports

**[7]** It is important that the RH SIP be clear that the Georgia EPD is the entity that accepts and adopts required emission controls, because the EPA BART Guidelines require that permit conditions be finalized and included in the RH SIP.<sup>1</sup> Section 7.7.3 implies that Interstate Paper in Riceboro developed the BART determination in the reference, "Their BART determination

results . . .” However, on a January 22, 2009 conference call Georgia EPD stated that the BART determination was developed by the State. Thus, the wording should be clear that the Required Control Options displayed in Table 7.7.3-1 are the conclusions of Georgia EPD, rather than merely results presented by Interstate Paper. In the next-to-last paragraph of Section 7.7.2, relating to Georgia Pacific - Cedar Springs, Georgia EPD should make it clear that the stated emission limits are accepted and adopted by the State.

<sup>1</sup> See 40 CFR Part 51, Appendix Y. The U.S. Environmental Protection Agency finalized its BART Guidelines on June 15, 2005, and published the preamble and final rule text in the Federal Register on July 6, 2005. The rulemaking action added Appendix Y to Part 51, titled “Guidelines for BART Determinations Under the Regional Haze Rule.” See Section V.

**Response:** *EPD added language to identify that the BART determination was performed by EPD and the resulting conclusions are EPD’s.*

*No change is necessary for the comment concerning GP Cedar Springs. The permit for this source is being amended and is not yet final. The Narrative states that the permit will be amended. No conclusive statement can be made until the permit is final.*

[8] The “model plant” criteria for International Paper – Savannah and Lafarge Building Materials – Atlanta should be documented. Table 7.7.2-2 makes reference to exempting these facilities from BART based on “Model Plant Criteria”, but the term has not been defined in the RH SIP. The EPA BART Guidelines define what could be accepted by a state as a model plant criteria<sup>2</sup>, but allows a state to develop its own criteria. The RH SIP should state or reference the State’s definition of “Model Plant Criteria” and it should also show the definitive distance and emission characteristics of the above two facilities so as to confirm their meeting the “Model Plant Criteria”.

<sup>2</sup> Ibid, Section III.A.3.Option 2.

**Response:** *EPD added language that defines the model plant criteria. In addition, emissions and distance from the closest Class I area for each facility listed were added to Table 7.7.2-2.*

[9] Regarding the BART determination for Interstate Paper-Riceboro, Table 7.7.3-1, under the heading “Required Control Option” for the Lime Kiln states, “No cost effective control options Available.” As discussed below there *are* cost-effective (i.e., cost per ton) control options available for the lime kiln, but as you clarified on a January 22, 2009, conference call, the lack of cost-effectiveness was on the basis of excessive cost of visibility improvement. Please clarify this in Section 7.7.3. For the record it should be noted that cost-effective (i.e., cost per ton) control options are available for the lime kiln. The control alternatives of SNCR-NH<sub>3</sub> based, SNCR-Urea based and Low NO<sub>x</sub> burner are all under \$1,500 per ton of NO<sub>x</sub> reduced. It should be noted that only summary cost data were presented. More detailed cost information



should be included in BART determinations so that third-party reviewers can more thoroughly review the costs and methodologies that were used.

***Response:*** *More detailed information on the control options considered is available in Appendix H.8. Also, note that there is little impact on visibility from NO<sub>x</sub>. Because of this, NO<sub>x</sub> controls are not cost effective no matter which control is considered. Therefore, EPD has decided to focus on SO<sub>2</sub> controls rather than NO<sub>x</sub> controls.*