GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

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April 17, 2020

Submitted by electronic email to: bridgers.george@epa.gov

Mr. George Bridgers
Air Quality Modeling Group
Air Quality Assessment Division
U. S. EPA Office of Air Quality Planning and Standards

Dear Mr. George Bridgers:

The Georgia Environmental Protection Division (Georgia EPD) appreciates the opportunity to provide the following comments on the "DRAFT Guidance for Ozone and Fine Particulate Matter Permit Modeling" document (hereafter "Draft Guidance") dated February 10, 2020.

Overall, EPA's Draft Guidance document provides clear and comprehensive guidance on demonstrating compliance with the NAAQS for ozone and $PM_{2.5}$ and PSD increments for $PM_{2.5}$. Below, we provide some general and specific comments for EPA to consider as they finalize the guidance document.

General Comments
Georgia EPD recommends that EPA use consistent terminology for "background concentrations." Throughout the draft document, EPA uses both "background levels" and "monitored background." If these terms are different, EPA should provide clear definitions for each in the final guidance document. In addition, we suggest that references be sorted in the same way in the main body (currently sorted by publication year) and appendices (currently sorted in alphabetical order).

Specific Comments
The attached Table 1 contains Georgia EPD's comments on specific items in EPA's Draft Guidance. We attempted to include the original text of the Draft Guidance in Table 1 so that EPA staff can easily locate our discussion items. For editorial changes, we used red font.

If you have any questions about our comments, please contact Byeong-Uk Kim at Byeong.Kim@dnr.ga.gov.

Sincerely,

James W. Boylan

James W. Boylan, Ph.D.
Manager, Planning and Support Program
Georgia Department of Natural Resources
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Table 1. Georgia EPD's specific comments on EPA's DRAFT Guidance for Ozone and Fine Particulate Matter Permit Modeling.

Page	Original Text	Comment
8	"… is considered significantand should …"	Add a space between "significant" and "and"
12	"With respect to the unique nature of the criteria pollutants O_3 and $PM_{2.5}$ emissions of individual O_3 and $PM_{2.5}$ precursors (i.e., NO_X, VOC, SO_2, and direct $PM_{2.5}$ are not summed when determining a significant emissions increase for either criteria pollutant.[8]"	Change to: "With respect to the unique nature of the criteria pollutants O_3 and $PM_{2.5}$, emissions of individual O_3 and $PM_{2.5}$ precursors (i.e., NO_X, VOC, and SO_2~~,~~) and direct $PM_{2.5}$ are not summed when determining a significant emissions increase for either criteria pollutant.[8]"
25	"which historically has been used as used as background concentrations in a cumulative modeling demonstration."	Change to: "which historically has been used as ~~used as~~ background concentrations in a cumulative modeling demonstration."
29	"see Appendix C and D"	Change to: "see Appendices C and D"
35	"Under the Tier 1 approach, for source impact analyses, the highest of the multi-season (or episode) averages of the maximum modeled daily 8-hour O_3 concentrations predicted each season (or episode) should be compared to the appropriate O_3 SIL, since this metric represents the maximum potential daily 8-hour O_3 impact from the proposed source or modification."	The Tier 1 approach (i.e., MERP) gives only one number for a given set of emissions. It will be helpful to have an example calculation demonstrating how to compute "the multi-season (or episode) averages of the maximum modeled daily 8-hour O_3 concentrations" with MERPs.
47	"The EPA recommends that the modeled O_3 impacts should be added to the monitor-based design value for comparison to the NAAQS, as appropriate."	For MEPRs, it is straightforward. However, it is not clear for Tier 2 demonstrations (i.e., single-source modeling). EPA should clarify if the highest daily maximum 8-hour average O_3 concentration or the 4th highest daily maximum 8-hour average O_3 concentration from the one-year PGM simulation should be used for "the modeled O_3 impacts"?
55	"98th percentile daily maximum 8-hour averaged O_3 concentrations at the affected receptor(s) should be compared to an appropriate O_3 NAAQS SIL"	It appears that "99th percentile" should be "4th highest". Also, EPA should explain how MERPs can be used in this analysis.
61	Figure V-1	This figure needs to be updated. The major source baseline date for $PM_{2.5}$ should be 10/20/2010 and the trigger date is 10/20/2011. This is stated on page 63.

Page	Original Text	Comment
70	"Sources whose emissions have not changed substantially since the applicable baseline date may not need to be included for purposes of increment consumption."	EPA should clarify if this is based on their *actual* or *potential* emission changes.
72	"For areas where $PM_{2.5}$ precursor emission increases from other increment-consuming sources have occurred since the major or minor source baseline dates, and are, thus, likely to have added to $PM_{2.5}$ concentration increases within the baseline area (and, thus, consume $PM_{2.5}$ increment), the chemical transport modeling methods (using the emissions input data applicable to increment analyses) discussed in Section III of this guidance may be appropriate for estimating the portion of $PM_{2.5}$ increment consumed due to secondary $PM_{2.5}$ impacts associated with those increases in precursor emissions."	EPA should include an option to use MEPRs applied to $PM_{2.5}$ increment consuming sources to address this.
A-10	"by the chemical speciation sites (Figure A-1)"	Change to: "by the chemical speciation sites (Figure A-8)"
B-3	"most recent 2 years"	EPA should consider adding a conditional statement such as "if representative" because some sources may not have typical operations during the most recent 2 years.