

November 24, 2021

United States Environmental Protection Agency

Guidance for Ozone and Fine Particulate Matter Permit Modeling

Subject: Comments on EPA Draft Guidance

The South Carolina Department of Health and Environmental Control (SCDHEC) appreciates this opportunity to comment on the draft Guidance for Ozone and Fine Particulate Matter Permit Modeling. This guidance outlines the procedures EPA recommends applicants use to address compliance with the National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) Increments in the air quality analysis that is required as part of the PSD permitting process.

SCDHEC supports the overall procedures outlined in this guidance. We believe the guidance allows for a logical approach to the NAAQS and PSD Increment modeling assessments required under the PSD permitting program and believe the recommended tiered approach through the use of the MERPs guidance will protect public health while allowing permit applicants a graduated approach to addressing secondary formation of ozone and fine particulate matter without, in most cases, having to resort to the onerous burden of performing photochemical modeling.

We offer the following specific comments we believe will further improve EPA's guidance:

- The draft guidance provides an example of an ozone and PM_{2.5} SIL analysis in Appendix C, which is very helpful. We suggest that the guidance also include an example for a Class II full impact analysis including secondary PM_{2.5} components for the NAAQS and increment standards. Also, a Class I analysis including secondary components for PM_{2.5} increments would be especially helpful.
- The draft guidance states in Section II.2 that "if a source would emit a significant amount of one or more of: NO_x, SO₂, or direct PM_{2.5} emissions, then the source should include NO_x and SO₂ precursor and direct PM_{2.5} emissions in the assessment of PM_{2.5} impacts." This implies that any amount of emissions of all these pollutants (0.1, 0.01, or even 0.001 tpy) should be included in the assessment if even one pollutant triggers the SER. We suggest that, as a practical matter, there is a level of emissions that is insignificant and can safely be excluded from the overall assessment and note that the SERs are expressed as whole numbers. Therefore, at least, it would appear to be reasonable to allow the reviewing authority to approve exclusion of some level of insignificant emissions and suggest that emissions below a 1 tpy threshold would be more than reasonable to exclude.

- The issue of whether the minor source baseline date would be set in an area where the direct PM_{2.5} emissions are below the SER but either NO_x or SO₂ emissions are above the SER is not addressed in the guidance. We believe it makes sense that only the triggering of PSD for direct emissions would set the minor source baseline date in an area and we recommend that EPA include guidance on this issue to affirm that is the case.
- We support the use of the MERPs guidance to address secondary formation for ozone and PM_{2.5} but note that the current database of modeled sources includes model plant sources at only heights of 10m and 90m. Since that guidance does not recommend interpolation of the results to account for different stack heights, we believe it would be helpful if EPA would perform MERPs modeling to include at least one intermediate source height between 10m and 90m at each location modeled.

Again, we appreciate this opportunity to provide comment and participate in the stakeholder process for developing this guidance. If you have questions or need additional information, please contact John Glass at (803-898-4074) or glassjp@dhec.sc.gov.