

Air Protection Branch

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Submitted by electronic email to: Eyth.Alison@epa.gov

Alison Eyth
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Emissions Inventory and Analysis Group
US EPA/OAQPS/AQAD
919-541-2478

Dear Ms. Eyth:

The Georgia Environmental Protection Division (Georgia EPD) appreciates the opportunity to provide the following comments on the 2016v2 Emissions Modeling Platform that was released in September 2021.

Overall, EPA's 2016v2 Emissions Modeling Platform did not change too significantly from the previous version, 2016v1. Below, Georgia EPD would like to offer both general and specific comments for EPA to consider.

General Comments

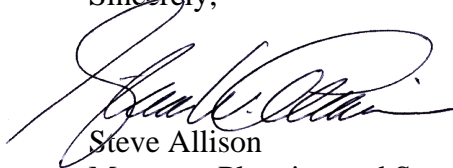
Georgia EPD's analysis of the 2016v2 release of the emissions modeling platform compared to the 2016v1 release showed minimal changes in most sectors. The differences that were significant were represented in three sectors: Nonpoint sources (Afdust), Biogenic Sources (BEIS), and Point Sources (Airports). Georgia uses the default EPA data for most of these sectors except for data pertaining to Hartsfield-Jackson International Airport in the Point Sources (Airports) sector.

Specific Comments

The attached Table 1 contains Georgia EPD's comments on specific items in the 2016v2 Emissions Modeling Platform. We divided the comments to align with sector categories of concern.

If you have any questions about our comments, please contact Tamara Hayes at tamara.hayes@dnr.ga.gov or 470-524-0274.

Sincerely,



Steve Allison
Manager, Planning and Support Program
Georgia EPD - Air Protection Branch
Georgia Department of Natural Resources

Table 1. Georgia EPD’s specific comments on EPA’s 2016v2 Emissions Modeling Platform.

Sector	Comment
2016 Point Sources	
EGU Sector	This sector was reviewed and found no significant differences or issues in the analysis of the two versions.
Non-EGU Sector	This sector was reviewed and found no significant differences or issues in the analysis of the two versions.
Airports	For Hartsfield-Jackson International Airport, it was discovered that some SCCs were duplicated leading to artificially high numbers. When the duplicates are removed, the results of the two inventories were equivalent. EPA responded and agreed to fix the problem in 2016v3.
2016 Nonpoint Sources	
Agricultural Fugitive Dust	<p>There are significant decreases in Afdust_adj between the modeling platforms 2016v1 and 2016v2 (almost a 50% decrease in PM10 emissions and 25% decrease in PM2.5 emissions). Georgia EPD requests EPA explain any changes in methodology or data used in these calculations that would lead to such a large change in results.</p> <p>Georgia EPD believes there is a typo/error on Page 34 of the v2 TSD. “2016v1” should be “2016v2” in the sentence “The total impacts of the transport fraction and meteorological adjustments for 2016v1 are shown in Table 2-11.”</p>
Agricultural Fertilizer	Section 2.2.3 (fertilizer) of the 2016v2 TSD states that 2016v2 emissions were estimated by CMAQ v5.3.2 with FEST-C v1.4 while 2016v1 emissions were estimated by CMAQ v5.3 with FEST-C v1.3. The BELD database is used for biogenic emissions modeling and fertilizer emissions estimates, but it is not clear which version of BELD was used for 2016v2. Georgia EPD requests that EPA clarify the version of BELD data used for fertilizer emission estimates.
Nonpoint	Georgia EPD believes there is a typo/error in Page 45 of the 2016v2 TSD. “2016v1” should be “2016v2” in the sentence “The starting point for the 2016v1 platform nonpt inventory is the 2017 NEI, including all nonpoint sources that are not included in the sectors afdust, ag, cmv_c1c2, cmv_c3, np_oilgas, rail, rwc, or solvents.”

2016 Onroad Mobile Sources	
Onroad Mobile Sources	Maps on the ftp site showed a hot spot over the Atlanta area for VOCs in contrast to the rest of the US (except TX). Other pollutants were reviewed, and the other pollutants showed higher values although not unique to Atlanta. The Technical Support Document indicated that the only significant change to the onroad mobile sources was the use of MOVES3 in v2 vs. MOVES2014b in v1. Georgia EPD identified that “startsperday” had not been adjusted for the new model which has a different format. EPA was notified of the issue by Gil Grodzinsky who showed them how to fix it as part of a general MOVES3 discussion.
2016 Nonroad Mobile Sources	
Nonroad Mobile Sources	Georgia EPD has no comments on this sector.
2016 Fires	
Fires	Georgia EPD has no comments on this sector.
2016 Biogenic Sources	
Biogenic Sources	Georgia EPD noticed a significant decrease between 2016v1 and NEI2016v2. Across Georgia, there was approximately a 25% decrease in VOC and CO emissions. Georgia EPD requests EPA explain any changes in methodology or data used in these calculations that would lead to such a change in results.
Future Year Point Sources	
EGU Sector	In the 2016v2 Emissions Modeling Platform, Georgia Power Plant Scherer (Facility ID: 8354711) should include SO ₂ and NO _x emissions for Unit 1 in 2023, 2026, and 2032; Unit 2 in 2023, 2026, and 2032; and Unit 3 in 2023 and 2026. Georgia Power Plant Scherer Unit 3 will likely retire by 2028 and Unit 4 will likely retire in 2022. Georgia Power Plant Bowen (Facility ID: 2813011) should include SO ₂ and NO _x emissions for Unit 1 in 2023 and 2026; Unit 2 in 2023 and 2026; Unit 3 in 2023, 2026, and 2032; and Unit 4 in 2023, 2026, and 2032. Georgia Power Plant Bowen Units 1 and 2 will likely retire by 2028.

Future Year Point Sources (Continued)	
Non-EGU Sector	<p>Many facilities with NAICS codes: 322110 (Pulp Mills), 322130 (Paperboard Mills), and 722410 (Drinking Places - Alcoholic Beverages) had NO_x and SO₂ emissions that were decreased from 40% to over 90% between 2016 and future years 2023, 2026, and 2032. The technical support document should document the reasons for the changes to these NAICS categories. Georgia EPD believes these emission reductions might be erroneous.</p> <p>Several facilities with NAICS codes beginning with 327 (Nonmetallic Mineral Product Manufacturing) had NO_x and SO₂ emissions that were increased approximately 25% or more between 2016 and future years 2023, 2026, and 2032. The technical support document should document the reasons for the changes to facilities in this NAICS category. Georgia EPD believes these emission increases might be erroneous.</p> <p>Thermal Ceramics (Facility ID: 2533311) is currently being permitted to install a wet scrubber to control SO₂ emissions. This scrubber is expected to reduce SO₂ emissions by 95%. Therefore, Thermal Ceramics' SO₂ emissions for 2023 and beyond should be reduced accordingly.</p>