GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, Georgia 30354
404-363-7000

DEC 26 2018

Ms. Mary Walker
Acting Regional Administrator
U.S. EPA, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

RE: Request Approval to Remove the Georgia Power-Plant Wansley Annual Reporting Requirement under EPA's Data Requirements Rule for the 2010 1-Hour SO_2 NAAQS

Dear Ms. Walker,

On January 9, 2018 (FR 83 1098), the U.S. Environmental Protection Agency (EPA) designated Heard County as Attainment/Unclassifiable. This designation was based on 2012-2014 modeling submitted to EPA by the Georgia Environmental Protection Division (EPD) on December 28, 2016. The SO_2 Data Requirements Rule (DRR) states:

> *"For any area where modeling of actual SO_2 emissions serve as the basis for designating such area as attainment for the 2010 SO_2 NAAQS, the air agency shall submit an annual report to the EPA Regional Administrator by July 1 of each year, either as a stand-alone document made available for public inspection, or as an appendix to its Annual Monitoring Network Plan (also due on July 1 each year under 40 CFR 58.10), that documents the annual SO_2 emissions of each applicable source in each such area and provides an assessment of the cause of any emissions increase from the previous year. The first report for each such area is due by July 1 of the calendar year after the effective date of the area's initial designation."*

In addition, the SO_2 DRR states:

> *"An air agency will no longer be subject to the requirements of this paragraph (b) for a particular area if it provides air quality modeling demonstrating that air quality values at all receptors in the analysis are no greater than 50 percent of the 1-hour SO2 NAAQS, and such demonstration is approved by the EPA Regional Administrator."*

Accordingly, EPD has updated the dispersion modeling for Plant Wansley with 2015-2017 actual emissions and meteorological data and demonstrated that the SO_2 concentrations at all receptors in the analysis are no greater than 50 percent of the 1-hour SO_2 NAAQS. Therefore, EPD requests your approval to remove the Georgia Power-Plant Wansley annual reporting requirement under EPA's Data Requirements Rule for the 2010 1-Hour SO_2 NAAQS.

A copy of this letter and attached modeling report are available for public inspection at 4244 International Parkway, Suite 120, Atlanta, GA 30354. In addition, the public can inspect an electronic version of this letter and attached modeling report at: https://epd.georgia.gov/air/documents/georgia-power-plant-wansley-annual-report-data-requirements-rule-2010-1-hour-so2-naaqs.

Should you or your staff have any questions or comments, please feel free to contact Dr. James Boylan at James.Boylan@dnr.ga.gov or 404-363-7014.

Sincerely,

Richard E. Dunn
Director
Georgia Environmental Protection Division

RED:DT

c: Scott Davis, EPA Region 4
Lynorae Benjamin, EPA Region 4
Karen Hays, Branch Chief, EPA Air Protection Branch

Attachment

GA EPD Dispersion Modeling to Fulfil Annual Reporting Requirements for the 2010 1-Hour SO_2 NAAQS: Georgia Power - Plant Wansley December 26, 2018

On January 9, 2018 (FR 83 1098), the U.S. Environmental Protection Agency (EPA) designated Heard County as Unclassifiable/Attainment. This designation was based on 2012-2014 modeling submitted to EPA by the Georgia Environmental Protection Division (EPD) on December 28, 2016. The SO_2 Data Requirements Rule (DRR) states:

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Accordingly, EPD has updated the dispersion modeling for Plant Wansley with 2015-2017 actual emissions and meteorological data to demonstrate that the SO_2 concentrations at all receptors in the analysis are no greater than 50 percent of the 1-hour SO_2 NAAQS. The dispersion modeling was performed using AERMET (v18081) and AERMOD (v18081) in accordance with the final DRR and Modeling Technical Assistance Document (TAD).

Table 1 contains the SO_2 emissions from Plant Wansley that were used in the original designation modeling (2012-2014), the SO_2 emissions from Plant Wansley that were used in this updated modeling (2015-2017), and EPA's Clean Air Markets Division (CAMD) SO_2 emissions (2012-2017). The 2015-2017 SO_2 emissions utilized in this updated modeling are approximately 1.8 times greater than the 2012-2014 SO_2 emissions utilized in the original designation modeling. The 2015-2017 modeled SO_2 emissions are slightly higher than those reported to EPA's CAMD database.

Table 1. SO_2 emissions (TPY) from Plant Wansley.

Calendar Year	CAMD SO_2 Emissions (Tons/year)	Modeled SO_2 Emissions (Tons/year)
2012	2,101.7	2,102.0
2013	1,196.5	1,172.0
2014	2,442.8	2,442.8
2015	2,930.0	2,930.4
2016	4,855.6	4,856.9
2017	2,720.4	2,721.4

Emissions from Unit 5A of Plant Wansley were not included in this modeling since the actual SO_2 emissions were not significant. Unit 5A is a blackstart combustion turbine which is used to restart the steam-electric generating units when all steam-electric generating units at a facility are down and off-site power is not available. It operates less than 30 hours per year (Table 2) and is considered an intermittent source. Unit 5A emissions in CAMD were not measured by SO_2 continuous emission monitoring systems (CEMS), but estimated using the low mass emission (LME) unit methodology for reporting under Part 75 (40 CFR 75.19). The reported Unit 5A emissions in CAMD were based on the default emission factor of 0.5 lb/mmBtu for diesel fuel with sulfur content of 4,950 ppm shown in Table LM-1 (40 CFR 75.19). The actual emission factor for Unit 5A was much smaller since Unit 5A used ultralow sulfur diesel (ULSD) with sulfur content of ~15 ppm. Therefore, the actual emissions from Unit 5A were much lower than those that were reported in CAMD (Table 2).

Table 2. SO_2 emissions (TPY) from Unit 5 of Plant Wansley and operating hours

Year	Reported Emissions in CAMD (assumes 4950 ppm)	Actual Emissions (ULSD, ~15 ppm)	Operating Time (hours)
2012	0.596	0.002	7
2013	0.708	0.002	27
2014	0.395	0.001	24
2015	1.179	0.004	23
2016	0.414	0.001	25
2017	0.429	0.001	13

INPUT DATA

Meteorological Data – Since no on-site meteorological data was available, the hourly meteorological data of surface and upper air observations from Peachtree City Airport, GA NWS station for the period of 2015-2017 were used in this modeling. The AERMET processor (v18081) was used to convert the NWS data into AERMOD model-ready meteorological data files. Values of the surface characteristics (albedo, Bowen ratio, and surface roughness) surrounding the Peachtree City Airport, GA NWS surface station and the project site were derived using the AERSURFACE surface characteristics evaluation utility (v13016) for each of twelve 30-degree sectors over four seasons in accordance with the AERMOD Implementation Guide (18081). A comparison of the surface characteristics between the Peachtree City Airport

NWS station and the facility site is shown in Table 3. No significant difference in the albedo, Bowen ratio, and surface roughness was found. Therefore, AERMOD modeling for Plant Wansley was performed with the surface characteristics from the Peachtree City Airport NWS station. According to the 3-year wind rose (2015-2017) for the Peachtree City Airport (Figure 1), the winds are predominantly from the northwest.

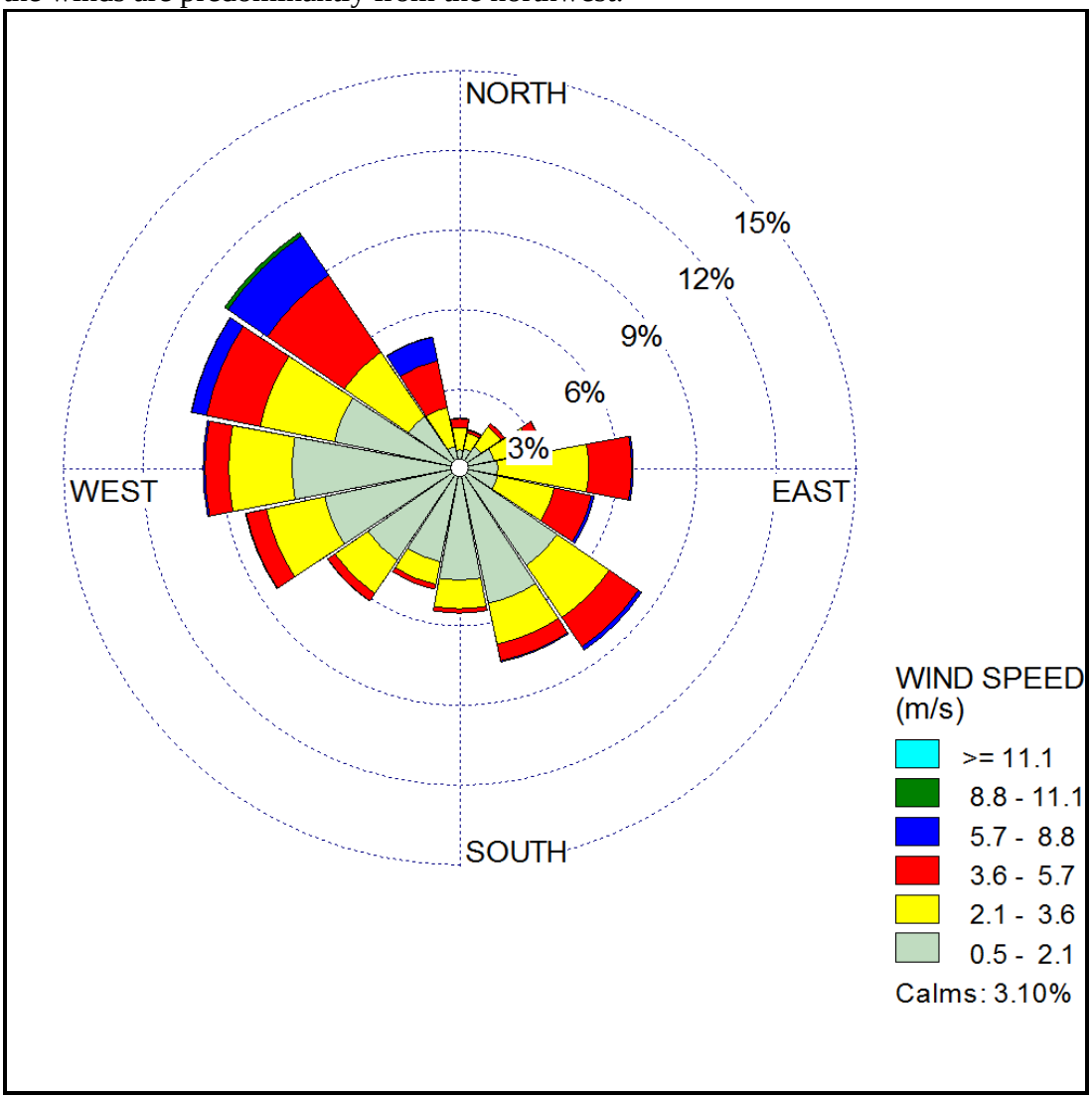

Figure 1. Three-year wind rose (2015-2017) for the Peachtree City Airport NWS Station.

Table 3. Comparisons of albedo, Bowen ratio, and surface roughness at the Peachtree City Airport NWS station and the Plant Wansley facility site.

		Peachtree City Airport NWS Station			Plant Wansley Facility Site		
Time Frequency	Wind Sector	Albedo	Bowen Ratio	Surface Roughness	Albedo	Bowen Ratio	Surface Roughness
Winter	1 of 12	0.15	0.73	0.27	0.15	0.80	0.74
Winter	2 of 12	0.15	0.73	0.29	0.15	0.80	0.49
Winter	3 of 12	0.15	0.73	0.40	0.15	0.80	0.42
Winter	4 of 12	0.15	0.73	0.15	0.15	0.80	0.47
Winter	5 of 12	0.15	0.73	0.08	0.15	0.80	0.34
Winter	6 of 12	0.15	0.73	0.23	0.15	0.80	0.45
Winter	7 of 12	0.15	0.73	0.31	0.15	0.80	0.50
Winter	8 of 12	0.15	0.73	0.22	0.15	0.80	0.59
Winter	9 of 12	0.15	0.73	0.19	0.15	0.80	0.55
Winter	10 of 12	0.15	0.73	0.12	0.15	0.80	0.03
Winter	11 of 12	0.15	0.73	0.04	0.15	0.80	0.01
Winter	12 of 12	0.15	0.73	0.12	0.15	0.80	0.06
Spring	1 of 12	0.14	0.55	0.33	0.14	0.59	0.83
Spring	2 of 12	0.14	0.55	0.35	0.14	0.59	0.55
Spring	3 of 12	0.14	0.55	0.46	0.14	0.59	0.47
Spring	4 of 12	0.14	0.55	0.18	0.14	0.59	0.55
Spring	5 of 12	0.14	0.55	0.12	0.14	0.59	0.40
Spring	6 of 12	0.14	0.55	0.32	0.14	0.59	0.49
Spring	7 of 12	0.14	0.55	0.41	0.14	0.59	0.54
Spring	8 of 12	0.14	0.55	0.29	0.14	0.59	0.63
Spring	9 of 12	0.14	0.55	0.27	0.14	0.59	0.59
Spring	10 of 12	0.14	0.55	0.17	0.14	0.59	0.03
Spring	11 of 12	0.14	0.55	0.04	0.14	0.59	0.01
Spring	12 of 12	0.14	0.55	0.13	0.14	0.59	0.06
Summer	1 of 12	0.15	0.35	0.40	0.15	0.32	0.93
Summer	2 of 12	0.15	0.35	0.44	0.15	0.32	0.68
Summer	3 of 12	0.15	0.35	0.52	0.15	0.32	0.58
Summer	4 of 12	0.15	0.35	0.24	0.15	0.32	0.63
Summer	5 of 12	0.15	0.35	0.19	0.15	0.32	0.43
Summer	6 of 12	0.15	0.35	0.42	0.15	0.32	0.52
Summer	7 of 12	0.15	0.35	0.46	0.15	0.32	0.60
Summer	8 of 12	0.15	0.35	0.32	0.15	0.32	0.70
Summer	9 of 12	0.15	0.35	0.31	0.15	0.32	0.64
Summer	10 of 12	0.15	0.35	0.20	0.15	0.32	0.03
Summer	11 of 12	0.15	0.35	0.05	0.15	0.32	0.01
Summer	12 of 12	0.15	0.35	0.14	0.15	0.32	0.06
Fall	1 of 12	0.15	0.73	0.39	0.15	0.80	0.93
Fall	2 of 12	0.15	0.73	0.42	0.15	0.80	0.68
Fall	3 of 12	0.15	0.73	0.51	0.15	0.80	0.58
Fall	4 of 12	0.15	0.73	0.23	0.15	0.80	0.63
Fall	5 of 12	0.15	0.73	0.17	0.15	0.80	0.43
Fall	6 of 12	0.15	0.73	0.39	0.15	0.80	0.52
Fall	7 of 12	0.15	0.73	0.44	0.15	0.80	0.60
Fall	8 of 12	0.15	0.73	0.31	0.15	0.80	0.70
Fall	9 of 12	0.15	0.73	0.29	0.15	0.80	0.64
Fall	10 of 12	0.15	0.73	0.18	0.15	0.80	0.03
Fall	11 of 12	0.15	0.73	0.05	0.15	0.80	0.01
Fall	12 of 12	0.15	0.73	0.14	0.15	0.80	0.06

Source Data – Plant Wansley is an electric power generation plant with two supercritical pulverized coal-fired boilers (Units 1 and 2). Each unit is equipped with a wet flue gas desulfurization (FGD) system for control of SO_2 emissions. During normal operations, the units exhausts through a 675-foot scrubber stack (Wan12FGD) which serves Units 1 and 2 (each with its own flue). However, there may be some periods of time during which a scrubber is not in operation. In these cases, the unit will exhaust through a 1000-foot bypass stack (Wan12BYP) which serves Units 1 and 2 (each with its own flue).

Actual hourly emissions, temperatures, and flow rates for the most recent three calendar years (2015-2017) provided by Georgia Power were used in the modeling. This information was also reported to EPA's CAMD under the Acid Rain Program using CEMS certified according to 40 CFR Part 75. Figures 2-4 show the hourly SO_2 emission rates (g/s) that were modeled through each stack for Wan12BYP and Wan12FGD in 2015, 2016, and 2017. As noted earlier, emissions from Unit 5A were not included in this modeling since the actual SO_2 emissions were not significant.

Receptor Locations – A comprehensive Cartesian receptor grid extending to approximately 20 km from the Plant Wansley in all directions was used in the AERMOD modeling analysis to assess ground-level SO_2 concentrations. The Cartesian receptors were placed according to the following configuration based on the center of the Plant Wansley:

- 0 km – 2km ➔ 100 meters apart
- 2 km – 5 km ➔ 250 meters apart
- 5 km – 10 km ➔ 500 meters apart
- 10 km – 20 km ➔ 1,000 meters apart

Receptors were also placed at 100-m intervals within Plant Wansley's ambient air boundary, although the SO_2 Modeling TAD specifies that receptors need not be placed at locations where it is not feasible to place a monitor (e.g., water bodies and within facility property lines). The receptor grid conservatively simulates all areas including within the facility's ambient air boundary that is not generally accessible to the public. Additional 100-m fine-grid receptors were added in the area of the maximum modeled impacts, which was originally modeled with the 250-m grid, in order to better capture the maximum impact. This domain is sufficient to capture the maximum impact. All receptor locations are represented in the Universal Transverse Mercator projections, Zone 16, North American Datum 1983. Figure 5 shows the modeling domain and receptor locations.

Terrain Elevation – Terrain data from USGS 1-sec National Elevation Dataset (NED) CONUS were extracted to obtain the elevations of receptors by AERMAP terrain processor (version 18081). The resulting elevation data were verified by comparing contoured receptor elevations with USGS 7.5-minute topographic map contours. The area in the vicinity of Plant Wansley is generally characterized as simple terrain relative to the Units 1-2 scrubbed and bypass stacks.

Building Downwash – The effects of building downwash were incorporated into the AERMOD analysis. Direction-specific building parameters required by AERMOD were developed using the BPIP PRIME utility (version 04274).

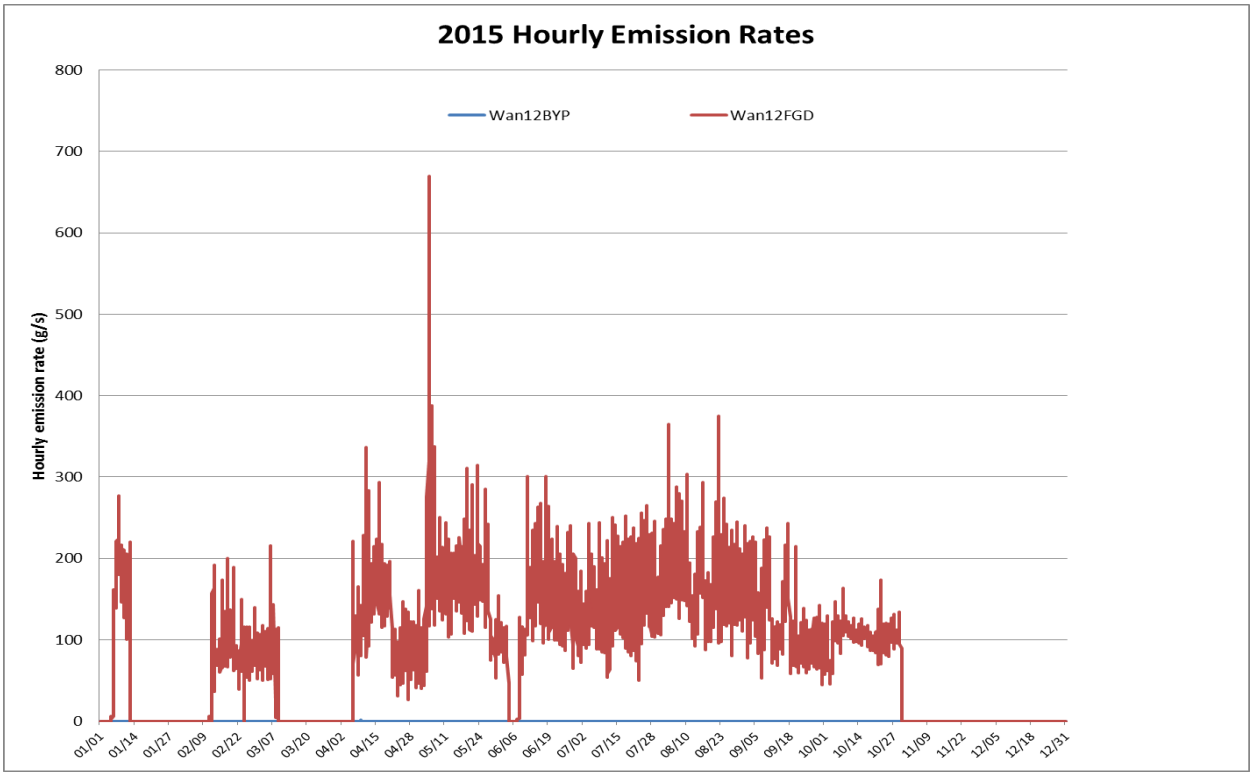

Figure 2. Hourly (2015) SO_2 emission rates (g/s) modeled through each stack for Plant Wansley.

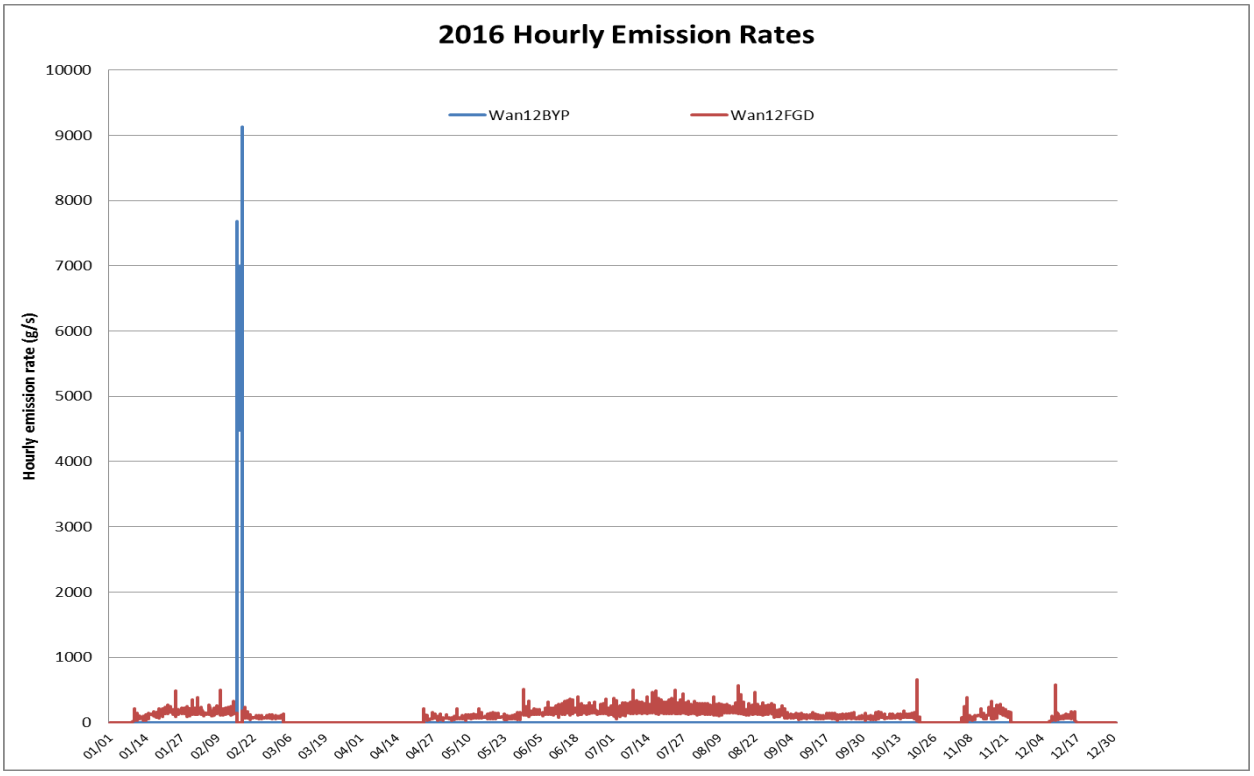

Figure 3. Hourly (2016) SO_2 emission rates (g/s) modeled through each stack for Plant Wansley.

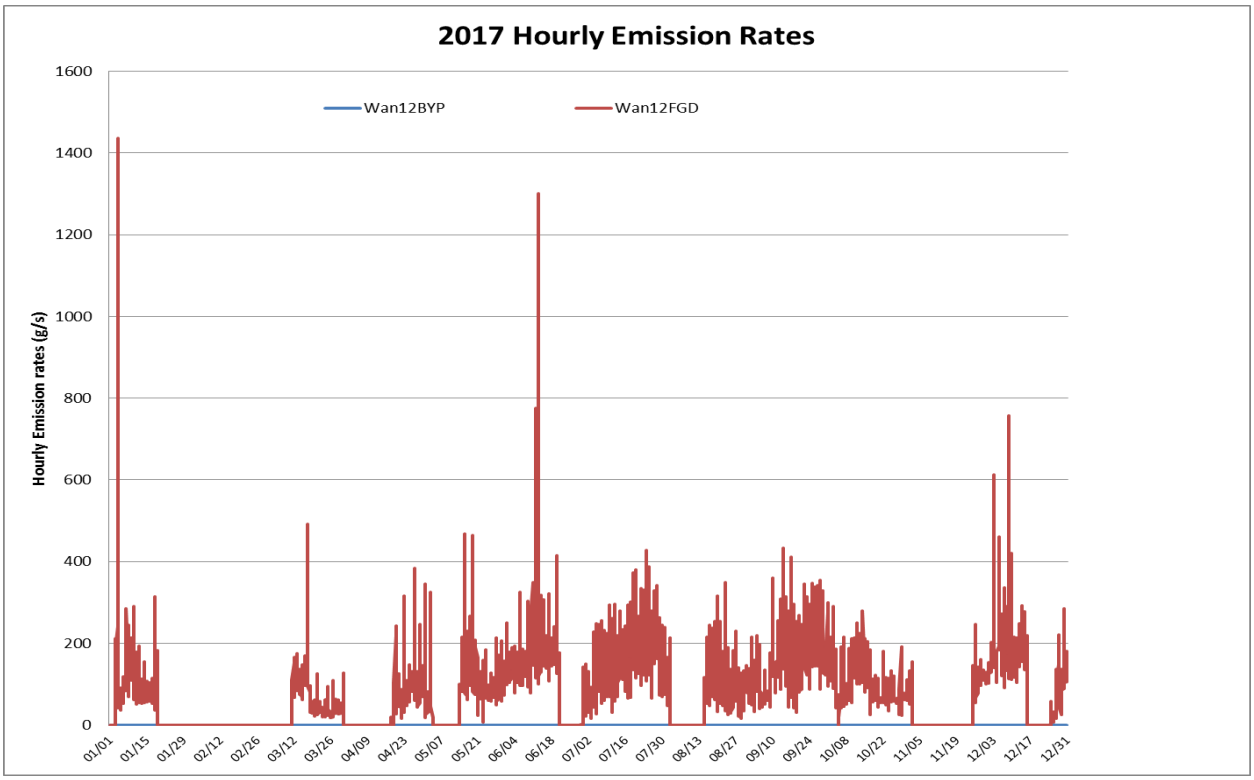

Figure 4. Hourly (2017) SO_2 emission rates (g/s) modeled through each stack for Plant Wansley.

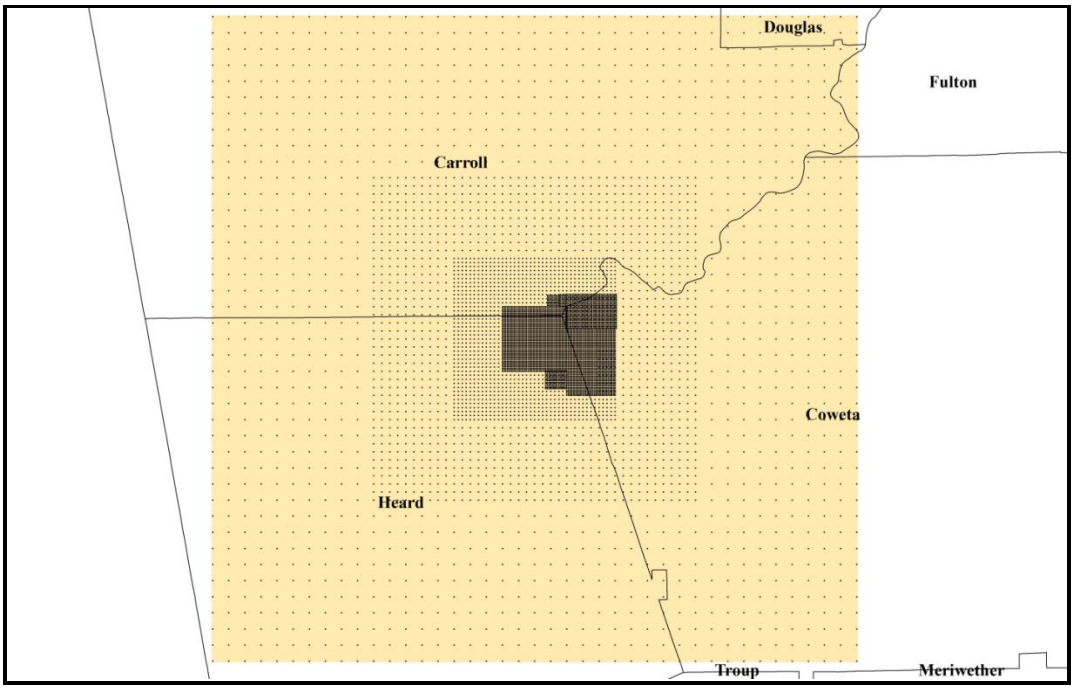

Figure 5. Modeling domain and receptor locations for the Plant Wansley SO_2 modeling.

Offsite Emission Inventory – The offsite sources within 50 km of Plant Wansley were evaluated. The most recent SO_2 emission for large sources (annual NEI reporters) is 2016, and the most recent SO_2 emission for smaller sources (triannual NEI reporters) is 2014.

Plant Yates Units 1-5 were not included in the model since these units were retired on April 15, 2015. Also, Units 6-7 were converted from coal to natural gas on April 15, 2015. Permit condition 3.2.1 limits the fuel fired in the electric generating units (Units 6 and 7) to natural gas only. Potential to Emit (PTE) SO_2 emissions for Units 6 and 7 at Plant Yates were used in this modeling rather than actual SO_2 emissions. PTE SO_2 emissions for SG06 and SG07 were calculated as 18.34 tons per year which is significantly higher than the actual 2016 and 2017 emissions from Plant Yates recorded in EPA's CAMD database (~2 tons per year). AP-42 emission factors were used to calculate PTE SO_2 emissions as follows:

AP-42, Fifth Edition, Volume I Chapter 1: External Combustion Sources, Section 1.4 Natural Gas Combustion, Table 1.4-2 lists an SO_2 emission factor of 0.6 lb/MMscf:

$$SO_2 emissions\ per\ EGU = \left(\frac{3{,}489{,}216\ scf}{hr}\right)\left(\frac{8760\ hr}{yr}\right)\left(\frac{1\ MMSCF}{10^6\ scf}\right)\left(\frac{0.6\ lb}{MMscf}\right)\left(\frac{ton}{2{,}000\ lb}\right)$$

$$SO_2 emissions\ per\ EGU = 9.17\ tons\ per\ year$$

$$SO_2 emissions\ from\ SG06\ and\ SG07 = 18.34\ tons\ per\ year$$

Therefore, the maximum hourly SO_2 emission rate that will be modeled for Yates Unit 6-7 will be 18.34 tons SO_2 x 2000 lbs/ton ÷ 8760 hrs/year = 4.2 lb/hr SO_2. Units 6 and 7 at Plant Yates exhaust to a single stack equipped with two flues. Dual-flue stacks have distinct emission points close enough together resulting in a merged plume.

Table 4 contains detailed information of the emission (TPY)/distance (km), or Q/d. Figure 6 contains a spatial map of the offsite sources near Plant Wansley. Due to the close proximity to Plant Wansley, the following offsite SO_2 sources were included in the modeling:

- Natural gas-fired Units 6 and 7 at Plant Yates
- Natural gas-fired combined-cycle Blocks 6 and 7 owned by Southern Power Company ("SPC") at the Wansley Combined-Cycle Generating Plant
- Natural gas-fired combined-cycle Block 8 owned by Oglethorpe Power Corporation ("OPC") at the Chattahoochee Energy Facility
- Natural gas-fired combined-cycle Block 9 owned by Municipal Electric Authority of Georgia ("MEAG Power")

Allowable/PTE SO_2 emissions and Good Engineering Practice (GEP) stack heights were used to model these sources. Information for the SPC, OPC, and MEAG Power combined-cycle units was obtained from the Georgia PSD Modeling Inventory (https://psd.georgiaair.org/inventory).

Table 4. List of facilities within 50 km of Plant Wansley and the most recent (2014 or 2016) SO_2 emissions (TPY)/distance (km), or Q/d.

EIS Facility ID	Facility Name	Latitude	Longitude	SO_2 Emissions (TPY)	Distance (km)	Q/d (TPY/km)
14900001	Ga Power Company - Plant Wansley	33.4139	-85.0333	4,856.2	0.0	N/A
14900011	Southern Power - Wansley Combined Cycle	33.4060	-85.0373	26.3*	1.1	22.9
14900007	Municipal Electric Authority Of Ga-Wansley	33.4082	-85.0399	13.1*	1.1	12.4
14900006	Chattahoochee Energy Facility	33.4071	-85.0386	10.7*	1.1	9.8
7700001	Ga Power Company - Plant Yates	33.4626	-84.9018	18.4*	13.7	1.3
4500008	Southwire Company - Carrollton	33.5644	-85.0700	5.1	20.5	0.3
14900004	Tenaska Georgia Generating Station	33.3533	-84.9992	1.0	8.9	0.1
12100021	Owens Corning Insulating Systems, LLC	33.5389	-84.6155	3.0	49.4	0.1
9754011	West Georgia Rgnl - O V	33.6310	-85.1520	0.4	31.9	0.0
9744911	Newnan Coweta County	33.3121	-84.7703	0.3	32.3	0.0
7700010	Bon L Manufacturing Company, Inc.	33.3816	-84.8167	0.1	24.5	0.0
11590211	South Fulton	33.5376	-84.6388	0.1	46.9	0.0
4500059	Decostar Industries	33.6066	-85.1144	0.0	27.3	0.0
7416211	Printpack Inc	33.7425	-84.9458	0.0	45.0	0.0
11666411	Tanner Medical Center\Villa Rica	33.7436	-84.8764	0.0	47.4	0.0
14900012	Plasti-Paint Inc.	33.2853	-85.0984	0.0	18.6	0.0
11938611	Tanner Medical Center	33.5701	-85.0749	0.0	21.4	0.0
11498411	Humana Hospital-Newnan	33.3926	-84.8172	0.0	24.2	0.0
11621011	Gum Creek	33.4212	-85.1619	0.0	14.3	0.0

* PTE SO_2 emissions were used rather than actual SO_2 emissions.

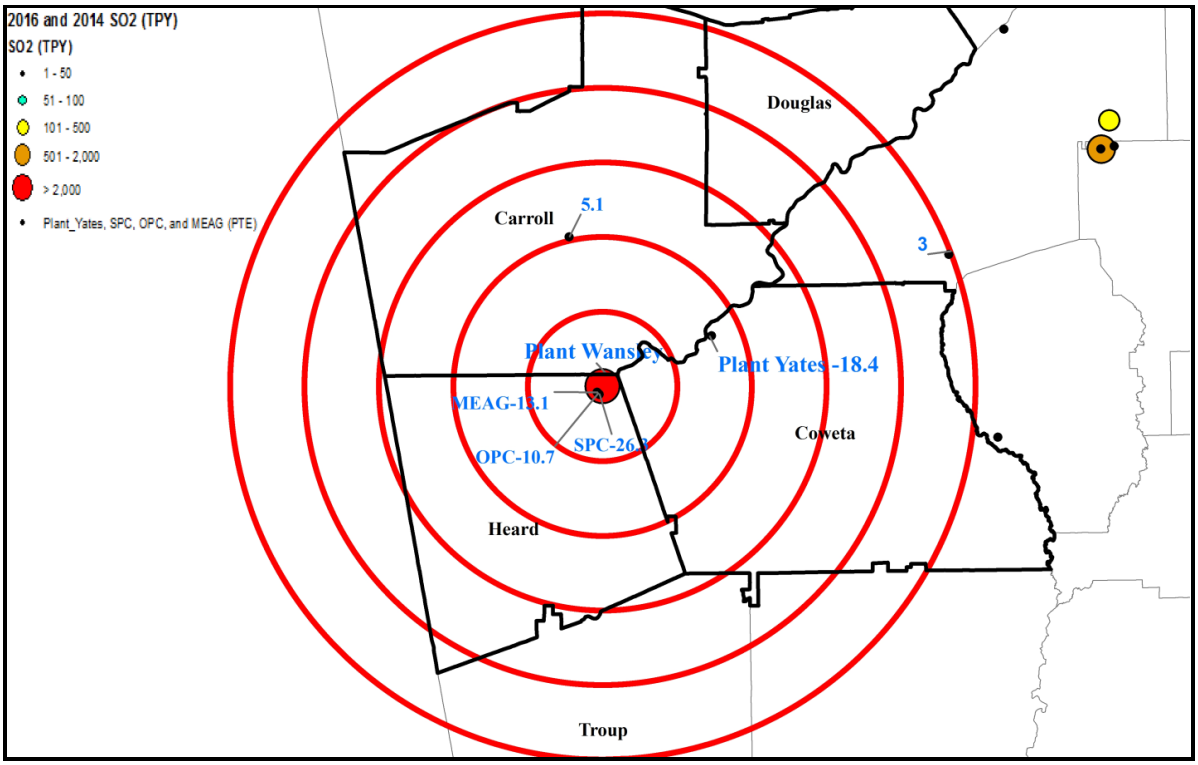

Figure 6. Map of the most recent (2014 or 2016) SO_2 emissions (TPY) from offsite sources near Plant Wansley. Red circles are placed in 10 km increments out to 50 km. PTE was used for the Plant Yates, SPC, OPC, and MEAG.

Background Concentration – EPD used a background SO_2 concentration of 3 ppb (7.9 µg/m^3) based on 2015-2017 SO_2 monitoring data from the South DeKalb monitoring site (13-089-002). The 2015-2017 three year design value for this monitor is 3 ppb (7.9 µg/m^3). Figure 7 contains a spatial map of the most recent SO_2 emissions (TPY) within 20 km of the South DeKalb SO_2 monitor. The most recent SO_2 emission for large sources (annual NEI reporters) is 2016 and the most recent SO_2 emission for smaller sources (triannual NEI reporters) is 2014. Table 5 contains a detailed list of facilities within 20 km of the South DeKalb SO_2 monitor and the emission (TPY)/distance (km), or Q/d. The total SO_2 emissions within 20 km from Plant Wansley is 70 TPY and the total SO_2 emissions within 20 km of the South DeKalb SO_2 monitor is 1,031 TPY. Therefore, the 3-year design value from the South DeKalb SO_2 monitor will be a conservative estimate of background SO_2 concentrations near Plant Wansley.

Table 5. List of facilities within 20 km of the South DeKalb SO_2 monitor and the most recent (2014 or 2016) SO_2 emissions (TPY)/distance (km), or Q/d.

EIS Facility ID	Facility Name	Latitude	Longitude	SO_2 Emissions (TPY)	Distance (km)	Q/d (TPY/km)
9748811	Hartsfield-Jackson Atlanta International Airport	33.6407	-84.4297	758.8	14.7	51.6
536111	Owens Brockway Glass Container Inc.	33.6694	-84.4191	241.8	13.0	18.6
17010111	Hartsfield-Jackson Atlanta International Airport	33.6409	-84.4302	9.8	14.7	0.7
6300105	Delta Air Lines Inc - Technical Operations Center	33.6433	-84.4139	9.7	13.1	0.7
10678611	Seminole Road MSW Landfill	33.6567	-84.2599	3.1	4.4	0.7
14419011	Inmann	33.7958	-84.4493	2.0	19.2	0.1
14478611	Howells	33.8126	-84.4322	1.7	18.9	0.1
532811	Dart Container Corporation of Georgia	33.7234	-84.1185	1.5	17.6	0.1
14479011	Tilford	33.7964	-84.4500	1.2	19.3	0.1
14478511	Bolton	33.8036	-84.4504	1.1	19.7	0.1

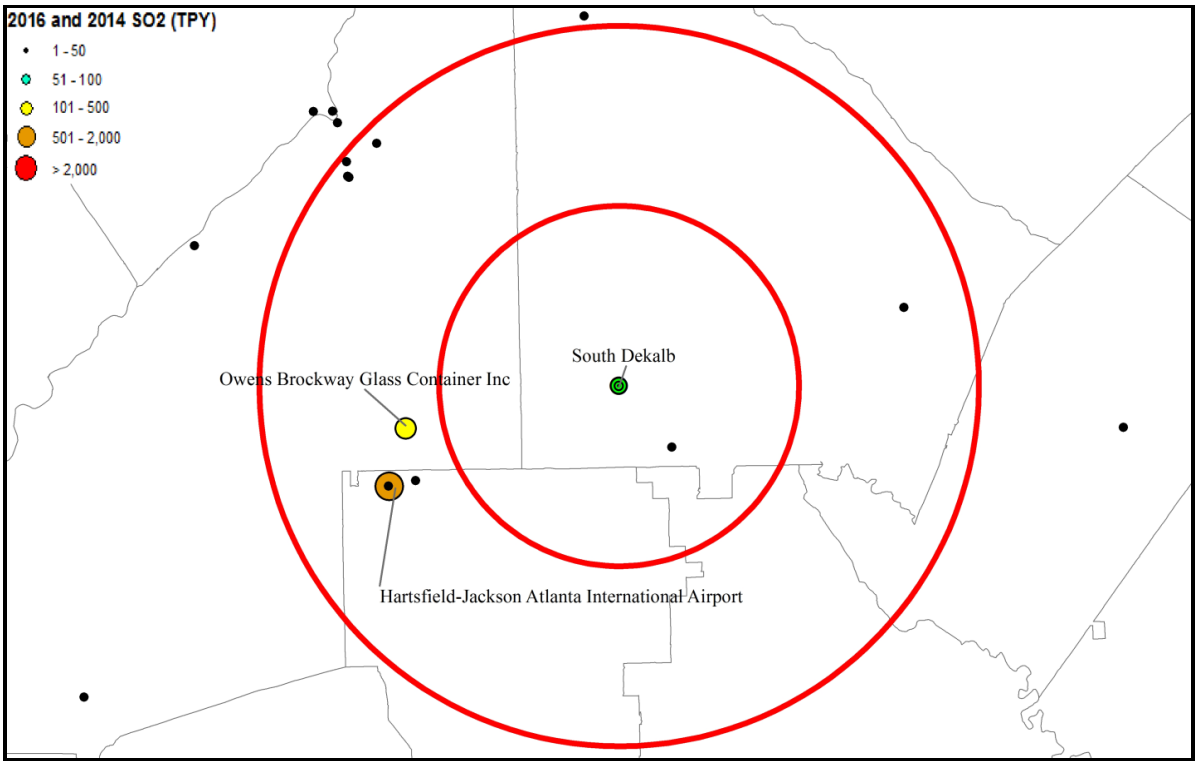

Figure 7. Map of most recent (2014 or 2016) SO_2 emissions (TPY) from offsite sources near the South DeKalb SO_2 monitor. Red circles are placed in 10 km increments out to 20 km.

1-HOUR SO_2 NAAQS ASSESSMENT

The total SO_2 concentrations were calculated as the sum of the modeled concentrations due to SO_2 emissions from Plant Wansley, SO_2 emissions from the offsite sources, and the background SO_2 concentration (3 ppb, 7.9 µg/m^3) to assess compliance with the 1-hour SO_2 NAAQS as part of the 1-hour SO_2 NAAQS analysis. The modeled design concentration was calculated by AERMOD (v18081) using 2015-2017 emissions.

The three-year average of the 1st, 2nd, 3rd, and 4th highest daily maximum 1-hour SO_2 concentrations is contained in Table 6. Tables 7 and 8 contain the modeling results in µg/m^3 and ppb, respectively. The 4th highest 1-hour SO_2 concentration averaged over three years is 16.5 ppb (43.2 µg/m^3) including both the modeled SO_2 impacts from Plant Wansley and offsite sources (13.5 ppb = 35.3 µg/m^3) and the background SO_2 concentration from the South DeKalb monitor (3.0 ppb = 7.9 µg/m^3).

As seen in Figures 8 and 9, the 4th highest daily maximum 1-hour SO_2 concentration averaged over 3-years for SO_2 was located at approximately 2 kilometers southeast of Plant Wansley.

Table 6. Summary of 1st, 2nd, 3rd, and 4th highest 1-hour SO_2 modeled impacts averaged over 3 years (2015-2017).

Rank	3-year Average (ppb)	2015 (ppb)	2016 (ppb)	2017 (ppb)	Receptor (lat, log)	Distance from Plant Wansley (km)
1st High	**119.6**	15.8	292.7	50.2	33.4334, -85.0548	3.26
2nd High	**42.8**	12.2	100.7	15.4	33.3784, -84.9969	5.01
3rd High	**19.9**	15.0	28.4	16.2	33.3997, -85.0061	2.82
4th High	**16.5**	13.0	19.9	16.6	33.4008, -85.0168	2.27

Table 7. Summary of 1-hour SO_2 NAAQS (µg/m^3) analysis.

SO_2 Average Period	SO_2 Model Design Concentration (µg/m^3)	SO_2 Background Concentration (µg/m^3)	SO_2 Total Concentration (µg/m^3)	SO_2 NAAQS (µg/m^3)	Below 50% of SO_2 NAAQS (Y/N)
1-hour	35.3	7.9	**43.2**	196	Y

Table 8. Summary of 1-hour SO_2 NAAQS (ppb) analysis.

SO_2 Average Period	SO_2 Model Design Concentration (ppb)	SO_2 Background Concentration (ppb)	SO_2 Total Concentration (ppb)	SO_2 NAAQS (ppb)	Below 50% of SO_2 NAAQS (Y/N)
1-hour	13.5	3.0	**16.5**	75	Y

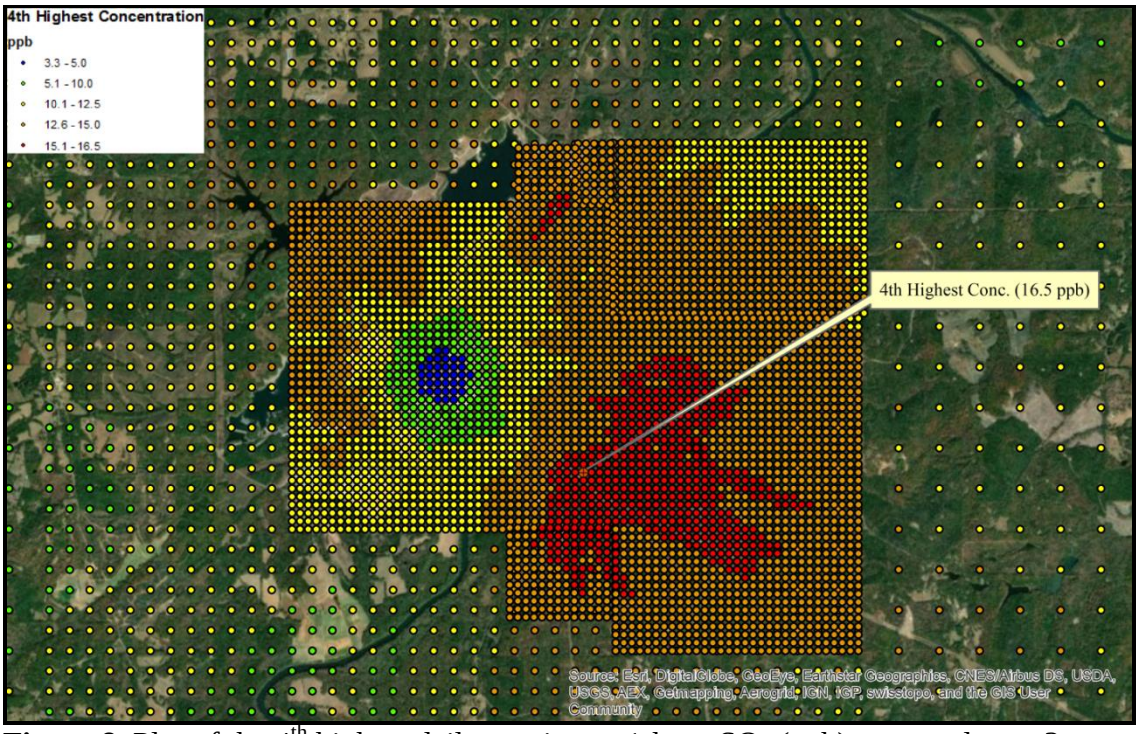

Figure 8. Plot of the 4th highest daily maximum 1-hour SO_2 (ppb) averaged over 3 years.

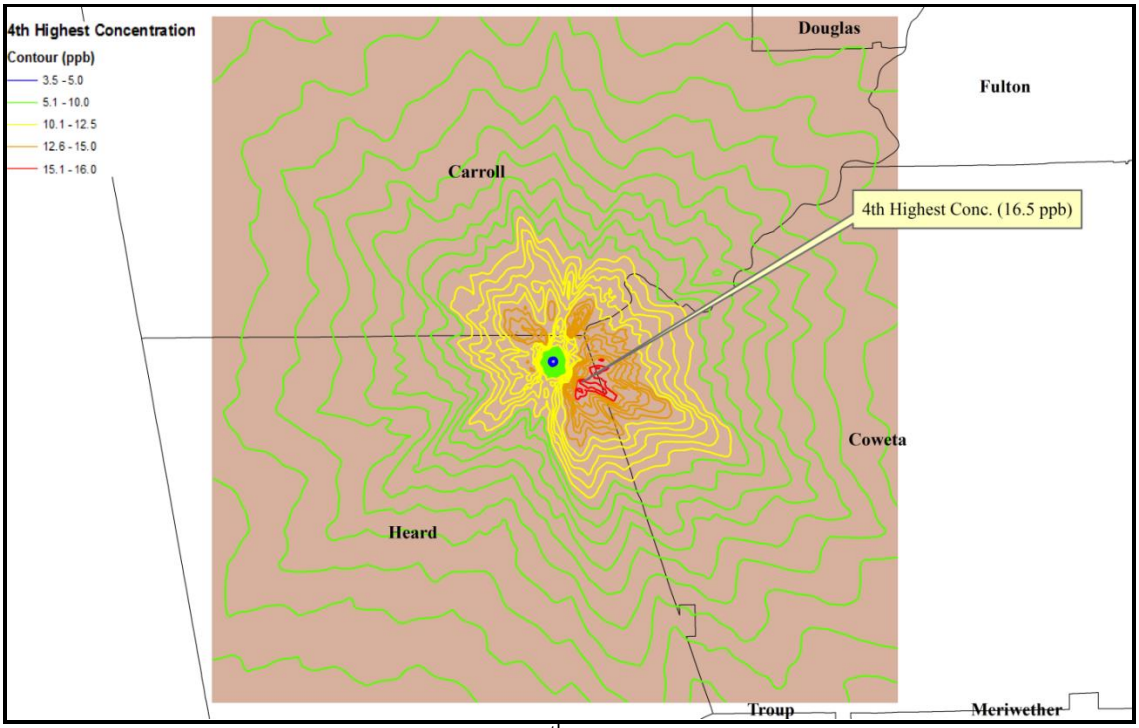

Figure 9. Concentration isopleth of the 4th highest daily maximum 1-hour SO_2 (ppb) averaged over 3 years.

CONCLUSIONS

To meet the annual reporting requirements for the 2010 1-hour SO_2 NAAQS, dispersion modeling for Georgia Power's Plant Wansley was conducted in accordance with the final Data Requirements Rule (DRR) and Modeling Technical Assistance Document (TAD) using the most recently available information. The modeled SO_2 impact using 2015-2017 hourly SO_2 emissions from Plant Wansley, four offsite emission sources, and 2015-2017 meteorology was 16.5 ppb. Therefore, the SO_2 emissions from Plant Wansley do not cause or contribute to any violations of the 1-hour SO_2 NAAQS in the vicinity of Georgia Power Plant Wansley. In addition, the SO_2 concentrations at all receptors in the analysis are no greater than 50 percent of the 1-hour SO_2 NAAQS. Therefore, EPD will no longer be required to submit future annual reports for the area surrounding Plant Wansley.