Georgia's Redesignation Request and Maintenance Plan for the Atlanta Ozone Nonattainment Area for the 2008 8-Hour Ozone NAAQS

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Prepared by:

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Environmental Protection Division

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Executive Summary

This is the Georgia Environmental Protection Division's (EPD's) request, on behalf of the State of Georgia, to redesignate the metro Atlanta ozone nonattainment area to attainment with respect to the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS). This document also includes Georgia's plan to maintain attainment of the 2008 8-hour ozone standard in the Atlanta Area for the counties of Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, and Rockdale (Atlanta Area).

EPD's request for redesignation is based on three years (2013-2015) of ambient monitoring data showing attainment of the standard (0.075 ppm). Georgia has implemented permanent and enforceable reductions in ozone precursor emissions and demonstrated compliance with all applicable requirements for the Atlanta Area under Title 1 (Part A, Section 110 and Part D) of the Clean Air Act (CAA). Atlanta Area emissions from 2014 are representative of emission levels during the 2013-2015 clean data period. This Maintenance Plan demonstrates continued maintenance by showing that the Atlanta Area will not exceed 2014 emission levels through the year 2030. Therefore, EPD requests that EPA approve the attached redesignation request and maintenance plan as expeditiously as possible.

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List of Acronyms

Acronym	Meaning	Acronym	Meaning
AEO	Annual Energy Outlook	MVEB	Motor Vehicle Emissions Budget
AERR	Annual Emissions Reporting Requirements	NEI	National Emissions Inventory
AQS	Air Quality System	NEMS	National Energy Modeling System
ARC	Atlanta Regional Commission	NMIM	National Mobile Inventory Model
CAA	Clean Air Act	NO_x	Nitrogen Oxides
CAMD	Clean Air Markets Division	NTE	Not-to-exceed
CARB	California Air Resources Board	PMF	Positive Matrix Factorization
CERR	Consolidated Emissions Reporting Rule	RACM	Reasonably Available Control Measures
E-GAS	Economic Growth Analysis System	RACT	Reasonably Available Control Technology
EGU	Electric Generating Unit	RFP	Reasonable Further Progress
EIA	Energy Information Administration	SCC	Source Classification Code
EPD	Georgia Environmental Protection Division	SEMAP	Southeastern Modeling And Planning
ERTAC	Eastern Regional Technical Advisory Committee	SIP	State Implementation Plan
FRM	Federal Reference Method	SOA	Secondary Organic Aerosols
GDOT	Georgia Dept. of Transportation	STN	Speciated Trends Network
HPMS	Highway Performance Monitoring System	TDM	Travel Demand Model
ICI	Industrial and Commercial/Institutional	VISTAS	Visibility Improvement State and Tribal Association of the Southeast
MPO	Metropolitan Planning Org.	VMT	Vehicle Miles Traveled
MOVES	Motor Vehicle Emissions Simulator	VOC	Volatile Organic Compounds
MSA	Metropolitan Statistical Area		

1.0 Introduction

This document contains technical support for the Georgia Environmental Protection Division's (EPD's) request to redesignate Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, and Rockdale counties (Atlanta Area) to attainment for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS) pursuant to Sections 107(d)(3)(D) and (E) of the Clean Air Act (CAA), as amended. This redesignation request was prepared in accordance with U.S. EPA guidance memos issued on September 4, 1992 and October 28, 1992 from John Calcagni[1], and EPA's 2008 Ozone Implementation Guidance[2].

1.1 Atlanta Area Nonattainment Designation

2008 8-Hour Ozone Standard

On Mar 27, 2008, EPA promulgated the 8-hour ozone standard of 0.075 ppm. On April 30, 2012, EPA designated the Atlanta Area as marginal nonattainment for that standard. On May 21, 2012, EPA published a final rule in the Federal Register designating 15-counties surrounding the City of Atlanta as marginal nonattainment for the 2008 8-hour ozone National Ambient Air Quality Standard (77 FR 30088). The 15-county area includes the counties of Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, and Rockdale (Atlanta Area).

According to EPA's 2008 Ozone Implementation Guidance, the attainment deadline for marginal areas was December 31, 2015. The CAA allows a three-year period from the effective date of designation for a 'Marginal' nonattainment area to attain the NAAQS. This would have set the deadline at July 20, 2015, which lies in the middle of the ozone season (May-September); however, EPA extended the deadline to December 31, 2015, to allow a full three years of ozone season data (2013-2015). The Natural Resource Defense Council (NRDC) contested EPA's decision to extend the deadline in court. On December 23, 2014 the U.S. Circuit Court of Appeals for the District of Columbia ruled that the deadline for attaining the 2008 ozone NAAQS should be set at July 20, 2015 and could not be extended to December 31, 2015.

With an attainment deadline of July 20, 2015, marginal areas were required to attain the National Ambient Air Quality Standard (NAAQS) by the end of the 2014 ozone season (October 31, 2014). On August 27, 2015, the U.S. EPA published a rulemaking proposing its determination that the Atlanta Area did not attain the 8-hour ozone NAAQS by July 20, 2015, the applicable attainment date for marginal nonattainment areas (80 FR 51992). The proposed finding was based on ambient air quality data from years 2012-2014. The U.S. EPA explained that, consistent with Section 181(b)(2) of the CAA, when EPA finalizes its determination that the Atlanta Area failed to attain, the Atlanta Area would be reclassified to the next highest classification or "moderate" nonattainment.

[1] "Procedures for Processing Requests to Redesignate Areas to Attainment", September 4, 1992, and "State Implementation Plan (SIP) Requirements Submitted in Response to Clean Air Act (Act) Deadlines", October 28, 1992, John Calcagni, Director, Air Quality Management Division, USEPA.

[2] U.S. EPA, 2015. "Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule"; 80 FR 12264 – 12319.

The "moderate" area attainment date for the Atlanta Area would then be "as expeditiously as practicable," but no later than July 20, 2018. The U.S. EPA finalized this finding on May 4, 2016 (81 FR 26697).

On January 13, 2016, EPD submitted 2015 ozone ambient air quality data to EPA. EPD has determined that the Atlanta Area has attained the 8-hour ozone NAAQS of 0.075 ppm based on ambient air quality data from 2013-2015 and is requesting redesignation to attainment.

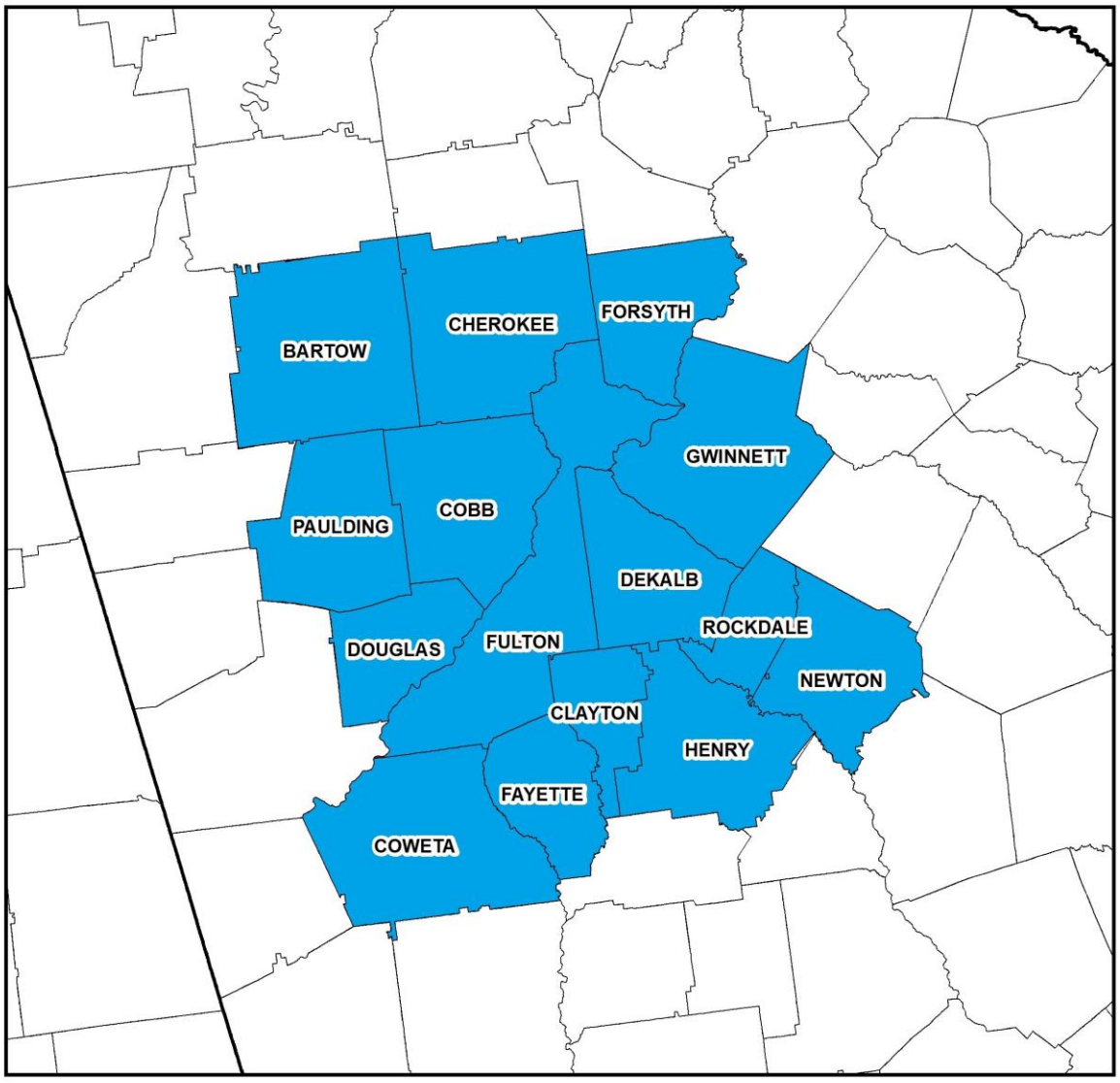


Figure 1-1. 2008 Ozone NAAQS Nonattainment Area in Georgia

1.2 Redesignation Request

This document contains Georgia's request that the metro Atlanta nonattainment area be redesignated to attainment with respect to the 2008 8-hour ozone NAAQS. Section 107(d) of the CAA states that an area can be redesignated to attainment if the following conditions are met:

1. The EPA has determined that the NAAQS has been attained.
2. The applicable implementation plan has been fully approved by EPA under Section 110(k).
3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
4. The state has met all applicable requirements for the area under Title 1 (Part A, Section 110 and Part D) of the CAA.
5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area as required by CAA Section 175A.

The supporting documentation to show that items 1 through 4 have been met is contained in Section 2 of this document. EPA's approval of the maintenance plan detailed in Section 3.0 of this document will satisfy item 5.

1.3 Maintenance Plan

The maintenance plan (see item 5 under Section 1.2 above) has two required components under Section 175A of the CAA:

- A demonstration of maintenance of the standard for at least ten years after redesignation; and
- Contingency provisions for prompt correction of any future violations.

Per EPA guidance[3], the metro Atlanta 8-hour ozone maintenance plan also includes the following elements:

- An attainment year emissions inventory (to support the maintenance demonstration);
- A commitment to continued operation of ambient monitoring equipment in the area; and
- Verification of continued attainment.

[3] "Procedures for Processing Requests to Redesignate Areas to Attainment", September 4, 1992, John Calcagni, Director, Air Quality Management Division, OAQPS, USEPA.

2.0 Redesignation Request

As noted in Section 1.2 of this document, Section 107(d) of the CAA states that an area can be redesignated to attainment if the following conditions are met:

1. The EPA has determined that the NAAQS has been attained.
2. The applicable implementation plan has been fully approved by EPA under Section 110(k) of the CAA.
3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
4. The state has met all applicable requirements for the area under Title 1 (Part A, Section 110 and Part D) of the CAA.
5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under Section 175A of the CAA.

This section of the document includes supporting documentation for items 1 through 4 above:

2.1 Attainment of the Ozone 8-Hour NAAQS

A monitoring site is in attainment of the 8-hour ozone standard when the average of the annual fourth-highest daily maximum concentration over three consecutive years measured at the monitor does not exceed 0.075 ppm. This 3-year average is termed the "design value" for the monitor. The data must be complete and quality-assured, consistent with 40 CFR Part 58 requirements and other relevant EPA guidance. Therefore, for a single site to meet the standard, the design value calculated from the previous three calendar years must be less than or equal to the standard. For a nonattainment area to achieve attainment, all monitoring sites in the nonattainment area must be in attainment.

EPD maintains nine ozone monitoring sites in the Atlanta Area. The design values for the Atlanta Area monitors, based on data from 2013 through 2015, range from 0.062 ppm to 0.073 ppm, which demonstrates attainment of the standard. The monitoring network and ambient ozone data are presented below.

2.1.1 Monitoring Network

Ozone is monitored using EPA-approved reference or equivalent methods. These analyzers continuously measure the concentration of ozone in the ambient air using the ultraviolet photometric method. EPD operates eight of nine ozone monitors located in the Atlanta Area from March 1st through October 31st. The ninth monitor is a National Core Monitoring Network (NCore) ozone monitor (South DeKalb, 13-089-0002) that operates year-round. All of the ozone monitors in the Atlanta Area are operated according the requirements of 40 CFR Part 58. During the monitoring season analyzers are subjected to multiple calibration checks, and on an annual basis EPD's Quality Assurance Unit audits these samplers.

EPD began monitoring ozone at the South DeKalb site (13-089-0002), which is within the Atlanta Area, in 1974. Since that time, the ozone-monitoring network has grown to nine ozone monitors operating within the Atlanta Area. All nine ozone monitors are part of the State and Local Ambient Monitoring Stations (SLAMS) network. The Yorkville (13-223-0003), South DeKalb (13-089-0002),

and Conyers (13-247-0001) ozone monitors are designated Photochemical Assessment Monitoring Stations (PAMS) sites, as well. Table 2-1 lists the metro Atlanta ozone monitors shown in Figure 2-1 and their respective start dates.

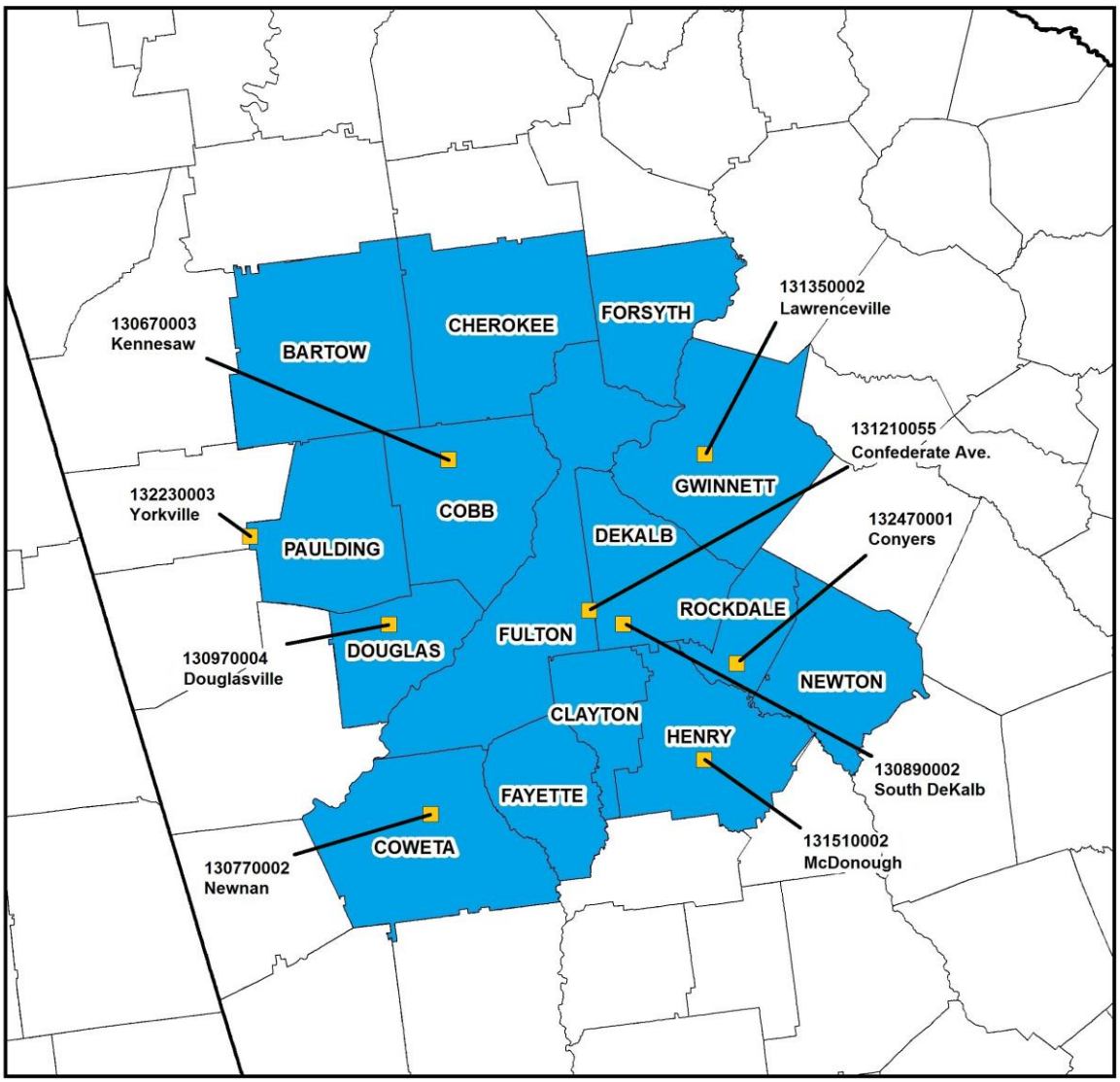


Figure 2-1. Locations of Ozone Monitors within the Atlanta 15-County Nonattainment Area

Table 2-1. Metro Atlanta Data Collection Sites

Site Name	AQS* Site ID	Start Date
Kennesaw - GA National Guard, McCollum Parkway	13-067-0003	Sept. 1, 1999
Newnan - University of W. Georgia at Newnan	13-077-0002	May 5, 1999
South DeKalb - 2390-B Wildcat Road	13-089-0002	Jan. 1, 1974
Douglasville – Douglas Co. Water Auth., W. Strickland St.	13-097-0004	Aug. 15, 1997
Gwinnett Tech – 5150 Sugarloaf Pkwy, Lawrenceville	13-135-0002	March 17, 1995
McDonough - Henry County Extension Office	13-151-0002	June 7, 1999
Yorkville - King Farm, 160 Ralph King Path, Rockmart	13-223-0003	Jan. 1, 1996
Conyers – Monastery, 2625 GA Highway 212	13-247-0001	July 26, 1978
Atlanta – 935 East Confederate Ave.	13-121-0055	Oct. 1, 1991

*EPA's Air Quality System.

2.1.2 Ambient Ozone Data

Table 2.2 shows the 8-hour ozone concentrations and the associated 3-year design value average that demonstrate attainment of the standard in the Atlanta Area. The 2013–2015 3-year design values range from 0.062 ppm to 0.073 ppm, all of which are below the standard of 0.075 ppm.

Table 2-2. Design Values for Counties in the Atlanta, Georgia Nonattainment Area for the 2008 8-Hour Ozone NAAQS

Location (County)	AQS site ID	2013 4th max (ppm)	2014 4th max (ppm)	2015 4th max (ppm)	2013-2015 Design value (ppm)
Cobb	GA National Guard, McCollum Pkwy. (13-067-0003)	0.067	0.063	0.066	**0.066**
Coweta	University of W. Georgia at Newnan (13-077-0002)	0.053	0.067	0.066	**0.062**
DeKalb	2390-B Wildcat Road Decatur (13-089-0002)	0.062	0.070	0.071	**0.067**
Douglas	Douglas Co. Water Auth. W. Strickland St. (13-097-0004)	0.063	0.065	0.070	**0.066**
Gwinnett	Gwinnett Tech, 5150 Sugarloaf Pkwy. (13-135-0002)	0.069	0.068	0.071	**0.069**
Henry	Henry County Extension Office (13-151-0002)	0.070	0.075	0.070	**0.071**
Paulding	Yorkville, King Farm (13-223-0003)	0.062	0.059	0.065	**0.062**
Rockdale	Conyers Monastery, 2625 GA Hwy. 212 (13-247-0001)	0.071	0.079	0.068	**0.072**
Fulton	Confederate Ave., Atlanta (13-121-0055)	0.069	0.073	0.077	**0.073**

2.1.3 Clean Data Determination and Determination of Attainment by Applicable Attainment Date

On January 13, 2016, EPD submitted quality-assured and certified ambient air quality monitoring data to EPA for the ozone data collected in 2015 throughout Georgia, including the Atlanta Area. On May 3, 2016 EPA proposed its "clean data" determination (81 FR 26515) that the Atlanta Area had attained the 2008 8-Hour Ozone National Ambient Air Quality Standard (NAAQS). This determination was based upon quality-assured and certified ambient air monitoring data for the 2013-2015 period, which showed design values ranging from 0.062 ppm to 0.073 ppm. When the clean data determination is finalized in the Federal Register, EPA will suspend the planning requirements for the Atlanta Area to submit an attainment demonstration, a reasonable further progress (RFP) plan, and contingency measures related to attainment. These planning requirements are suspended as long as the Atlanta Area continues to attain the standard. Item 1 in Section 2.0 of this document has been met.

2.2 Requirements Under Section 110(k)

Section 110(k) of the CAA addresses EPA's responsibilities and requirements for acting on state implementation plan submittals including completeness criteria, completeness findings, effect of findings of incompleteness, deadlines for action by EPA, full and partial approvals and disapprovals, conditional approvals, calls for plan revisions, and corrections. A September 4, 1992 memo from John Calcagni of EPA[4] states the following:

"The SIP for the area must be fully approved under section 110(k), and must satisfy all requirements that apply to the area. It should be noted that approval action on SIP elements and the redesignation request may occur simultaneously."

On May 3, 2016 EPA proposed its "clean data" determination (81 FR 26515) that the Atlanta Area had attained the 2008 8-Hour Ozone NAAQS. When the clean data determination is finalized in the Federal Register, the Atlanta Area will have attained the 2008 8-hour ozone NAAQS. When EPA has determined that the Atlanta Area has attained the NAAQS, the area's obligations to submit an attainment demonstration, reasonable further progress (RFP), and contingency measures related to attainment are suspended for as long as the area continues to attain. This suspension is authorized in a May 10, 1995 memorandum from John S. Seitz of U.S. EPA[5]. Item 2 in Section 2.0 of this document has been met.

[4] "Procedures for Processing Requests to Redesignate Areas to Attainment", September 4, 1992, John Calcagni, Director, Air Quality Management Division, USEPA.

[5] U.S. EPA, 1995. "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard," Memorandum from John S. Seitz, May 10, 1995.

2.3 Permanent and Enforceable Reductions in Emissions

In order for the nonattainment area to be redesignated to attainment, the State must demonstrate (and EPA must concur) that the improvement of ambient ozone concentrations during the years 2013-2015 is due to permanent and enforceable reductions in emissions. This subsection contains EPD's demonstration that the improved air quality is due to permanent and enforceable emissions reductions.

Table 2-3 and Figure 2-2 show the measured fourth highest ozone levels at each of the monitors in the Atlanta Area. Table 2-4 and Figure 2-3 show design values at each of the monitors in the Atlanta Area. The continuing drop in ozone concentrations and the implementation of federally enforceable control measures lend strong evidence that the improvements in air quality are a result of reductions in emissions and not a meteorological influenced phenomenon. Figure 2-4 shows the average temperature and precipitation during May-September in Atlanta, Georgia from 1930-2015. The 2013-2015 average temperature and precipitation fluctuates around the average meteorological conditions, with 2014 and 2015 being hotter than the 1930-2000 average temperature and 2014 being drier than the 1930-2000 average precipitation. Similar results are shown in Figure 2-5 which ranks temperature and precipitation across the continental U.S. Based on this information, it was concluded that the 2013-2015 period for the Atlanta Area was not unusually cool or wet and that meteorology is not responsible for the decreasing ozone trends.

Table 2-3. 4th Highest Ozone Levels – Atlanta Area Monitors

Ozone 4th Max Monitors	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GA National Guard, McCollum Parkway	0.073	0.081	0.093	0.089	0.075	0.076	0.079	0.079	0.075	0.067	0.063	0.066
University of W. Georgia at Newnan	0.083	0.078	0.086	0.091	0.075	0.065	0.065	0.072	0.062	0.053	0.067	0.066
2390-B Wildcat Road Decatur, GA	0.084	0.087	0.096	0.096	0.087	0.077	0.075	0.080	0.085	0.062	0.070	0.071
Douglas Co. Water Auth., W. Strickland St.	0.080	0.089	0.095	0.086	0.080	0.072	0.074	0.078	0.073	0.063	0.065	0.070
Gwinnett Tech 5150 Sugarloaf Pkwy.	0.092	0.082	0.096	0.091	0.079	0.073	0.072	0.082	0.080	0.069	0.068	0.071
Henry County Extension Office	0.085	0.089	0.095	0.102	0.086	0.074	0.078	0.082	0.088	0.070	0.075	0.070
Yorkville, King Farm	0.073	0.082	0.084	0.084	0.072	0.067	0.071	0.075	0.072	0.062	0.059	0.068
Conyers Monastery 2625 GA Hwy. 212	0.087	0.088	0.099	0.098	0.089	0.070	0.076	0.081	0.081	0.071	0.079	0.068
Confederate Ave., Atlanta	0.089	0.092	0.092	0.098	0.084	0.077	0.080	0.084	0.087	0.069	0.073	0.077

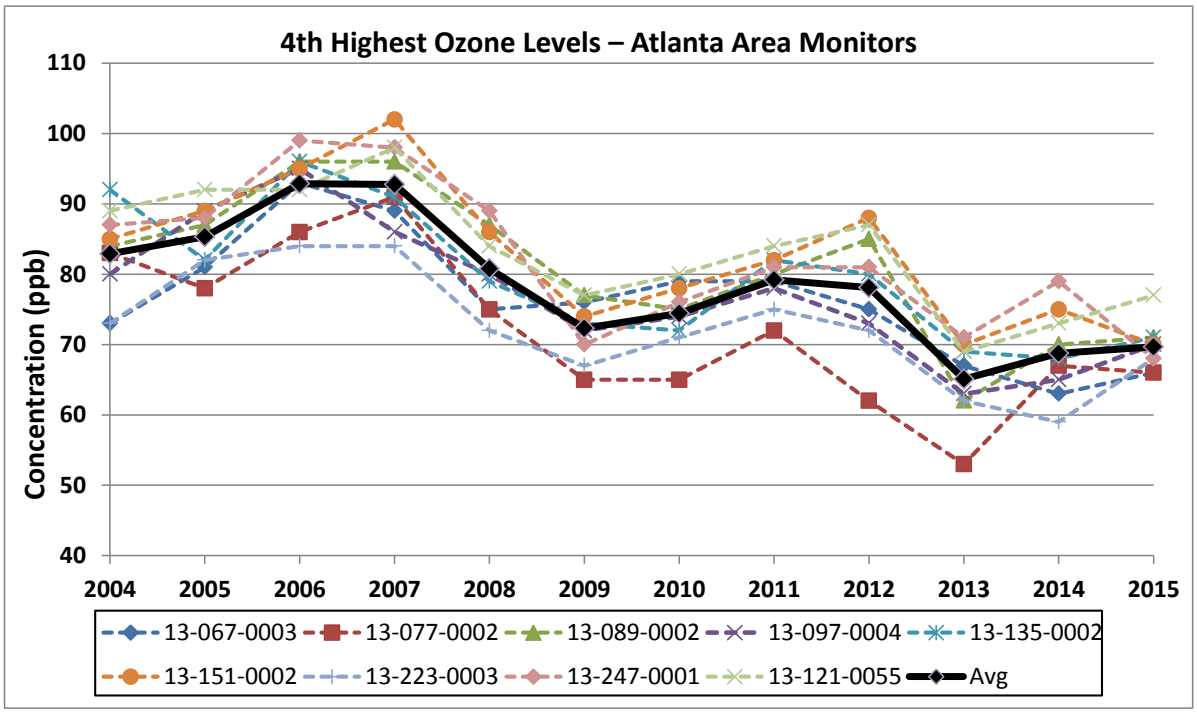


Figure 2-2. Ozone 4th high annual concentrations for 2004 to 2015 for Atlanta Area ozone monitors.

Table 2-4. Ozone Design Values – Atlanta Area Monitors

Ozone Design Value Monitors	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GA National Guard, McCollum Parkway	0.085	0.079	0.082	0.087	0.085	0.080	0.076	0.078	0.077	0.073	0.068	0.065
University of W. Georgia at Newnan	0.086	0.079	0.082	0.085	0.084	0.077	0.068	0.067	0.066	0.062	0.060	0.062
2390-B Wildcat Road Decatur, GA	0.087	0.084	0.089	0.093	0.093	0.086	0.079	0.077	0.080	0.075	0.072	0.067
Douglas Co. Water Auth., W. Strickland St.	0.087	0.084	0.088	0.090	0.087	0.079	0.075	0.074	0.075	0.071	0.067	0.066
Gwinnett Tech 5150 Sugarloaf Pkwy.	0.089	0.087	0.090	0.089	0.088	0.081	0.074	0.075	0.078	0.077	0.072	0.069
Henry County Extension Office	0.088	0.085	0.089	0.095	0.094	0.087	0.079	0.078	0.082	0.080	0.077	0.071
Yorkville, King Farm	0.085	0.079	0.079	0.083	0.080	0.074	0.070	0.071	0.072	0.069	0.064	0.062
Conyers Monastery 2625 GA Hwy. 212	0.088	0.084	0.091	0.095	0.095	0.085	0.078	0.075	0.079	0.077	0.077	0.072
Confederate Ave., Atlanta	0.093	0.090	0.091	0.094	0.091	0.086	0.080	0.080	0.083	0.080	0.076	0.073

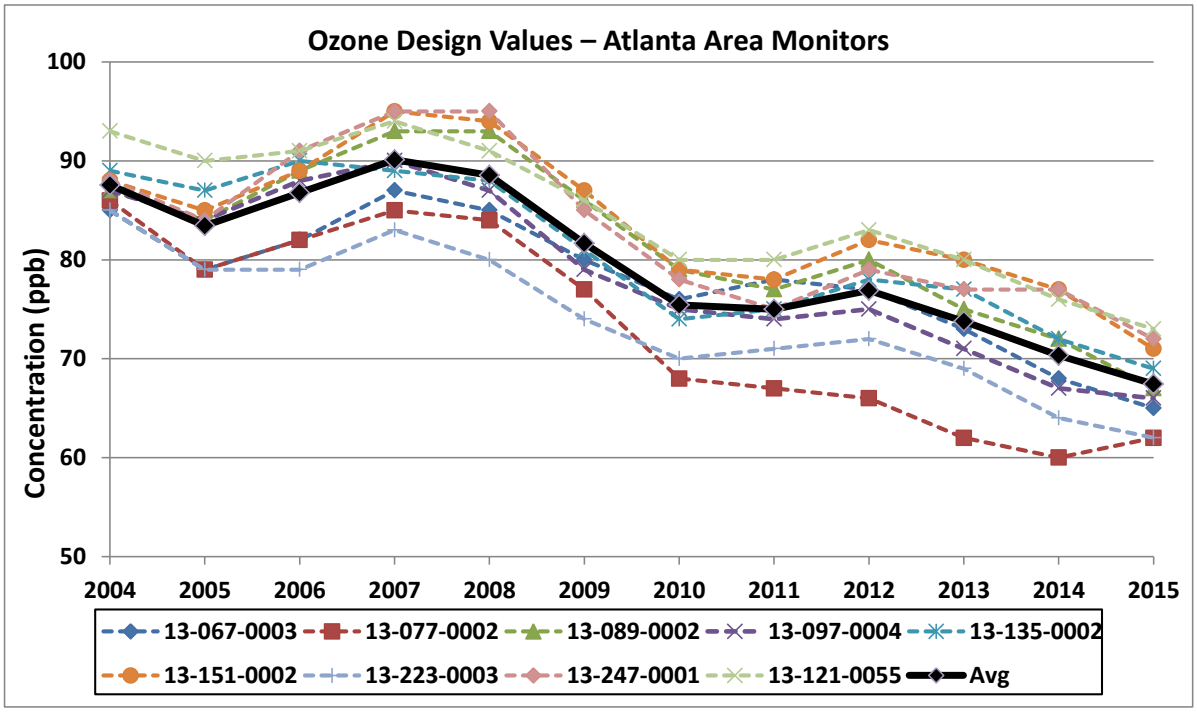
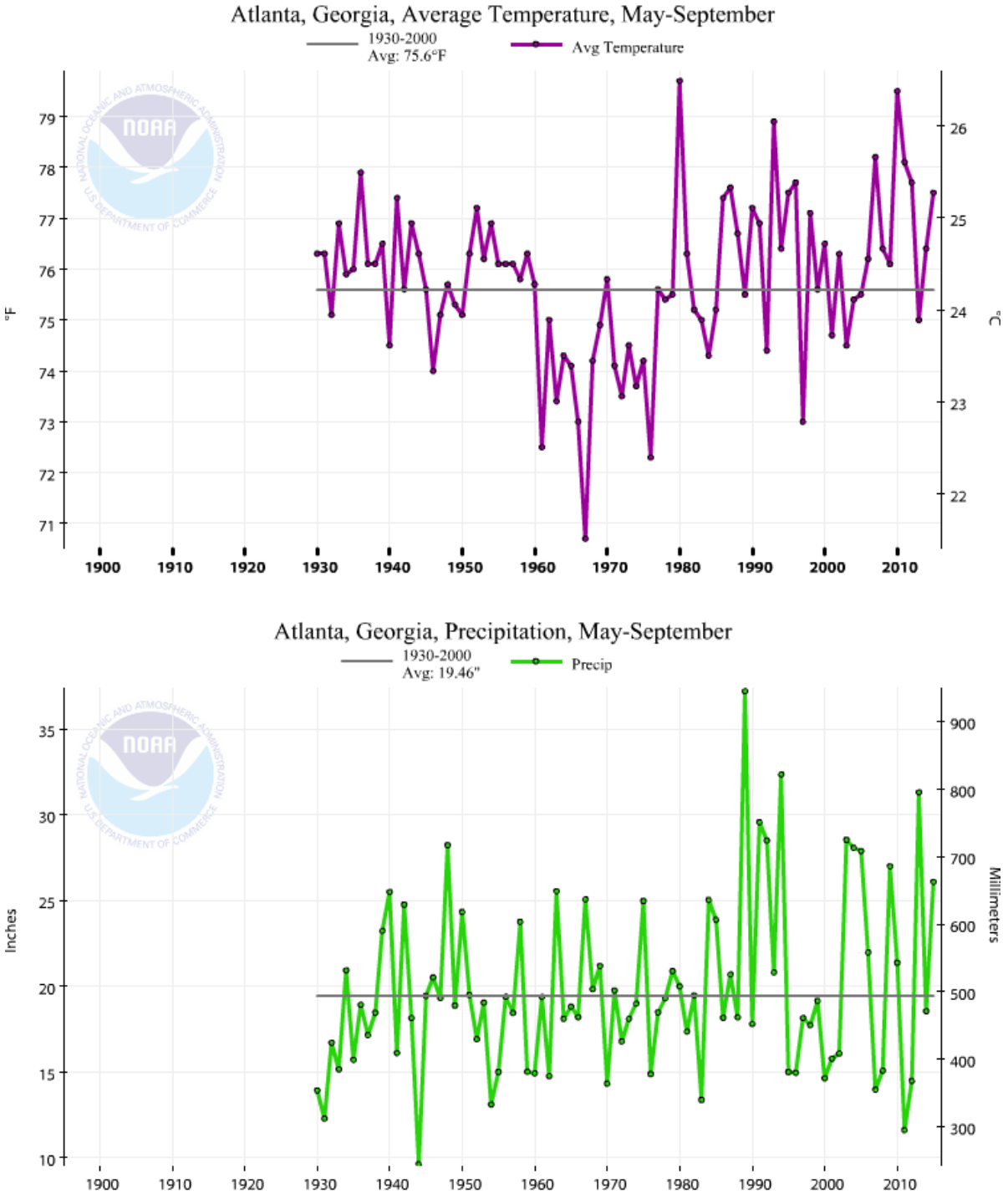
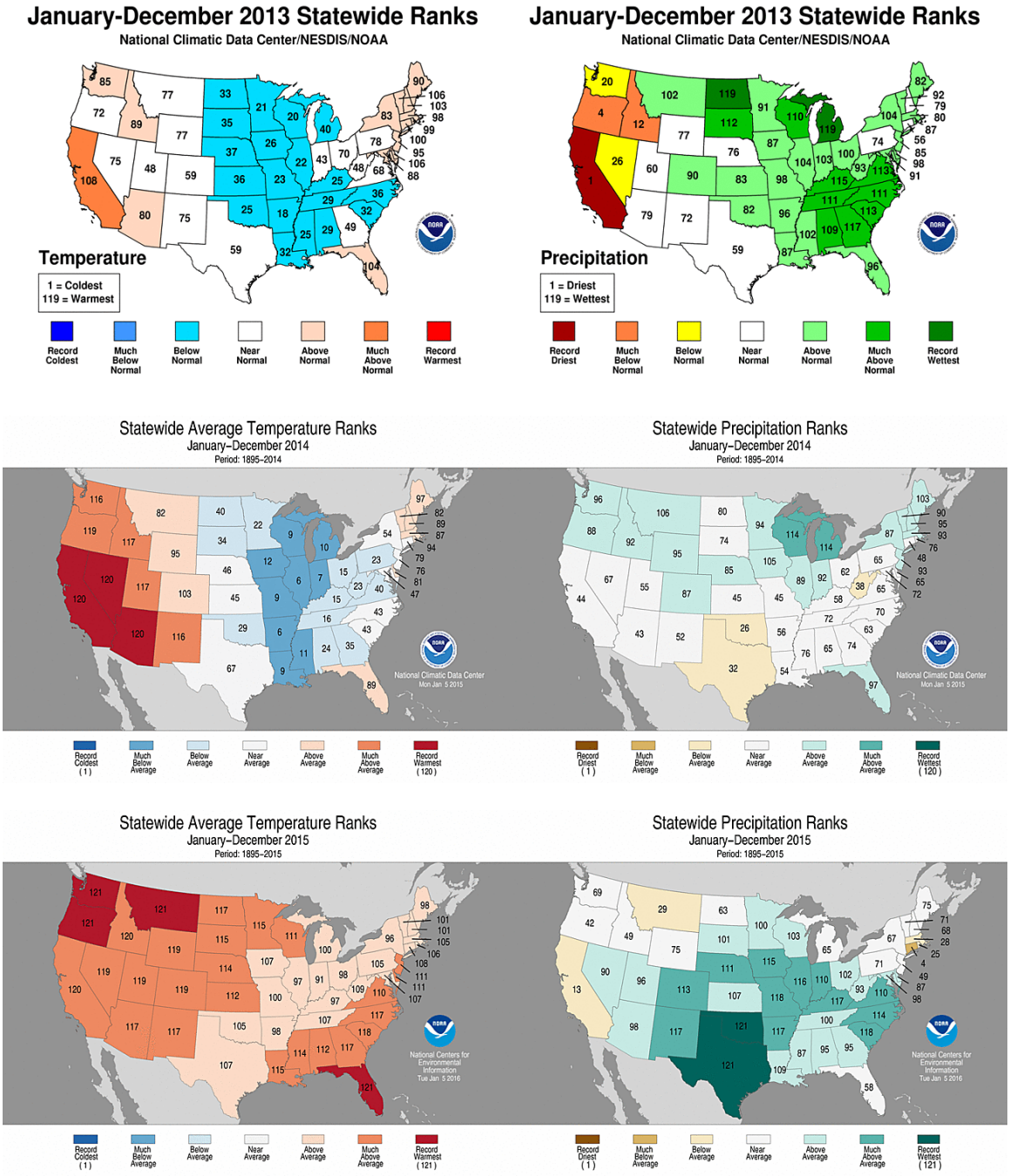


Figure 2-3. Ozone design value concentrations for 2004 to 2015 for Atlanta Area ozone monitors.



*Obtained from NOAA website (http://www.ncdc.noaa.gov/cag).

Figure 2-4. Trend of average temperature (top) and precipitation (bottom) during May-September in Atlanta, Georgia



*Obtained from NOAA website (http://www.ncdc.noaa.gov/temp-and-precip/us-maps/)

Figure 2-5. Statewide ranks of average temperature (left) and precipitation (right) during 2013 (top), 2014 (middle), and 2015 (bottom)

2.3.1 State Control Measures - Georgia

Since the metro Atlanta region was previously designated nonattainment for both the ozone and $PM_{2.5}$ NAAQS (the Atlanta Area was redesignated to attainment for the 1997 $PM_{2.5}$ standard on February 24, 2016, 81 FR 9114), control strategies for the ozone and $PM_{2.5}$ NAAQS have been integrated and harmonized to the maximum extent possible. Control of anthropogenic NO_x and VOC emissions is generally considered the most important component of an ozone control strategy. However, the metro Atlanta nonattainment area has shown a greater sensitivity to NO_x controls rather than VOC controls due to the large biogenic component of VOC emissions in Georgia. Anthropogenic NO_x emissions are primarily from combustion devices. Therefore, control measures have focused on the control of NO_x emissions from combustion devices.

NO_x emission limitations and standard provisions in Georgia Rule 391-3-1-.02(2)[6] are established for various external and internal combustion devices and include numerical emission standards and work practice requirements. State measures that target the reductions of NO_x emissions include the following:

- Georgia Rule (yy) – Emissions of Nitrogen Oxides
- Georgia Rule (jjj) - NO_x from EGUs
- Georgia Rule (lll) - NO_x from Fuel Burning Equipment
- Georgia Rule (nnn) – NO_x from Large Stationary Gas Turbines
- Georgia Rule (rrr) - NO_x from Small Fuel Burning Equipment
- Vehicle Emissions Inspection and Maintenance (I/M) Program

2.3.1.1 Georgia Rule (yy)

Georgia Rule (yy) is a case-by-case RACT determination for major sources of NO_x emissions that applies to sources with the potential to emit more than 25 tons of NO_x per year in the following 13 counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale (all in the Atlanta Area), and to those sources that have the potential to emit more than 100 tons of NO_x per year in these seven counties: Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton. This rule has changed over the years based on the major source threshold for NO_x. This rule was adopted as a state rule on June 8, 2008, and adopted into the Georgia SIP on September 28, 2012 (77 FR 59554). As part of the federally approved SIP, this rule is permanent and federally enforceable.

Georgia Rule (yy) continues to be in effect for affected sources in all counties in the Atlanta Area, and some counties outside the Atlanta Area.

2.3.1.2 Georgia Rule (jjj)

NO_x emissions from coal-fired external combustion devices that generate steam for electricity generation are regulated under Georgia Rule 391-3-1-.02(2)(jjj). This rule was adopted into the Georgia SIP on July 10, 2001 (66 FR 35906). As part of the federally approved SIP, this rule is permanent and federally enforceable. As required by the SIP adopted in 2001 (66 FR 35906),

[6] State of Georgia, Rules for Air Quality Control, Chapter 391-3-1, Effective December 16, 2015.

Georgia Rule (jjj) established a more stringent NO_x emission standard of 0.13 lb/MMBtu from May 1 – September 30 (starting in 2003) averaged across affected sources in 20 counties (Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gwinnett, Heard, Henry, Paulding, and Rockdale). Georgia EPD estimated that NO_x emissions from these point sources would be reduced by approximately 42% by 2009 (from a 2002 baseline). During 2013-2015, the affected facilities included Plant Bowen, Plant Yates, Plant Hammond, and Plant Wansley. Plant Bowen (Bartow County) and Plant Yates (Coweta County) are inside the Atlanta Area, while Plant Hammond (Floyd County) and Plant Wansley (Heard County) are just outside the Atlanta Area. In early-2015, Plant Yates Units 1-5 shut down and Plant Yates Units 6 and 7 converted to natural gas leaving Plant Bowen as the only remaining coal-fired EGU in the Atlanta Area (see Figure 2-6). In order to comply with Rule (jjj), Plant Bowen incorporated a 0.07 lb/MMBtu permit limit from May 1 – September 30 into its Title V permit. Plant Bowen has been operating at or below 0.07 lb/MMBtu each year from May 1 – September 30 since 2003 in order to comply with Georgia Rule (jjj).

2.3.1.3 Georgia Rule (lll)

Fuel burning equipment that is installed or modified after May 1, 1999, is regulated under Georgia Rule 391-3-1-.02(2)(lll) for NO_x emissions. This rule was adopted into the Georgia SIP on July 10, 2001 (66 FR 35906). As part of the federally approved SIP, this rule is permanent and federally enforceable. This rule applies to fuel-burning equipment with maximum design heat input capacities $\geq$ 10 MMBtu/hr and $\leq$ 250 MMBtu/hr in 45 counties in Atlanta and the surrounding area. Georgia Rule (lll) established a compliance date for this standard beginning May 1, 2000, and it affects all fuel burning equipment installed from that date forward. This rule affects future possible emissions for new or modified sources by requiring the operation of equipment during the control season to meet emission limits based on the use of natural gas. The continued implementation of this rule will support the maintenance of the ozone NAAQS for the Atlanta Area.

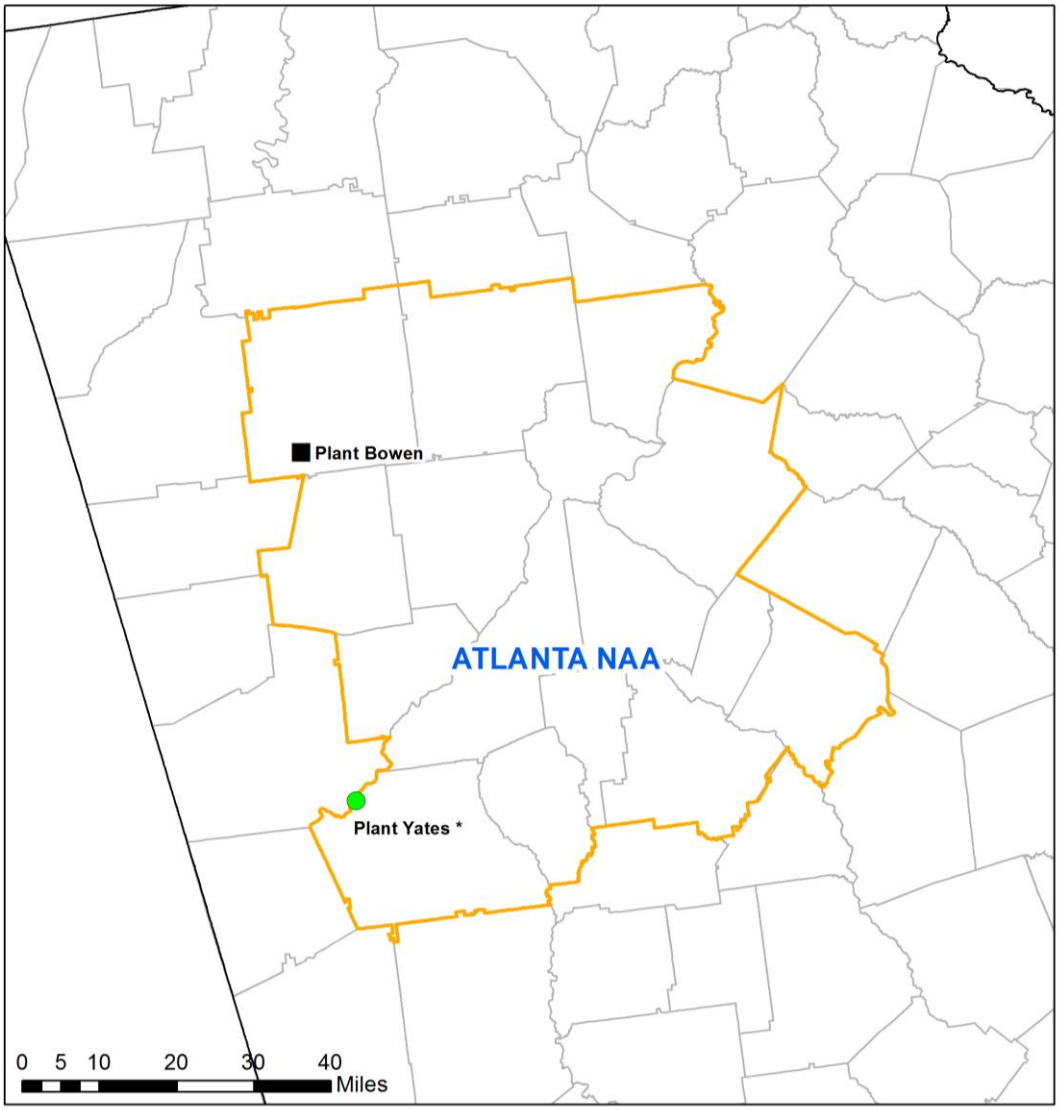
2.3.1.4 Georgia Rule (nnn)

Stationary gas turbines greater than 25 MW are regulated under Georgia Rule 391-3-1-.02(2)(nnn) for NO_x emissions. This rule was adopted into the Georgia SIP on July 10, 2001 (66 FR 35906). As part of the federally approved SIP, this rule is permanent and federally enforceable. Georgia Rule (nnn) establishes ozone-season NO_x emissions limits for large stationary gas turbines located in 45 counties in Atlanta and the surrounding area. Plant McDonough-Atkinson in Cobb County (in the Atlanta Area) is the only electric generation unit (EGU) subject to Georgia Rule (nnn), which requires combustion turbines permitted on or after April 1, 2000, to emit no more than 6 ppm NO_x at 15% oxygen during the period May 1 through September 30 of each year.

2.3.1.5 Georgia Rule (rrr)

Georgia Rule (rrr) is a Reasonably Available Control Technology (RACT) rule for small fuel-burning equipment that requires an annual tune-up and the burning of natural gas, LPG, or propane during ozone season to reduce nitrogen oxide emissions. This rule was adopted into the Georgia SIP on September 28, 2012 (77 FR 59554) and remains in effect. As part of the federally approved SIP, this rule is permanent and federally enforceable.

The deadline for full compliance with Georgia Rule (rrr) was May 15, 2005, in the following 13 counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale; and March 1, 2009, in the additional 7 counties: Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton. This continues to be in effect in all counties that make up the 15-county Atlanta Area.



*Plant Yates Units 1-5 shut down in mid-2014 and Units 6 and 7 converted to natural gas leaving Plant Bowen as the only remaining coal-fired EGU in the 15-county Atlanta NAA.

Figure 2-6. Locations of Coal-fired EGU Facilities in the Atlanta NAA

2.3.1.6 Vehicle Emissions Inspection and Maintenance (I/M) Program

Georgia's Clean Air Force (GCAF) was created in 1996 as a result of the CAA and the support of the Georgia legislature. In conjunction with EPD, GCAF serves as the state's Enhanced Vehicle Emission Inspection and Maintenance (I/M) Program for the following 13 counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale, which are part of the 15-county Atlanta Area. This rule was adopted into the Georgia SIP on April 17, 2009 (74 FR 17783) and remains in effect. As part of the federally approved SIP, this rule is permanent and federally enforceable.

2.3.2 Federal Control Measures

Federal control measures related to the reduction of VOCs and NO_x emissions are discussed below. All the emission reductions discussed below are federally enforceable.

VOCs

Federal measures that target reduction of VOCs from stationary point sources include New Source Performance Standards (NSPS), National Emissions Standards for Hazardous Air Pollutants (NESHAPs), and Reasonably Available Control Technology (RACT). The State of Georgia has been delegated the authority to administer these measures.

NOx

Federal measures that targeted reduction of NO_x emissions are as follows:

- Clean Air Interstate Rule (CAIR) and Cross-State Air Pollution Rule (CSAPR), which replaced CAIR;
- Tier 2 Vehicle Standards;
- Tier 3 Vehicle Standards;
- Heavy-duty Gasoline and Diesel Highway Vehicles Standards & Ultra Low-Sulfur Diesel Rule;
- Medium- and Heavy-duty Vehicle Fuel Consumption and GHG Standards;
- Large Nonroad Diesel Engines Rule & Ultra Low-Sulfur Diesel Rule;
- Non-Road Large Spark Ignition Engines and Recreational Engines Standard;
- Greenhouse Gas Emissions and Fuel Economy Standards;
- Boiler and Reciprocating Internal Combustion Engine (RICE) National Emissions Standards for Hazardous Air Pollutants (NESHAP);
- Utility Mercury Air Toxics Standards (MATS); and
- New Source Performance Standards (NSPS).

Table 2-5 shows the maximum ozone design values and ozone design values averaged across all Atlanta Area monitors combined with the control measures applied to the area during those years. The ozone design values averaged across all Atlanta Area monitors are included to demonstrate the overall impact of emission controls across the entire Atlanta Area. To see ozone design values at specific monitors, please see Table 2-4. Additional federal control measures will take effect after the attainment year so that the Atlanta Area will continue to maintain the standard.

Table 2-5. Ozone design values average across all Atlanta Area monitors combined with the control measures applied to the area during those years.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Future Control Options
Maximum Ozone Design Value	**0.093**	**0.090**	**0.091**	**0.095**	**0.095**	**0.087**	**0.080**	**0.080**	**0.083**	**0.080**	**0.077**	**0.073**	
Average Ozone Design Value	**0.088**	**0.083**	**0.087**	**0.090**	**0.089**	**0.082**	**0.075**	**0.075**	**0.077**	**0.074**	**0.070**	**0.067**	
Clean Air Interstate Rule and Cross-State Air Pollution Rule													
Tier 2 Vehicle Standards[a]													
Tier 3 Vehicle Standards													2017 to 2025
Heavy-Duty Gasoline and Diesel Highway Vehicle Standards & Ultra Low-Sulfur Diesel Rule													
Medium- and Heavy-Duty Vehicle Fuel Consumption and GHG Standards													To 2018
Large Nonroad Diesel Engines Rule & Ultra Low-Sulfur Diesel Rule													
Nonroad Large Spark-Ignition Engines and Recreational Engines Standard													To 2020
Greenhouse Gas Emissions and Fuel Economy Standards													To 2025
Boiler and Reciprocating Internal Combustion Engine (RICE) National Emissions Standards for Hazardous Air Pollutants (NESHAP)													To 2016
Utility Mercury Air Toxics Standards (MATS) and New Source Performance Standards (NSPS)													

[a] All passenger vehicle manufacturers had to comply with Tier 2 vehicle standards by 2009. More stringent Tier 3 vehicle standards will take effect as of 2017.

2.3.2.1 Clean Air Interstate Rule and Cross-State Air Pollution Rule

On May 12, 2005, the U.S. EPA promulgated the "Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule)" referred to as CAIR. This rule established the requirement for States to adopt rules limiting the emissions of NO_x and sulfur dioxide (SO_2) and a model rule for the states to use in developing their rules. The purpose of CAIR was to reduce interstate transport of precursors of fine particulate matter and ozone.

The CAIR rule applied to fossil-fuel-fired electric generation units (EGUs), including certain cogeneration units, with nameplate capacities of greater than 25 megawatts electric (MWe). This rule set annual state caps for NO_x and SO_2 in two phases, with the Phase I caps starting in 2009 and 2010, respectively. Phase II caps for NO_x and SO_2 were to become effective in 2015.

As part of the CAIR rule, EPA determined that Georgia contributed significantly to downwind $PM_{2.5}$ nonattainment areas and/or interfered with maintenance of the $PM_{2.5}$ NAAQS (70 FR 25246-25250). Accordingly, State CAIR rules [Georgia rule 391-3-1-.02(12) and Georgia rule 391-3-1-.02(13)] were adopted that mirror the provisions of the federal CAIR rule.

On July 11, 2008, the U.S. District Court of Appeals in the District of Columbia vacated CAIR and remanded it to EPA. A rehearing of the Court's decision was requested and granted. On December 23, 2008, the court remanded CAIR to EPA without vacatur (i.e., the rule was still in place). EPA was directed to correct the deficiencies in CAIR that were identified in the court's decision.

To replace CAIR, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) on August 8, 2011 (76 FR 48208). CSAPR imposes restrictions on emissions of NO_x and SO_2 from states identified as having significant impacts on ozone and/or $PM_{2.5}$ NAAQS attainment, or as interfering with maintenance of these same standards in downwind states. The requirements of CSAPR were to become effective in 2012 and 2014. However, on December 30, 2011, the U.S. Court of Appeals for the D.C Circuit Court issued a ruling to stay CSAPR pending judicial review. The timing of CSAPR's implementation has been affected by a number of court actions. On December 30, 2011, CSAPR was stayed prior to implementation. On April 29, 2014, the U.S. Supreme Court issued an opinion reversing an August 21, 2012 D.C. Circuit decision that had vacated CSAPR. Following the remand of the case to the D.C. Circuit, EPA requested that the court lift the CSAPR stay and delay the CSAPR compliance deadlines by three years. On October 23, 2014, the D.C. Circuit granted EPA's request. Accordingly, CSAPR Phase 1 implementation began in 2015, with Phase 2 beginning in 2017. The Phase 2 requirements take effect beyond the 2013-2015 clean data period for metro Atlanta, and will result in additional NO_x emission reductions from EGUs in the future.

2.3.2.2 Tier 2 Vehicle Standards

Federal Tier 2 vehicle standards have reduced NO_x emissions from passenger vehicles. The standards require all passenger vehicles in a manufacturer's fleet, including light-duty trucks and sport utility vehicles (SUVs), to meet an average standard of 0.07 grams of NO_x per mile. Implementation began in 2004 and was completely phased in by 2007. The Tier 2 standards also cover passenger vehicles over 8,500-pounds-gross-vehicle-weight rating (the larger pickup trucks and SUVs) beginning in 2008, with full compliance in 2009. The new standards required vehicles to be 77% to 95% cleaner than those on the road prior to implementation of Tier 2. The Tier 2 rule also reduced the sulfur content of gasoline to 30 parts per million (ppm) starting in January 2006. Sulfur occurs naturally in gasoline but interferes with the operation of catalytic converters on vehicles, resulting in higher emissions. Lower-sulfur gasoline is necessary to achieve the Tier 2 vehicle emission standards. With fleet turnover it took several years for Tier 2 to be fully implemented; therefore, Tier 2 emission reductions contributed to the Atlanta Area attaining the 2008 8-hour ozone NAAQS between 2013 and 2015. Once Tier 3 (described below) is in effect, it will provide additional controls for maintenance.

2.3.2.3 Tier 3 Vehicle Standards

The Tier 3 program sets new vehicle emissions standards and lowers the sulfur content of gasoline in order to reduce air pollution from passenger cars and trucks, with implementation beginning in 2017 and phasing in through 2025. Tailpipe and evaporative emissions will be reduced for passenger cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty vehicles. The Tier 3 vehicle standards for light-duty vehicles, light-duty trucks, and medium-duty passenger vehicles will be 0.03 grams of NO_x per mile as measured on the Federal Test Procedure (FTP), and 0.05 grams of NO_x per mile as measured on the Supplemental Federal Test Procedure (SFTP). The Tier 3 vehicle standards for heavy-duty pick-ups and vans will be 0.178 grams of NO_x per mile for Class 2b vehicles and 0.630 grams of NO_x per mile for Class 3 vehicles, as measured on the FTP. The Tier 3 gasoline sulfur standard will require federal gasoline to meet an annual average standard of 10 parts per million (ppm) of sulfur by January 1, 2017. The Tier 3 tailpipe standards for light-duty vehicles will reduce the fleet average standards for the sum of non-methane organic gases (NMOG) and nitrogen oxides (NO_x), NMOG+NO_x, by approximately 80% from the current fleet average standards, and will reduce the per-vehicle particulate matter (PM) standards by 70%. The Tier 3 program for heavy-duty vehicles will reduce the fleet average standards for NMOG+NO_x and PM by approximately 60% from the current fleet average standards. The Tier 3 program is also reducing the evaporative VOCs by approximately 50% from the current standards, and these standards apply to all light-duty and onroad gasoline-powered heavy-duty vehicles.

2.3.2.4 Heavy-Duty Gasoline and Diesel Highway Vehicle Standards & Ultra Low-Sulfur Diesel Rule

EPA standards designed to reduce NO_x and VOC emissions from heavy-duty gasoline and diesel highway vehicles (14,001 pounds or more) took effect in 2004. A second phase of standards and testing procedures, which began in 2007, reduced particulate matter from heavy-duty highway engines. The standards also reduced highway diesel fuel sulfur content to 15 ppm to prevent damage to the catalytic converters. The total program achieves a 90% reduction in particulate matter (PM) emissions and a 95% reduction in NO_x emissions, compared to older engines using diesel with

higher sulfur content. SO_2 emissions will also be reduced due to the lower fuel sulfur content. With fleet turnover it took several years for this rule to be fully implemented; therefore, emission reductions from this rule contributed to the Atlanta Area attaining the 2008 8-hour ozone NAAQS between 2013 and 2015.

2.3.2.5 Medium- and Heavy-Duty Vehicle Fuel Consumption and GHG Standards

In September 2011, the EPA and the National Highway Traffic Safety Administration (NHTSA) adopted joint rules to reduce greenhouse gas (GHG) emissions and increase fuel efficiency from combination tractors (semi trucks), heavy-duty pickup trucks and vans, and vocational vehicles. The agencies' complimentary standards, which form the Heavy-Duty National Program, cover model years 2014 – 2018. The standards for combination tractors will reduce CO_2 emissions and fuel consumption by 9% to 23% over the 2010 baselines. The standards for heavy-duty pickup trucks and vans will reduce CO_2 emissions by 17% for diesel vehicles and 12% for gasoline vehicles, on average per vehicle over the 2010 baselines, and will reduce fuel consumption by 15% for diesel vehicles and 10% for gasoline vehicles, on average per vehicle compared to a common baseline. The standards for vocational vehicles will reduce CO_2 emissions and fuel consumption by 6% to 9% over the 2010 baselines. The decreased fuel consumption due to the Heavy-Duty National Program will result in decreased NO_x emissions from vehicles.

2.3.2.6 Large Nonroad Diesel Engines Rule & Ultra Low-Sulfur Diesel Rule

In May 2004, the EPA promulgated new rules for large nonroad diesel engines, such as those used in construction, agricultural, and industrial equipment, to be phased in between 2008 and 2014. The nonroad diesel rules reduced the allowable sulfur in nonroad diesel fuel by over 99%. Prior to 2006, nonroad diesel fuel averaged about 3,400 ppm sulfur. The rule limited nonroad diesel sulfur content to 500 ppm in 2006 and 15 ppm in 2010. The combined engine and fuel rules reduced NO_x and PM emissions from large nonroad diesel engines by over 90%, compared to older engines using diesel with higher sulfur content. SO_2 emissions were also reduced due to the lower fuel sulfur content.

2.3.2.7 Nonroad Large Spark-Ignition Engines and Recreational Engines Standard

This standard regulates nitrogen oxides (NO_x), hydrocarbons (HC), and carbon monoxide (CO) for groups of previously unregulated nonroad engines. The standard applies to all new engines sold in the United States and imported after these standards began and applies to large spark-ignition engines (forklifts and airport ground service equipment), recreational vehicles (off-highway motorcycles and all-terrain-vehicles), and recreational marine diesel engines. The regulation varies based upon the type of engine or vehicle.

The large spark-ignition engines contribute to ozone formation and ambient CO and PM levels in urban areas. Tier 1 of this standard was implemented in 2004 and Tier 2 started in 2007. Like the large spark-ignition engines, recreational vehicles contribute to ozone formation and ambient CO and PM levels. For the model year 2006 off-highway motorcycles and all-terrain-vehicles, the new exhaust emissions standard was phased-in by 50%, and for model years 2007 and later at 100%. Recreational marine diesel engines over 37 kilowatts are used in yachts, cruisers, and other types of pleasure craft. Recreational marine engines contribute to ozone formation and PM levels, especially in marinas. Depending on the size of the engine, the standard began phasing in during 2006.

When all of the nonroad spark-ignition engines and recreational engines standards are fully implemented, an overall 72% reduction in HC, 80% reduction in NO_x, and 56% reduction in CO emissions are expected by 2020. These controls will help reduce ambient concentrations of ozone, CO, and fine PM.

2.3.2.8 Greenhouse Gas Emissions and Fuel Economy Standards

The National Program for greenhouse gas emissions (GHG) and fuel economy standards was developed by the EPA along with the National Highway Traffic Safety Administration (NHTSA) and affects light-duty cars and trucks in model years 2012 – 2016 for phase 1, and model years 2017 – 2025 for phase 2. Additionally, the Tier 3 program for vehicle emission standards and gasoline sulfur content will be implemented during the same period as the second phase of the GHG standards for light-duty vehicles, beginning in model year 2017. The final GHG and fuel economy standards are estimated to give an average industry fleet-wide level of 163 grams of carbon dioxide (CO_2) per mile in model year 2025, equivalent to 54.5 miles per gallon if attained entirely through fuel economy improvements. This program will reduce the precursors of ambient ozone by improving fuel economy and reducing the amount of fuel consumed, thus reducing the amount of NO_x emissions released.

2.3.2.9 Boiler and Reciprocating Internal Combustion Engine (RICE) National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The NESHAP for industrial, commercial, and institutional boilers (40 CFR Part 63 Subpart DDDDD) and the NESHAP for reciprocating internal combustion engines (40 CFR Part 63 Subpart ZZZZ) are projected to reduce VOC emissions.

The NESHAP for industrial, commercial, and institutional boilers and process heaters applies to boiler and process heaters located at major sources of hazardous air pollutants (HAP) that burn natural gas, fuel oil, coal, biomass, refinery gas, or other gas. The compliance deadline for existing boilers was January 31, 2016. The NESHAP includes work practice standards such as regular boiler tune-ups and a one-time energy assessment, emission limitations for pollutants including filterable particulate matter (PM), hydrochloric acid (HCl), Mercury, and carbon monoxide (CO), and operating limitations for control devices. The emission limits and operating limits only apply to larger boilers of at least 10 million BTU/hr that burn fuels other than natural gas, refinery gas, or other gas 1 fuels (gaseous fuel containing no more than 10 $\mu g/m^3$ mercury).

The NESHAP for reciprocating internal combustion engines (RICE) applies to existing, new, or reconstructed stationary RICE located at major or area sources of HAP, excluding stationary RICE being tested at a stationary RICE test cell/stand. The compliance date for existing stationary RICE, excluding existing non-emergency stationary compression ignition (CI) RICE, with > 500 brake HP located at a major source of HAP emissions was June 15, 2007. The compliance date for existing non-emergency stationary CI RICE with > 500 brake HP located at a major source of HAP, existing stationary CI RICE with ≤ 500 brake HP located at a major source of HAP, or existing stationary CI RICE located at an area source of HAP was May 3, 2013. The compliance date for existing stationary spark ignition (SI) RICE with ≤ 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions was October 19, 2013. The NESHAP includes work practice standards such as engine maintenance, fuel requirements,

regular performance testing, operating limitations, and emission limitations for pollutants including formaldehyde and CO.

2.3.2.10 Utility Mercury Air Toxics Standards (MATS) and New Source Performance Standards (NSPS)

EPA published the final rules for the MATS for new and existing coal- and oil-fired electric generation units (EGU) and the NSPS for fossil-fuel-fired electric utility, industrial-commercial-institutional, and small industrial-commercial-institutional steam generating units on February 16, 2012 (77 FR 9304). The purpose of the MATS is to reduce mercury and other toxic air pollutant emissions from coal- and oil-fired EGUs with a capacity of 25 megawatts or more that generate electricity for sale and distribution through the national electric grid to the public. The NSPS has revised emission standards for NO_x, SO_2, and particulate matter (PM) that apply to new coal- and oil-fired power plants.

The compliance date for existing sources subject to MATS was April 16, 2015, although all coal-fired EGUs in Georgia sought and received a one-year compliance extension. The MATS rule can be expected to result in further reductions of both NO_x and SO_2 emissions in addition to the reduction in mercury and other air toxic emissions.

The control measures listed in Section 2.3.1 and 2.3.2 of this document demonstrate that Item 3 in Section 2.0 has been met.

2.4 Title 1 Part A, Section 110 and Part D Requirements of the Clean Air Act

Title 1 Part A, Section 110 of the CAA contains the requirements for state implementation plans (SIPs). The purpose of a SIP is to provide for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS). Title 1 Part D, of CAA (Sections 171 to 179) contains general requirements for areas that have been designated nonattainment. As stated in Section 1.1 of this maintenance plan, the Atlanta Area was designated as nonattainment for the 2008 8-hour ozone standard on April 30, 2012.

With an attainment deadline of July 20, 2015, marginal areas were required to attain the National Ambient Air Quality Standard (NAAQS) by the 2014 ozone season. On August 27, 2015, the U.S. EPA published a rulemaking proposing its determination that the Atlanta Area did not attain the 8-hour ozone NAAQS by July 20, 2015, the applicable attainment date for marginal nonattainment areas (80 FR 51992). The proposed finding was based on ambient air quality data from years 2012-2014. The U.S. EPA explained that, consistent with Section 181(b)(2) of the Clean Air Act (CAA), when EPA finalizes its determination that the Atlanta Area failed to attain, the Atlanta Area would be reclassified to the next highest classification or "moderate" nonattainment. The "moderate" area attainment date for the Atlanta nonattainment area would then be "as expeditiously as practicable," but no later than July 20, 2018. The U.S. EPA finalized this finding on May 4, 2016 (81 FR 26697). On May 3, 2016 EPA proposed its "clean data" determination (81 FR 26515) that the Atlanta Area had attained the 2008 8-Hour Ozone NAAQS. When the clean data determination is finalized in the Federal Register, the Atlanta Area will have attained the 2008 8-hour ozone NAAQS. When EPA has determined that the Atlanta Area has attained the NAAQS, the area will no longer be subject to the nonattainment provisions of Section 110 and Part D requirements for demonstrating attainment, RFP, and contingency for areas designated as nonattainment with the NAAQS. All other Section 110 and Part D Clean Air Act requirements pertaining to the metro Atlanta Area have previously been approved or are currently subject to approval by EPA, or will be suspended upon submittal of this plan.

The requirements that have previously been approved include ozone monitoring, emissions inventory, and emission statement requirements. Georgia EPD submitted its current monitoring plan to EPA on July 1, 2016. The current monitors are operated consistent with 40 CFR Part 58 and any changes will only be made if they are consistent with 40 CFR Part 58. On February 6, 2015, Georgia EPD submitted to EPA, the base year emissions inventory (2011) and emissions statements SIP in order to fulfill the requirements of Part D, Sections 182(a)(1) and 182(a)(3)(B) of the CAA. On August 11, 2015, EPA published a direct final rule approving the base year emissions inventory and emissions statements requirements for the Atlanta Area (80 FR 48036).

The state has met all applicable requirements for the Atlanta Area under Section 110 of the CAA and Sections 171 through 179 of the CAA (Part D). Therefore, Item 4 in Section 2.0 of this document has been met.

3.0 Maintenance Plan

Any state seeking redesignation of an area to attainment must submit documentation to EPA that the area will continue to attain the standard in the form of a maintenance plan. Title 1 Part D, Section 175A of the CAA defines maintenance plan requirements. Requirements include a quantitative demonstration of maintenance of the standard (ozone, in this case) and contingency provisions for prompt implementation of corrective measures if attainment is not maintained. Per guidance from EPA[7], this maintenance plan also includes a method to verify continued attainment of the 2008 8-hour ozone standard to support the maintenance demonstration. This plan also includes a plan to use the ambient monitoring network for verification of continued attainment or for triggering contingency provisions, if required.

3.1 Maintenance Demonstration

Part D Section 175A of the CAA requires any state requesting a redesignation to submit a revision to its SIP demonstrating maintenance of the applicable standard for a minimum of 10 years after the redesignation date. Section 107(d)(3)(D) allows EPA up to 18 months from receipt of a complete submittal to process a redesignation request. Therefore, Georgia EPD is providing a demonstration of maintenance through the year 2030.

There are two generally accepted methodologies for demonstrating maintenance. Under the first method, an emissions inventory is compiled for one of the three years which are used to show clean (i.e., attaining) ambient data (see Section 2.1). This is called the attainment year inventory. Emissions are projected for the final year of the maintenance period (called the maintenance inventory) and for intermediate years. If the projected emission levels in each of the intermediate and maintenance years are less than the emission level for the attainment year, then maintenance of the standard is demonstrated. Under the second maintenance demonstration method, air quality modeling is used to project ambient pollutant concentrations and annual design values for the final year and intermediate years. If all of the modeled rolling 3-year averages of the annual design values are below the standard, maintenance is demonstrated.

EPD selected the method of comparing attainment year emissions to projected emissions for this maintenance plan. This approach has been used in the previous maintenance plans submitted by EPD and approved by EPA. The following sections discuss the attainment year inventory, the projected inventories for the maintenance year and intermediate years, and a demonstration that the Atlanta Area will continue to attain the standard.

Provision 175A(b) of the Clean Air Act requires that "8 years after redesignation of any area as an attainment area under section 107(d), the State shall submit to the Administrator an additional revision of the applicable State implementation plan for maintaining the national primary ambient air quality standard for 10 years after the expiration of the 10-year period referred to in subsection (a)." EPD intends to address this provision in the future.

[7] "Procedures for Processing Requests to Redesignate Areas to Attainment", September 4, 1992, John Calcagni, Director, Air Quality Management Division, OAQPS, USEPA

3.1.1 Attainment and Maintenance Year Emissions Inventories

EPD prepared 2014 and 2030 summer day emissions inventories of Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOCs) for the following 15 counties in the Atlanta Area: Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, and Rockdale.

The 2014 emissions developed by EPD to meet the Air Emissions Reporting Requirements (AERR) are used when available. Sources without 2014 emission estimates are estimated using different approaches that vary by source category as documented below. Then, the base year 2014 emissions are projected to 2030 using different methods for each source category, including:

- EGU point sources
- Non-EGU point source
- Area sources
- Fires – Agricultural burning and land clearing
- Fires – Wildfire and prescribed burning
- Nonroad mobile sources – NONROAD model category
- Nonroad mobile sources - Marine, aircraft and railroad
- Onroad mobile sources

The summer day emission calculations are performed following the emission inventory guidance[8]. The guidance says, "Summer day emissions mean an average day's emissions for a typical summer work weekday. The state will select the particular month(s) in the summer and the day(s) in the work week to be represented. The selection of conditions should be coordinated with the conditions assumed in the development of reasonable further progress (RFP plans, rate of progress plans and demonstrations, and/or emissions budgets for transportation conformity), to allow comparability of daily emission estimates." July is a typical summer month for the Atlanta Area. In addition, the July weekday emissions have been traditionally used to develop the motor vehicle emission budget (MVEB) for transportation conformity[9]. Therefore, the summer day emissions are calculated here as the average of emissions during weekdays in July 2014. The weekdays (from Monday to Friday) during July 2014 are listed in Table 3-1. Since July 4th is a holiday and is treated the same as Sunday during SMOKE modeling, the calculation here also treats July 4th, a Friday, as Sunday. The calculation varies among source categories due to availability of different data sources, and is described in detail by source categories below.

All the detailed calculations by source categories can be found in the Appendix A-1 through A-10, as well as emission summary by counties, SCC, and facilities (Appendix A-11). It should be noted that emissions in Table 3-3 through Table 4-4 are generally reported to two decimal places (rounded) and that the summation of the values in the tables may not exactly match the value in the "Total" row due to the number of significant digits reported in the table. The exact emission numbers used to generate the total emissions can be found in Excel files located in the appropriate Appendix.

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[8] U.S. EPA, 2014. Emissions Inventory Guidance for Implementation of Ozone [and Particulate Matter] National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations. Available at https://www3.epa.gov/ttnchie1/eidocs/eiguid/

[9] MOVES2014 and MOVES2014a Technical Guidance: *Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity*, Nov. 2015, EPA-420 B-15-093

Table 3-1. List of Weekdays during July 2014

Day	Dates	# of Days	# of Days with Holiday Correction
Monday	7/7/2014, 7/14/2014, 7/21/2014, 7/28/2014	4	4
Tuesday	7/1/2014, 7/8/2014, 7/15/2014, 7/22/2014, 7/29/2014	5	5
Wednesday	7/2/2014, 7/9/2014, 7/16/2014, 7/23/2014, 7/30/2014	5	5
Thursday	7/3/2014, 7/10/2014, 7/17/2014, 7/24/2014, 7/31/2014	5	5
Friday	7/4/2014*, 7/11/2014, 7/18/2014, 7/25/2014	4	3
Saturday	7/5/2014, 7/12/2014, 7/19/2014, 7/26/2014	4	4
Sunday	7/6/2014, 7/13/2014, 7/20/2014, 7/27/2014	4	5

*7/4/2014 is a Friday, but is treated as Sunday in SMOKE modeling.

3.1.1.1 Point Sources

Point sources in the 2014 emission inventory include stationary sources whose actual emissions equal or exceed 25 tons per year of VOC or NO_x in the following 13 counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale; and 100 tons per year of VOC or NO_x in Bartow and Newton counties. Emissions from point sources have been calculated for EGU and non-EGU sources.

EGU Point Sources:

2014 NO_x and VOC emissions from three power plants in the Atlanta Area (Plant Bowen, Plant McDonough/Atkinson, and Plant Yates) were submitted by Georgia Power during the 2014 EPD emission data collection process[10].

The 2030 emissions from Plant Bowen (coal-fired with SCR) and Plant McDonough/Atkinson (gas-fired NGCC with SCR) are projected from their 2014 emissions using growth factors based on fuel consumption for the Southeastern region in the Annual Energy Outlook 2015[11]. The growth factors vary by fuel types (Table 3-2) and are applied to 2014 process-level emissions by Source Classification Code (SCC). Detailed information can be found in Appendix A-2. No control factors are applied since no additional controls are expected for Plant Bowen and Plant McDonough/Atkinson during the period from 2014 to 2030.

[10] http://epd.georgia.gov/air/emissions-inventory-system-eis

[11] Energy Information Administration, Department of Energy, "Annual Energy Outlook, 2015".

Table 3-2. Growth Factors by SCC s for EGU Sources

SCC	Fuel Type	2030/2014
20100101	Distillate Fuel Oil	0.8975
10100501	Distillate Fuel Oil	0.8975
20100201	Natural Gas	1.1814
10100604	Natural Gas	1.1814
10100602	Natural Gas	1.1814
10100212	Steam Coal	1.0252

The 2030 emissions for Plant Yates are not projected from its 2014 emissions using growth factors based on AEO2015 since five units were retired in 2015 (SG01-SG05) and two units (Unit SG06 and SG07) were converted from coal to natural gas boilers in 2015. According to Georgia Power, this facility will be run as a peaking unit with a capacity factor of approximately 25%. Therefore, EPD calculated its potential NO_x emissions in 2030 using its projected usage, the nominal heat rate of 12 MMBtu/MWh, and the measured NO_x emission rates after the conversion to natural gas at this facility (0.116 lbs/MMBtu for Unit SG06 and 0.141 lbs/MMBtu for Unit SG07). For VOC emissions, the maximum measured emission rates during May and June of 2015 are used.

The summer day NO_x emissions from EGU point sources are calculated by summing the hourly CEMS NO_x emission measurements during the 22 weekdays in July 2014 and then dividing by 22 days. The summer day VOC emissions are calculated by multiplying the annual VOC emissions with fractions of average heat input during July weekdays to annual total heat input.

$$emis_{summer-day} = emis_{annual} \times \frac{\sum_j HeatInput_j / 22}{\sum_i HeatInput_i}$$

Where *i* refers to every day during 2014 and *j* refers to every day during July weekdays listed in Table 3-1. Specifically, the above data are downloaded from the EPA Air Market Program Data (AMPD) website[12]. The only exception is for 2030 summer day emissions for Plant Yates. Since Unit SG07 of Plant Yates was not operated during July 2014, the 2014 CEMS data can't be used to calculate 2030 summer day emissions. The 2030 summer day emissions for Plant Yates were calculated by dividing the annual emissions by 365. Detailed calculation can be found in Appendix A-1.

Summer day emissions during 2014 and 2030 were summarized by each EGU facility (Table 3-3).

[12] http://ampd.epa.gov/ampd/

Table 3-3. Summer Day Emissions by EGU Facilities in 2014 and 2030, tons/day

Facility Name	Facility ID	Summer Day Emissions (TPD)			
		2014		2030	
		NO_x	VOC	NO_x	VOC
Ga Power Company - Plant Bowen	1500011	16.75	0.69	17.17	0.70
Ga Power Company – Plant McDonough/Atkinson	6700003	1.41	0.37	1.66	0.43
Ga Power Company - Plant Yates	7700001	4.93	0.05	3.24	0.02
Total		**23.09**	**1.11**	**22.07**	**1.15**

Non-EGU Point Sources:

2014 NO_x and VOC emissions from non-EGU point sources were submitted by facilities during the 2014 EPD emission data collection process[13]. The 2030 emissions from non-EGU point sources were not grown from the 2014 emissions based on the following guidance from the EPA[14]:

> "Since 2006 (EPA, 2006a), the EPA has been assuming that emissions growth does not track with economic growth for many stationary sources (both point and nonpoint). This "no-growth" assumption is based on an examination of historical emissions and economic data. Emissions (as of 2005) had declined for several years and those reductions could not be directly attributed to specific control programs despite increasing economic-based growth factors for many metrics over the same time period. While the EPA continues to work toward improving the projection approach in its own work, we are still using this no-growth assumption for many emissions sectors."

In addition, EPD has checked the growth and control data in the NEI2011 modeling platform version 6.2[15] and found that no growth or control factors were applied for non-EGU point sources in the Atlanta Area. EPD is also not aware of other significant controls that will be applied to these non-EGU point sources during the period from 2014 to 2030. Therefore, the 2030 emissions are kept the same as 2014 emissions for these non-EGU point sources.

The summer day emissions from non-EGU point sources are calculated by applying the emissions fractions from the SMOKE monthly and weekly temporal profiles to the annual non-EGU point source emissions. The SMOKE monthly temporal profiles include weighting factors by month, and the weekly profiles include weighting factors by day of week. These profiles vary with SCCs. More detailed information can be found in the SMOKE manual[16]. Specifically, emissions during July are first calculated following the equation:

[13] http://epd.georgia.gov/air/emissions-inventory-system-eis

[14] U.S. EPA, 2015. Technical Support Document: Preparation of Emissions Inventories for the Version 6.2, 2011 Emissions Modeling Platform, Office of Air and Radiation, Office of Air Quality Planning and Standards, Air Quality Assessment Division.

[15] ftp://ftp.epa.gov/EmisInventory/2011v6/v2platform/2011emissions/

[16] https://www.cmascenter.org/smoke/

$$emis_{July} = emis_{annual} \times \frac{wf_{July}}{\sum_{i=1}^{12} wf_i}$$

where wf_{July} refers to weighting factor for July and wf_i refers to weighting factor for each month. Then the summer day emissions are calculated following the equation:

$$emis_{summer-day} = emis_{July} \times \frac{\sum_{j=1}^{5} n_j wf_j}{\sum_{i=1}^{7} n_i wf_i} \div 22$$

where i refers to everyday in a week, j refers to every weekday, wf_i or wf_j refers to the weighting factors for a specific day, and n_i or n_j refers to the number of days for a specific day during July. The temporal reference and profiles are downloaded from the EPA 2011 modeling Platform ftp site[17]. Detailed calculation and a list of non-EGU point sources in Atlanta ozone nonattainment area and facility-specific VOC and NO_x summer day emissions for 2014 and 2030 can be found in Appendix A-1 and A-3.

2014 and 2030 summer day emissions of NO_x and VOC from EGU and non-EGU facilities are shown in Table 3-4.

Table 3-4. Summer Day Point Source Emissions in 2014 and 2030, tons/day

Source	Summer Day Emissions (TPD)			
	2014		2030	
	NO_x	VOC	NO_x	VOC
EGU Point Sources	23.09	1.11	22.07	1.15
Non-EGU Point Sources	8.27	10.13	8.27	10.13
Total	**31.36**	**11.24**	**30.34**	**11.28**

3.1.1.2 Nonpoint Sources

Area Sources:

2014 emissions from area sources were based on EPD's 2014 AERR submittal, which includes both EPA's draft 2014 estimates[18] and EPD's estimates. For the source sectors that EPA has developed draft 2014 emission estimates by February 16, 2016, EPD has carefully reviewed these estimates and included them as part of EPD's 2014 AERR submittal when these estimates were deemed reasonable. For other source sectors that EPA hasn't developed draft 2014 estimates, the 2014 emissions are estimated as the average of 2011 and 2017 emissions in the EPA's 2011 modeling platform v6.2. These 2011 and 2017 emissions have been carefully reviewed by EPD and are considered as the best available emission estimates for area sources in Georgia.

[17] ftp://ftp.epa.gov/EmisInventory/2011v6/v2platform/ancillary_data/

[18] U.S. EPA, 2016. Draft 2014 National Emission Inventory for Non-Point Sources, Office of Air Quality Planning and Standards, Air Quality Assessment Division

2030 emissions from area sources were estimated by multiplying 2014 emissions by growth factors calculated using 2011, 2017, and 2025 emissions in EPA's 2011 modeling platform v6.2. The 2017 and 2025 emissions were developed by EPA using growth factors based on surrogate data varying by source sectors (e.g. AEO growth rates for energy sectors) and control factors due to new regulations or amendments to regulations (NESHAP-RICE, NSPS-RICE, Boiler MACT, etc.). After EPD reviewed the methodology and data in EPA's 2011 modeling platform v6.2, EPD concluded that the 2011, 2017, and 2025 emissions could reasonably reflect the area source emission trends in Georgia. Therefore, these emissions are used to develop the growth factors used to project 2030 emissions.

The growth factors = E_{2030}/E_{2014}, where:

$$E_{2030} = \left(E_{2025} - E_{2017}\right) \times \frac{13}{8} + E_{2017}$$

$$E_{2014} = \left(E_{2011} + E_{2017}\right) / 2$$

These growth factors vary with SCC, county and pollutants. The extrapolated 2030 emissions are not directly used due to the fact of different base year emissions.

Summer day emissions for area sources were calculated using the SMOKE temporal profiles as described for non-EGU point sources. Appendix A-4 contains SCC-specific VOC and NO_X summer day emissions for 2014 and 2030, and Appendix A-1 contains the temporal profiles used for nonpoint sources.

Fires - Agricultural Burning and Land Clearing:

2014 emissions from agricultural burning and land clearing were developed using detailed 2014 burning records collected from Georgia Forestry Commission (GFC). The emission factors for agricultural burning are provided by EPA Office of Air Quality Planning and Standards (OAQPS) during the development of 2011 agricultural burning emissions for NEI2011. The emissions for land clearing are estimated using the same method used in SEMAP 2007[19] and NEI2011 fire inventory. Emissions in future year 2030 were assumed to be the same as base year 2014.

Summer day emissions from agricultural burning and land clearing are calculated using emissions during July. Daily emissions are obtained by using monthly totals and applying the same formula used to calculate summer day emissions as described for non-EGU sources. Detailed information can be found in Appendix A-5.

Fires - Wildfire and Prescribed Burning:

2014 emissions from wildfires and prescribed burning were developed using detailed 2014 burning records collected from the GFC and military bases. The detailed burning records showed burned area per day. The emissions are estimated using the same method used in SEMAP 2007[20] and NEI2011

[19] AMEC, 2012. Development of the 2007 Base Year and Typical Year Fire Emission Inventory for the Southeastern States Air Resource Managers, Inc. (Final Report)

[20] AMEC, 2012. Development of the 2007 Base Year and Typical Year Fire Emission Inventory for the Southeastern States Air Resource Managers, Inc. (Final Report)

fire inventory. The fuel consumption and emission factors used in this method are considered to be the best available for fires in the southeast. These emission estimates have been submitted to EPA to meet the AERR and will be included as part of the NEI2014. Emissions in future year 2030 were assumed to be the same as base year 2014.

The summer day emissions from wildfires and prescribed burning are calculated by summing the daily emissions from fires that occurred during the 22 July weekdays as mentioned above and then dividing the total emissions during July weekdays by 22 days. Appendix A-6 contains VOC and NO_x summer day emissions summary by fire types and county in Atlanta ozone nonattainment area for 2014.

The 2014 and 2030 summer day emissions of NO_x and VOC from nonpoint sources are shown in Table 3-5.

Table 3-5. Summer Day Nonpoint Source Emissions in 2014 and 2030, tons/day

Source	Summer Day Emissions (TPD)			
	2014		2030	
	NO_x	VOC	NO_x	VOC
Area Sources	4.87	119.85	5.04	114.38
Fire – Ag & Land Clearing	0.00	0.01	0.00	0.01
Fire – Wild & Prescribed	0.01	0.02	0.01	0.02
Total	**4.88**	**119.88**	**5.05**	**114.41**

3.1.1.3 Nonroad Mobile Sources

NONROAD Model Category:

NONROAD model calculates emissions from a diverse collection of equipment such as logging, agricultural, construction, industrial, residential and commercial lawn and garden equipment, as well as nonroad vehicles. This model does not calculate emissions from marine, aircraft, and locomotives which are separately estimated as documented below.

2014 and 2030 emissions from NONROAD model category were calculated using the NONROAD portion of MOVES2014a model released on November 4, 2015, which reflects all of EPA's final nonroad standards to date. Defaults in MOVES2014a were used with 2014 meteorological data based on observations at Atlanta Hartsfield Jackson International Airport. Fuel properties were modified to reflect removal of "Georgia gasoline". Emissions were calculated by county, SCC, day, and hour. Summer day emissions were calculated by running MOVES for a July weekday. Detailed MOVES run specification files, output database, SQL query codes for analysis and SCC-specific VOC and NO_x emissions by county are provided in Appendix A-7.

Marine, Aircraft, and Locomotives:

Emissions from locomotives in 2014 were kept the same as 2011 emissions obtained from NEI2011 version 6.2[21] because locomotive fuel consumption changed very little from 2011 to 2014 according to R-1 fuel use data trends. For detailed historical fuel use, refer to the Fuel Use Data Summary in Appendix A-8. Emissions from Georgia yard locomotives were obtained from NEI2011[22].

Emissions from locomotives in 2030 are projected from 2014 emissions using growth and control factors. Growth factors for Class I and Class II/III line haul and diesel switchyard operations were calculated based on freight rail sector fuel consumption forecasts from the Annual Energy Outlook (AEO), 2015. Growth factors for passenger and commuter rail were developed from national forecasts of passenger rail diesel consumption. Control factors were based on US EPA's locomotive engine Regulatory Impact Analyses[23] (RIA) and associated emission factor guidance from EPA[24]. Diesel locomotive engines are subject to revised Federal Tier 0, Tier 1, and Tier 2 standards, as well as new Tier 3 and 4 standards. Refer to Appendix A-8 for detailed growth factor calculations, AEO 2015 table data, and control factor calculations. Appendix A-8 also contains a list of specific aircraft and locomotives sources in the Atlanta Area and SCC-specific VOC and NO_x emissions for 2014 and 2030 and the associated growth or control factors.

Annual and summer day emissions from aircrafts at Atlanta Hartsfield Jackson International Airport (HJIA) in 2014 and 2030 were provided by KB Environmental Sciences. Appendix A-9 contains HJIA emissions and the documentation of the methods used to calculate 2014 and 2030 emissions.

Other aircraft emissions for 2014 were projected from the NEI2011 version 6.2, and then were projected for 2030 using growth factors. Growth factors for all aircraft engine and airport-related SCCs, except for HJIA, were based on landing and take-off operation (LTO) projections available from the Federal Aviation Administration's Terminal Area Forecasts (TAF)[25]. Growth factors were calculated for itinerant air carrier, itinerant air taxi and commuter, and local Georgia operations as Atlanta nonattainment area averages (excluding HJIA operations). Growth rates for military aircraft were held constant at 2011 levels. No control factors have been applied to aircraft for criteria pollutant forecasts.

There were no emissions from commercial marine vessels in the Atlanta Area.

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[21] U.S. EPA, 2015. Technical Support Document: Preparation of Emissions Inventories for the Version 6.2, 2011 Emissions Modeling Platform, Office of Air and Radiation, Office of Air Quality Planning and Standards, Air Quality Assessment Division.
ftp://ftp.epa.gov/EmisInventory/2011v6/v2platform/2011emissions/

[22] Downloaded from EPA 2011 modeling Platform ftp site,
ftp://ftp.epa.gov/EmisInventory/2011v6/v1platform/2011emissions2011NEIv1_POINT_20130723_revised_ptnonipm_15aug2013_v3.csv

[23] U.S. EPA, 2008. "Regulatory Impact Analysis: Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression Ignition Engines Less than 30 Liters Per Cylinder," Office of Transportation and Air Quality, EPA-420-R-08-001. March 2008.

[24] U.S. EPA, 2009. "Emission Factors for Locomotives," Office of Transportation and Air Quality, EPA-420-F09-025. April 2009.

[25] FAA, 2015. Federal Aviation Administration, "Terminal Area Forecasts, 2014-2040," available from http://aspm.faa.gov/main/taf.asp.

Summer day emissions for aircrafts, except HJIA, and locomotives were calculated using the SMOKE temporal profiles as described for non-EGU point sources.

The 2014 and 2030 summer day emissions of NO_x and VOC from nonroad mobile sources are shown in Table 3-6.

Table 3-6. Summer Day Nonroad Mobile Source Emissions in 2014 and 2030, tons/day

Source	Summer Day Emissions (TPD)			
	2014		2030	
	NO_x	VOC	NO_x	VOC
NONROAD	52.64	50.88	28.01	49.56
Railroad	10.94	0.54	5.30	0.23
Aircraft	13.12	1.96	16.59	2.50
Marine	0.00	0.00	0.00	0.00
Total	**76.69**	**53.38**	**49.89**	**52.28**

3.1.1.4 Onroad Mobile Sources

2014 and 2030 emissions from onroad mobile sources were developed by Atlanta Regional Commission using MOVES2014a. MOVES2014a was run separately for two groups of nonattainment counties in Atlanta in inventory mode due to differences in I/M and Stage II refueling control programs. These two groups are the following 13 counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale and Bartow and Newton counties. The 13-county group has an I/M program and ran a Stage II refueling emissions control program until 2015. Bartow and Newton counties do not have I/M programs or Stage II refueling emission control programs. In addition, 2030 fuel inputs for the 13-county group are different from that for the Bartow and Newton counties since a lower RVP fuel is required for the 13-county group according to federal rule. Running MOVES2014a separately for the two unique groups of counties helps address impacts from different inputs by county and is consistent with modeling for future transportation conformity demonstration. Further details regarding this approach are provided in the document "Ozone 2016 Maintenance Plan Modeling Assumptions" in Appendix A-10.

Best available local data were used for MOVES2014a inputs such as vehicle population, vehicle miles traveled (VMT) by source type, road type distribution, average speed distributions, starts, ramp fractions, hourly VMT fractions, age distributions, I/M inputs and fuel properties, as well as average July 2014 daily meteorological inputs. National defaults were applied to populations and age distributions for long haul combination trucks. Please refer to the document "Ozone 2016 Maintenance Plan Modeling Assumptions" provided by the Atlanta Regional Commission in Appendix A-10 for more detailed information.

The 2014 and 2030 summer day emissions of NO_x and VOC from onroad mobile sources are shown in Table 3-7.

Table 3-7. Summer Day Onroad Mobile Source Emissions in 2014 and 2030, tons/day

Source	Summer Day Emissions (TPD)			
	2014		2030	
	NO_x	VOC	NO_x	VOC
Onroad Mobile Sources*	170.15	81.76	37.57	32.67

*Includes 0.03 tons/day NOx and 0.05 tons/day VOC emissions in addition to the original summer day emission estimates to account for Senior I/M exemption for on-road sources

3.1.1.5 Summary of 2014 and 2030 Emissions Inventories

The total 2014 and 2030 NO_x and VOC emissions for the Atlanta Area are presented for each source sector in Table 3-8. In 2014, the majority of NO_x emissions are from onroad and nonroad mobile sources and the majority of VOC emissions are from onroad mobile sources and nonpoint sources. In 2030, the majority of NO_x emissions are from onroad and nonroad mobile sources and the majority of VOC emissions are from nonroad mobile sources and nonpoint sources.

Table 3-8. Summary of 2014 and 2030 Summer Day Emissions Inventory (tons/day)

Source	Summer Day Emissions (TPD)			
	2014		2030	
	NO_x	VOC	NO_x	VOC
Point - EGU	23.09	1.11	22.07	1.15
Point - non-EGU	8.27	10.13	8.27	10.13
Nonpoint	4.87	119.86	5.05	114.39
Onroad	170.15	81.76	37.57	32.67
Nonroad*	76.69	53.38	49.89	52.28
Fires	0.01	0.02	0.01	0.02
Total	**283.09**	**266.25**	**122.86**	**210.64**

*Including Aircraft and Locomotive.

3.1.2 Intermediate Year Emissions Projections

As discussed previously, Georgia EPD is providing a demonstration of maintenance through the year 2030 (maintenance year). Emissions projections to support maintenance have been prepared through 2030. In addition, emissions have been calculated by interpolation for the years 2018, 2022, and 2026. Emissions levels for 2022 were calculated by linear interpolation between 2014 and 2030, emissions levels for 2018 were calculated by linear interpolation between 2014 and 2022, and emission levels for 2026 were calculated by linear interpolation between 2022 and 2030. Emissions for these additional years provide additional reference points for periodic assessment of maintenance of the standard. The intermediate year emission inventories are presented in the following subsections.

3.1.2.1 Point Sources

Intermediate year emission projections for EGU and non-EGU point sources are shown in Table 3-9.

Table 3-9. Projected Point Source Emissions (tons, summer day)

Pollutant	*2014 (attainment)*	2018	2022	2026	2030 (*maintenance*)
EGU					
NO_x	23.09	22.84	22.58	22.33	22.07
VOC	1.11	1.12	1.13	1.14	1.15
Non-EGU					
NO_x	8.27	8.27	8.27	8.27	8.27
VOC	10.13	10.13	10.13	10.13	10.13
Total Point					
NO_x	**31.36**	31.11	30.85	30.60	**30.34**
VOC	**11.24**	11.25	11.26	11.27	**11.28**

3.1.2.2 Nonpoint Sources

Intermediate year emission projections for nonpoint sources are shown in Table 3-10.

Table 3-10. Projected Nonpoint Source Emissions (tons, summer day)

Pollutant	*2014 (attainment)*	2018	2022	2026	2030 (*maintenance*)
Nonpoint (excluding fire)					
NO_x	4.87	4.92	4.96	5.01	5.05
VOC	119.86	118.49	117.13	115.76	114.39
Fire					
NO_x	0.01	0.01	0.01	0.01	0.01
VOC	0.03	0.03	0.03	0.03	0.03
Total Nonpoint					
NO_x	**4.88**	4.93	4.97	5.02	**5.06**
VOC	**119.89**	118.52	117.16	115.79	**114.42**

3.1.2.3 Nonroad mobile sources

Intermediate year emission projections for nonroad mobile sources are shown in Table 3-11.

Table 3-11. Projected Nonroad Mobile Source Emissions (tons)

Pollutant	*2014 (attainment)*	2018	2022	2026	2030 (*maintenance*)
NONROAD					
NO_x	52.64	46.48	40.33	34.18	28.01
VOC	50.88	50.55	50.22	49.89	49.56
Aircraft					
NO_x	13.12	13.99	14.86	15.72	16.59
VOC	1.96	2.10	2.23	2.37	2.50
Locomotive					
NO_x	10.94	9.53	8.12	6.71	5.30
VOC	0.54	0.46	0.39	0.31	0.23
Marine					
NO_x	0.00	0.00	0.00	0.00	0.00
VOC	0.00	0.00	0.00	0.00	0.00
Total Nonroad					
NO_x	**76.69**	69.99	63.29	56.59	**49.89**
VOC	**53.38**	53.11	52.83	52.56	**52.28**

3.1.2.4 Onroad mobile sources

Intermediate year emission projections for onroad mobile sources are shown in Table 3-12.

Table 3-12. Projected Onroad Mobile Source Emissions (tons, summer day)

Pollutant	*2014 (attainment)*	2018	2022	2026	2030 (*maintenance*)
NO_x	**170.15**	137.01	103.86	70.72	**37.57**
VOC	**81.76**	69.49	57.22	44.94	**32.67**

3.1.2.5 Emissions Projections Summary and Demonstration of Maintenance of Attainment

The consolidated emissions projections and intermediate years for all source categories are presented in Table 3-13. Emissions of NO_x and VOC drop significantly from 2014 to 2030. Overall, emissions of NO_x are projected to decline by 56 percent and emissions of VOC are projected to decline by 24 percent over the course of the maintenance period.

Table 3-13. Projected Emissions – Total of All Sectors (tons, summer day)

Pollutant	*2014 (attainment)*	2018	2022	2026	2030 (*maintenance*)
Total Point					
NO_x	31.36	31.11	30.85	30.60	30.34
VOC	11.24	11.25	11.26	11.27	11.28
Total Nonpoint					
NO_x	4.88	4.93	4.97	5.02	5.06
VOC	119.89	118.52	117.16	115.79	114.42
Onroad					
NO_x	170.15	137.01	103.86	70.72	37.57
VOC	81.76	69.49	57.22	44.94	32.67
Total Nonroad					
NO_x	76.69	69.99	63.29	56.59	49.89
VOC	53.38	53.11	52.83	52.56	52.28
Total of All					
NO_x	**283.09**	243.03	202.98	162.92	**122.86**
VOC	**266.25**	252.35	238.45	224.54	**210.64**

3.1.2.6 Emissions Decreases

The degree of improvement (reduction) in 2030 emissions compared to the attainment year (2014) emissions can be used to determine the amount of emission that can be allocated as safety margin for the area's motor vehicle emissions budget. The decrease in emissions of NO_x and VOC from 2014 to 2030 is shown in Table 3-15. Only a portion of the NO_x (and VOC) margin will be allotted to the Motor Vehicle Emissions Budget (see Section 4).

Table 3-15. Emissions Decreases

Pollutant	Emissions Decrease* 2014 to 2030 (tons)
NO_x **	160.23
VOC **	55.61

* Decrease in Emissions = (2014 emissions level) – (2030 emissions level)
** These quantities do not reflect allotment to Motor Vehicle Emissions Budget

3.1.3 Verification of Continued Attainment

Verification of continued attainment is accomplished through operation of the ambient ozone monitoring network and the periodic updates of the area's emissions inventory. EPD will continue operation of an appropriate air quality monitoring network in accordance with 40 CFR Part 58, Ambient Air Quality Surveillance and associated appendices.

The Consolidated Emissions Reporting Rule (CERR) was promulgated by EPA on June 10, 2002. The CERR was replaced by the Annual Emissions Reporting Requirements (AERR) rule on December 17, 2008. The most recent triennial inventory for Georgia was compiled for 2014. The larger point sources of air pollution will continue to submit emissions data on an annual basis as required by the AERR. Emissions from the rest of the point sources, the nonpoint source portion, and the onroad and nonroad mobile sources continue to be quantified on a three-year cycle.

The inventory will be updated and maintained on a three-year cycle. As required by the AERR, future comprehensive emissions inventories will be compiled for 2017, 2020, 2023, 2026, 2029, and 2032.

3.2 Contingency Provisions for Maintenance

Section 175A(d) of the CAA requires that the maintenance plan include provisions for contingency measures that would promptly be implemented to correct a violation of the standard, should this occur, after redesignation of an area to attainment. The measures may include rules or other measures that are not yet effective that EPD agrees to adopt and implement, as expeditiously as practicable, when required by this plan. The minimum requirement for contingency provisions is the implementation of all measures that were contained in the SIP for the area (i.e., the nonattainment plan) before the redesignation. In addition, EPA guidance (John Calcagni memo dated September 4, 1992) specifies the following pertaining to contingency provisions in the maintenance plan:

- identification of additional measures that would be considered for implementation should a violation occur;
- identification of triggers for the implementation of additional contingency measures; and
- a schedule and procedure for adoption and implementation of additional measures (with time limit).

3.2.1 Contingency Plan

Section 175A(d) of the CAA requires that the maintenance plan include provisions for contingency measures that would promptly be implemented by the state to correct any violation of the 8-hour ozone NAAQS after redesignation of an area as an attainment area. A list of potential contingency measures that could be considered for future implementation in such an event should also be included in the maintenance plan.

EPD has developed a contingency plan for the Atlanta 2008 8-hour ozone nonattainment area. Contingency measures are intended to provide further emission reductions if violations of the 8-hour ozone NAAQS occur after redesignation to attainment. Consistent with this plan, EPD agrees to adopt and implement, as expeditiously as practicable, the necessary corrective actions for attainment of the standard. The contingency measures as described below would be adopted and implemented within 24 months of a contingency trigger unless a period longer than 24 months is warranted and

approved by EPA. In this case, EPD would provide a detailed technical and/or economic analysis to EPA demonstrating why a longer schedule is required.

EPD will use actual ambient monitoring and emissions inventory data as the indicators to determine whether contingency measures would be implemented. In accordance with 40 CFR Part 58, ambient ozone monitoring data that indicates an exceedance of the ozone NAAQS level will begin the process to implement these contingency measures according to the protocols identified below. The contingency plan provides for corrective responses should the 8-hour ozone NAAQS be violated, or if emissions in the Atlanta maintenance area increase significantly above current levels.

3.2.1.1 Tier I

A Tier I trigger will apply where no actual violation of the 2008 8-hour ozone standard has occurred, but where the state finds monitored ozone levels indicating that an actual ozone NAAQS violation may be imminent. A pattern will be deemed to exist when there are two consecutive ozone seasons in which the 4th highest values are 0.076 ppm or greater at a single monitor within the Atlanta nonattainment area. The trigger date will be 60 days from the date that the state observes a 4th highest value of 0.076 ppm or greater at a monitor for which the previous season had a 4th highest value of 0.076 ppm or greater.

If a Tier I trigger is activated, EPD will develop a plan identifying additional voluntary measures that can be implemented. Possible voluntary measures could include the following types of measures or any other measure deemed appropriate and effective at the time the selection is made:

- Clean Air Force Campaign Strategies
- Additional GDOT Marketing Campaigns
- Implementation of diesel retrofit programs, including incentives for performing retrofits for fleet vehicle operations;
- Alternative fuel programs for fleet vehicle operations;
- Gas can and lawnmower replacement programs;
- Voluntary engine idling reduction programs.

If the 4th highest exceedance occurs early in the season, EPD will work with entities identified in the plan to determine if the measures can be implemented during the current season, otherwise, EPD will implement the plan for the following ozone season.

By May 1 of the year following the ozone season in which the Tier I trigger has been activated, EPD will complete sufficient analyses to begin adoption of necessary rules for ensuring attainment and maintenance of the 2008 8-hour ozone NAAQS. The rules would become state effective by the following year.

3.2.1.2 Tier II

A Tier II trigger is activated when any quality assured ozone design value is equal to or greater than 0.076 ppm at a monitor in the Atlanta maintenance area. The trigger date will be 60 days from the date that the state observes a 4th highest value that, when averaged with the two previous ozone seasons' fourth highest values, would result in a three-year average equal to or greater than 0.076 ppm. Alternately, a Tier II trigger is activated if the periodic emission inventory updates (based on the triannual AERR) reveal excessive or unanticipated growth greater than 10% in NO_x or VOC

emissions over the attainment or intermediate emissions inventories for the Atlanta maintenance area.

In the case that a Tier II trigger is activated, EPD will conduct a comprehensive analysis, based on quality-assured ambient data that will examine:

- the severity of the trigger condition;
- the meteorological conditions (in the case of an ambient concentration trigger) associated with the trigger condition;
- potential contributing local emissions sources;
- potential contributing emissions resulting from regional or long-range transport;
- the geographic applicability of possible contingency measures;
- emission trends, including implementation timelines of potential control measures;
- timelines of "on-the-books" (adopted) measures that are not yet fully implemented; and
- current and recently identified control technologies.

All monitored ozone data will be verified through EPD's Ambient Monitoring Program quality assurance and certification process. This process will include an analysis of available data regarding the air quality, meteorology, transport, and related activities in the area to determine the possible cause of the violation.

EPD commits to implement within 24 months of a Tier II trigger, or as expeditiously as practicable, at least one of the control measures listed in the paragraph below or other contingency measures that may be determined to be more appropriate based on the analyses performed. If it is determined that a longer schedule is required to implement specific contingency measures, EPD will submit a detailed technical and/or economic analysis to EPA demonstrating why a longer schedule is required and request EPA approval of the proposed schedule.

If the analysis required above determines emissions from the local area are contributing to the trigger condition, EPD will evaluate those measures as specified in Section 172 of the CAA for control options as well as other available measures. If a new measure/control is already promulgated and scheduled to be implemented at the federal or state level, and that measure/control is determined to be adequate, additional local controls may be unnecessary. Under Section 175A(d), the minimum requirement for contingency measures is the implementation of all measures that were contained in the SIP before the redesignation. Currently all such measures are in effect for the Atlanta Area; however, an evaluation of those measures, such as RACT, can be performed to determine if those measures are adequate or up-to-date. In addition to those identified above, contingency measure(s) will be selected from the following types of measures or from any other measure deemed appropriate and effective at the time the selection is made:

- Reasonably Available Control Measures (RACM) for sources of VOC and NO_x.
- Reasonably Available Control Technology (RACT) for point sources of VOC and NO_x, specifically the adoption of new and revised RACT rules based on Groups II, III, and IV CTGs.
- Expansion of RACM/RACT to area(s) of transport within the State.
- Other measures deemed appropriate at the time as a result of advances in control technologies.
- Additional NO_x reduction measures yet to be identified.

Any resulting contingency measure(s) will be based upon cost effectiveness, emission reduction potential, economic and social considerations, ease and timing of implementation, and other appropriate factors.

Adoption of additional control measures is subject to necessary administrative and legal processes. EPD will solicit input from interested and affected persons (stakeholders) in the area prior to selecting appropriate contingency measures. No contingency measure will be implemented without providing the opportunity for full public participation. This process will include publication of notices, an opportunity for public hearing, and other measures required by Georgia law.

3.2.2 Tracking Program for Ongoing Maintenance

EPD will continue operation of an appropriate air quality monitoring network in accordance with 40 CFR Part 58, Ambient Air Quality Surveillance and associated appendices. EPD will continue to update its emissions inventory at least once every three years. In addition to the emissions inventory for 2014, the emissions inventory base year, and the last year of the maintenance plan, 2030, the interim years of 2018, 2022, and 2026 were selected to show a trend analysis for maintenance of the 2008 8-hour ozone NAAQS. Tracking the progress of the maintenance plan also includes performing reviews of the updated emissions inventories for the area using the latest emissions factors, models, and methodologies. For these periodic inventories, EPD will review the assumptions made for projected growth of activity levels.

4.0 Motor Vehicle Emissions Budget

The transportation conformity rule (40 CFR 93.100 - 40 CFR 93.129) ensures that projects and plans funded by the Federal Highway Administration and the Federal Transit Administration conform to air quality SIPs and maintenance plans. In the case of a NAAQS maintenance plan, the rule requires a motor vehicle emissions budget (MVEB) to be established for the last year of the plan's maintenance period. The rule, at 40 CFR 93.124(a), describes a motor vehicle emissions budget as "...the implementation plan's estimate of future [motor vehicle] emissions." Such budgets establish caps on motor vehicle emissions; projected emissions from transportation plans and programs must be equal to or less than these caps for a positive conformity determination to be made. Transportation conformity determinations are required for federally-funded highway and transit projects that are classified as nonexempt before they are funded and approved and for transportation plans and transportation improvement programs.

4.1 Pollutants

For this maintenance plan, MVEBs will be set for NO_x and VOC emissions. 40 CFR Parts 93.119(f)(1) through (10) identify the ozone pollutants which must be analyzed for transportation conformity purposes. These parts of the rule are listed below:

§119(f)(1) - VOC in ozone areas; and

§119(f)(2) - NO_x in ozone areas, unless the EPA Administrator determines that additional reductions in NO_x would not contribute to attainment.

4.2 Methodology

In preparation of this Atlanta Area Ozone Maintenance Plan, EPD worked closely with the Georgia Department of Transportation (GDOT) and the Atlanta Regional Commission (ARC) to develop the estimates of mobile source emissions for the Atlanta nonattainment area. ARC is the metropolitan planning organization (MPO) for Metro Atlanta Area. Mobile source inventories for 2014 and 2030 were developed using the latest available planning assumptions, the most recent travel demand model, EPA's latest motor vehicle emission simulator (MOVES2014a) model, and vehicle population and age distributions developed from registration data obtained from R.L. Polk, a division of IHS. The methodology used to calculate the highway mobile source emissions on which the 2014 and 2030 MVEBs are based is discussed below.

MOVES2014a was run in "inventory mode" producing raw emissions in g/hr but aggregated to "per day" time frame with mass units converted to "tons" for this maintenance plan ("tons/day"). In this mode, emissions are estimated by multiplying activity (e.g., VMT, vehicles, and starts) by emission factors (mass pollutant per mile for VMT, per vehicle for vehicle population, and per start for starts which involve parked vehicles being turned on and driven). See Appendix A-10 for more details on the development of the travel demand model and the determination of emissions.

The MOVES2014a motor vehicle emissions model was used to calculate 2014 and 2030 emission factors with all currently known 2014 and 2030 mobile source control rules in place. The emission rates reflect all federal controls, such as the Federal Motor Vehicle Control Program including Tier 1,

Tier 2 tailpipe standards, the National Low Emission Vehicle program, and Tier 3 emission standards. These standards phase in beginning in 2017 for cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty trucks. Tier 3 fuel standards that require lower sulfur gasoline phase in beginning in 2017. The model also incorporates heavy-duty engine and vehicle greenhouse gas (GHG) regulations that phase in during model years 2014-2018, as well as the second phase of light-duty vehicle GHG regulations that phase in for model years 2017-2025.

The ARC travel demand model is developed and maintained by the Atlanta Regional Commission in cooperation with GDOT. Inputs to the model are socioeconomic data and the highway network that consists of roadway segments (links) and intersections (nodes). Outputs include vehicle activity, number of trips, vehicle population, and other data. The use of a county-specific travel demand model for transportation conformity calculations is consistent with the transportation conformity rule at 40 CFR 93.122(b) and (d), which requires a network-based travel model emissions estimation methodology as the use of such procedures has been the previous practice of the ARC.

Section 93.105(b) of the Transportation Conformity Rule and Sections 106(g) and 106(h) of Georgia's transportation conformity SIP require interagency consultation for SIP development. Accordingly, a detailed listing of the procedures and planning assumptions used for the regional emissions analysis supporting development of the MVEB was presented to the ARC interagency consultation committee for review on December 9, 2015. The assumptions used to develop metro Atlanta's conforming Long Range Transportation Plan and Transportation Improvement Program were also used to develop the network and emissions for this maintenance plan MVEB.

4.3 Motor Vehicle Emissions Budgets and Safety Margins

The projected 2030 on-road motor vehicle emissions for NO_x and VOC are 37.57 and 32.67 tons per day, respectively. As presented in Section 3.1.2.2, the overall surplus or overall emissions reduction from 2014 for all sectors is 160.23 tons per day for NO_x and 55.61 tons per day for VOCs. A portion of these emission reductions will be used as a safety margin for the 2030 MVEBs. The safety margin allotted for the MVEB is based on determining a worst-case daily emissions projection. The worst-case scenario increased VMT by ~35%, increased vehicle population by ~30%, and increased vehicle starts by ~25%. Also, the average age of vehicles was increased by 2 years. Safety margins do not apply to the 2014 MVEBs (only applies to 2030 MVEBs).

The worst-case 2030 daily motor vehicle emissions projection for NO_x is 54 percent above the projected 2030 on-road emissions. In a worst-case scenario, the needed safety margin allotment for the 2030 MVEB would be 20.43 tons per day resulting in an overall MVEB of 58 tons per day. This leaves a remaining overall safety margin of 139.80 tons per day for NOx. The worst-case 2030 daily motor vehicle emissions projection for VOC is 59 percent above the projected 2030 on-road emissions. In a worst-case scenario, the needed safety margin allotment for the 2030 MVEB would be 19.33 tons per day resulting in an overall MVEB of 52 tons per day. This leaves a remaining overall safety margin of 36.28 tons per day for VOCs.

The 2014 and projected 2030 on-road emissions, MVEBs, and safety margins (listed as "N/A" for 2014) are presented in Tables 4-1 and 4-2. The additional emission allotted for the safety margin is also added to the overall inventory as presented in Tables 4-3 and 4-4.

Table 4-1. 2014 Motor Vehicle Emissions, Safety Margins and Emissions Budgets

Pollutant	2014 On-Road Emissions (tons per day)	Safety Margin Allotted to MVEB (tons per day)	MVEB (tons per day)
NO_x	170.15	N/A	170.15
VOC	81.76	N/A	81.76

Table 4-2. 2030 Motor Vehicle Emissions, Safety Margins and Emissions Budgets

Pollutant	2030 Projected On-Road Emissions (tons per day)	% Above 2030 Projection Allotted to MVEB	Safety Margin Allotted to MVEB (tons per day)	MVEB with Safety Margin included (tons per day)
NO_x	37.57	54	20.43	58
VOC	32.67	59	19.33	52

Table 4-3. Summary of Projected NO_x Emissions – Total of All Sectors (tons, summer day)

Source	2014 (*attainment*)	2018	2022	2026	2030 (*maintenance*)
Point - total	31.36	31.11	30.85	30.60	30.34
Area - total	4.88	4.93	4.97	5.02	5.06
Non-road - total	76.69	69.99	63.29	56.59	49.89
Onroad	170.15	137.01	103.86	70.72	37.57
Onroad Safety Margin					20.43
Total	**283.09**	243.03	202.98	162.92	**143.29**

Table 4-4. Summary of Projected VOC Emissions – Total of All Sectors (tons, summer day)

Source	2014 (attainment)	2018	2022	2026	2030 (maintenance)
Point - total	11.24	11.25	11.26	11.27	11.28
Area - total	119.89	118.52	117.16	115.79	114.42
Non-road - total	53.38	53.11	52.83	52.56	52.28
Onroad	81.76	69.49	57.22	44.94	32.67
Onroad Safety Margin					19.33
Total	**266.25**	252.35	238.45	224.54	**229.97**

Conclusion

Section 107(d) of the CAA states that an area can be redesignated to attainment if the following conditions are met:

1. The EPA has determined that the NAAQS has been attained.
2. The applicable implementation plan has been fully approved by EPA under Section 110(k) of the CAA.
3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
4. The state has met all applicable requirements for the area under Title 1 (Part A, Section 110 and Part D) of the CAA.
5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area as required under Section 175A of the CAA.

The supporting documentation to show that the above conditions have been met for metro Atlanta is contained in this document. Based on the 2013-2015 monitored design values for the Atlanta nonattainment area, EPA has proposed in the Federal Register a determination that the Atlanta nonattainment area has attained the 2008 8-hour ozone NAAQS (81 FR 26515). The maintenance demonstration in this document shows that, based on the comparison of projected emissions to attainment year emissions, emissions are expected to stay at or below 2014 levels through the year 2030. This document also contains provisions for contingency measures should emissions levels or ambient concentrations rise unexpectedly. EPA's concurrence that the improvement in the metro Atlanta Area's air quality is due to permanent and enforceable reductions in emissions and EPA's approval of this document will satisfy Items 1 through 5 above. Therefore, EPD requests that the Atlanta Area be redesignated to attainment with respect to the 2008 8-hour ozone NAAQS as expeditiously as possible.