

Georgia Department of Natural Resources

**Environmental Protection Division • Air Protection Branch
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Mark Williams, Commissioner

Judson H. Turner, Director

February 29, 2012

Gwendolyn Keyes Fleming
Regional Administrator
U.S. EPA, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-3104

Re: GA EPD's Response to EPA's December 8, 2011 Preliminary Ozone Nonattainment Area Boundaries

Dear Ms. Fleming:

This letter and attached enhanced technical analysis is in response to EPA's December 8, 2011 letter and Technical Support Document (TSD) titled "Georgia - Area Designations for the 2008 Ozone National Ambient Air Quality Standards" in which EPA recommended that 18 counties in the Atlanta-Sandy Springs-Gainesville, GA-AL Combined Statistical Area (CSA) be designated nonattainment for the 2008 ozone NAAQS. This letter and attachment supplement our previously submitted recommendations dated October 25, 2011.

A list of 2009-2011 8-hour ozone design values for all monitors in Georgia is attached in Table 1 and a spatial plot of the 2009-2011 8-hour ozone design values is attached in Figure 1. This data shows that all areas in Georgia, except for Atlanta, are complying with the 2008 ozone standard of 0.075 ppm.

A nonattainment area is defined in Clean Air Act (CAA) section 107(d)(1)(A)(i) as "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant". Of the 18 counties recommended for nonattainment by EPA in its December 8, 2011 letter, only four have monitored air quality that "does not meet" the 2008 ozone National Ambient Air Quality Standard (NAAQS). In fact, five of them (Coweta, Douglas, Gwinnett, Paulding, and Rockdale) have monitored air quality that meets the 2008 ozone NAAQS. As a result, the determination of which, if any, additional counties without violating monitors should be included in the nonattainment area comes down to a determination of which ones "contribute to ambient air quality" in the four counties that have monitored air quality exceeding the standard.

The Clean Air Act makes "air pollution prevention . . . and air pollution control...the primary responsibility of States and local governments¹." Even though the Clean Air Act gives EPA the authority to set NAAQS and to make nonattainment designations, the Clean Air Act gives states the responsibility to make recommendations on which areas are designated

¹ CAA section 101(a)(3). See also CAA section 107(a).

nonattainment and to develop and implement the SIPs that bring areas into compliance with the NAAQS. In addition, the states know their local emission sources, meteorology, and air quality situation much better than EPA does. Therefore, EPA should grant deference to the states' boundary recommendations as long as those recommendations are consistent with the Clean Air Act because the states are better situated to know what it takes to bring an area into compliance with a NAAQS than EPA. The Clean Air Act limits EPA's authority to revise a state's recommended designation (including boundaries) to situations where it is "necessary²" to do so. As discussed in more detail below and in the attachment, we continue to believe that our October 25, 2011 recommendation provides for timely compliance with the NAAQS, minimizes the regulatory burden on the state, is less costly to affected sources, and fully complies with the Clean Air Act. We do not believe that the inclusion of the additional counties that EPA intends to include in the nonattainment area are necessary or appropriate because it imposes significantly more regulatory burden and higher compliance costs without having a material impact on the nonattaining area's ability to comply with the standard in a timely manner.

The current ozone design value in Atlanta is 80 ppb. This is only 5 ppb above the standard. And as described above, more than half of the Atlanta area ozone monitors are already in compliance with the 2008 ozone NAAQS. EPA recently proposed a classifications rule³ in the Federal Register that would designate the area as "Marginal," meaning that the area should come into compliance soon with minimal, if any, additional measures beyond what are already in process of being implemented. In the Preamble to the classifications rule, EPA said the following about Marginal areas:

"Many Marginal areas are expected to attain the 2008 NAAQS within 3 years of designation (e.g., in 2015) due to reductions of ozone precursors resulting from a number of federal and state emission reduction programs that have already been adopted. Such programs include more stringent emission standards for onroad and nonroad vehicles and equipment (with associated fleet turnover), regional reductions in power plant emissions to address interstate transport, and potential future programs such as the boiler maximum achievable control technology standards. The EPA estimates that in about half of the Marginal areas, these reductions in conjunction with other ongoing state and federal controls should be sufficient to bring about attainment."

In support of the above statements, EPA published information⁴ in the docket for the classifications rule that predicts that the entire Atlanta area could achieve the 75 ppb ozone

² CAA section 107(d)(1)(B)(ii)

³ 77 FR 8197, "Implementation of the 2008 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications Approach, Attainment Deadlines and Revocation of the 1997 Ozone Standards for Transportation Conformity Purposes."

⁴ Document ID: EPA-HQ-OAR-2010-0885-0011, "Spreadsheet estimates 2015 design values for hypothetical 8-hour ozone nonattainment areas for the 75 ppb NAAQS for the purpose of estimating the number of marginal nonattainment areas that are expected to attain the NAAQS by their attainment date (2015)." The 2008-2010 observed ambient ozone design values are projected to the future using the modeled average percent per year change in ozone from the 2014 CSAPR final rule modeling (CSAPR remedy case). See pg. 82.

NAAQS by 2015 without any additional pollution control measures and regardless of the size of the nonattainment boundary.

In the September 22, 2011 memorandum from Assistant Administrator Gina McCarthy titled, "Implementation of the Ozone National Ambient Air Quality Standard," EPA stated that they will be "mindful of the President's and Administrator's direction that in these challenging economic times EPA should reduce uncertainty and minimize the regulatory burdens on state and local governments." In general, a smaller area is consistent with the President's directive to reduce uncertainty and minimize the regulatory burdens on state governments, while a larger area is not consistent with this directive. A reasonable interpretation of "contributes to" in Clean Air Act section 107(d)(1)(A)(i) would be that inclusion of an area that currently is in compliance⁵ with the standard as part of the nonattainment area is necessary because it would have a material impact on the nonattaining area's ability to comply with the standard. Otherwise, the only thing that is accomplished by including the compliant area within the nonattainment boundary is to increase the cost of compliance, increase the scope of government control and bureaucracy, and to potentially harm the economic fortunes of the compliant area.

One specific Clean Air Act requirement that is influenced by the size of a nonattainment area is the Clean Air Act section 172(c)(2)⁶ requirement for Reasonable Further Progress (RFP). Incorporating counties that have minimal potential for emissions reductions may make it very difficult for Georgia to meet RFP requirements. For example, in the past, emission reductions associated with the turnover of Atlanta's mobile source fleet provided a reliable mechanism for meeting RFP (i.e., newer cars have lower emissions). However, the emissions benefit from fleet turnover continues to decline and could eventually result in emissions increases if vehicle miles traveled continues to increase and vehicle emission standards do not improve. This potential RFP problem extends to counties with minimal point source emissions and counties where the point sources are already very well controlled. As a result, including counties where EPD has little or no ability to obtain further emission reductions may make it very difficult to meet the Clean Air Act RFP requirement.

EPD urges EPA to reconsider each of the fourteen counties without violating monitors from inclusion in a nonattainment area.

EPA's December 4, 2008, memorandum "Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards" contains the factors that EPA indicated it would consider in determining nonattainment boundaries for this ozone standard⁷. The attached technical analysis, performed by EPD, followed EPA's weight-of-evidence approach documented in their December 8, 2011 TSD with the following important updates:

1. GA EPD used 2009-2011 ozone measurements instead of 2008-2010 ozone measurements since they are the most recent quality-assured and certified ozone monitoring data.

⁵ Or has no monitoring data.

⁶ Or Clean Air Act section 182(b)(1) if EPA uses Subpart 2 for ozone designations.

⁷ It should be noted that this guidance did not go through public notice and comment rulemaking, was not subject to any judicial review, and explicitly states that it is nonbinding.

G. Keyes Fleming

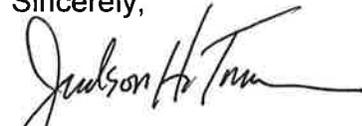
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2. GA EPD used the distance from a county centroid to the violating monitor in addition to using the criteria of "next to counties with violating monitors".
3. GA EPD used NO_x and VOC emission density (tons/mile²) in addition to county total emissions (tons).
4. GA EPD included data regarding reduced NO_x emissions from the two coal-fired power plants in Bartow and Coweta Counties.
5. GA EPD used the county percent contribution to the total CSA value (county value/CSA total value) and/or percent above/below the CSA average ([county value/CSA average value] – 1.0) for each factor when evaluating whether or not that factor indicates if county is likely to contribute to one of the four violating monitors.
6. GA EPD used site-specific wind speed and wind direction data for the most recent four years to correlate ozone exceedance days at individual monitors with upwind counties instead of using National Weather Service (NWS) data from the Atlanta International Airport station to determine predominant wind direction regardless of measured ozone concentrations.

GA EPD has used this weight-of-evidence analysis to provide information regarding why each of the fourteen counties without violating monitors should not be included in a nonattainment area for the 2008 ozone standard. As a result, the following four Georgia counties are recommended to be designated nonattainment under the revised 2008 ozone NAAQS: Cobb, DeKalb, Fulton, and Henry. A map with the location of these four counties is contained in Figure 2. As shown in Table 2, Georgia EPD recommends that all other counties be designated as unclassifiable/attainment for the 2008 ozone standard.

If you have any questions or need more information, please contact Jac Capp at (404) 363-7016 or Jimmy Johnston at (404) 363-7014.

Sincerely,



Judson H. Turner
Director

JHT:JJ:jwb

Attachments

- c: Scott Davis, U.S. EPA Region 4
Jac Capp, Branch Chief, Air Protection Branch
Jimmy Johnston, Program Manager, Planning & Support

Table 1. 2009-2011 DVs of 8-hour ozone at FRM monitors (data taken from AMP480, Preliminary Design Value Report on February 9, 2012).

AIRS_ID	County	Station Name	2009-2011 DV
Atlanta-Sandy Springs-Gainesville, GA-AL			
13-067-0003	Cobb, GA	Kennesaw	0.078
13-077-0002	Coweta, GA	Newnan	0.067
13-085-0001	Dawson, GA	Dawsonville	0.068
13-089-0002	DeKalb, GA	South DeKalb	0.077
13-097-0004	Douglas, GA	Douglasville	0.074
13-121-0055	Fulton, GA	Confederate Ave.	0.080
13-135-0002	Gwinnett, GA	Gwinnett	0.075
13-151-0002	Henry, GA	McDonough	0.078
13-223-0003	Paulding, GA	Dallas / Yorkville	0.071
13-247-0001	Rockdale, GA	Conyers	0.075
Athens-Clarke County, GA			
13-059-0002	Clarke, GA	Athens	0.071
Augusta-Richmond County, GA-SC			
13-245-0091	Richmond, GA	Augusta	0.069
13-073-0001	Columbia, GA	Evans	0.068
45-003-0003	Aiken, SC	SC Aiken - Jackson	0.067
45-037-0001	Edgefield, SC	SC Edgefield - Trenton	0.063
Chattanooga-Cleveland-Athens, TN-GA			
47-065-4003	Hamilton, TN	TN-Chatt VAAP	0.073
47-065-1011	Hamilton, TN	TN-Sequoyah	0.072
Columbus-Auburn-Opelika, GA-AL			
13-215-0008	Muscogee, GA	Columbus Airport	0.067
01-113-0002	Russell, AL	AL - Russell Co	0.066
Macon-Warner Robins-Fort Valley, GA			
13-021-0012	Bibb, GA	Macon SE	0.073
Dalton, GA			
13-213-0003	Murray, GA	Fort Mountain	0.071
Other area			
13-055-0001	Chattooga, GA	Summerville	0.067
13-261-1001	Sumter, GA	Leslie	0.065
13-127-0006	Glynn, GA	Brunswick	0.061
13-051-0021	Chatham, GA	Savannah	0.064

2008 Ozone NAAQS NAA Designation Reference Map

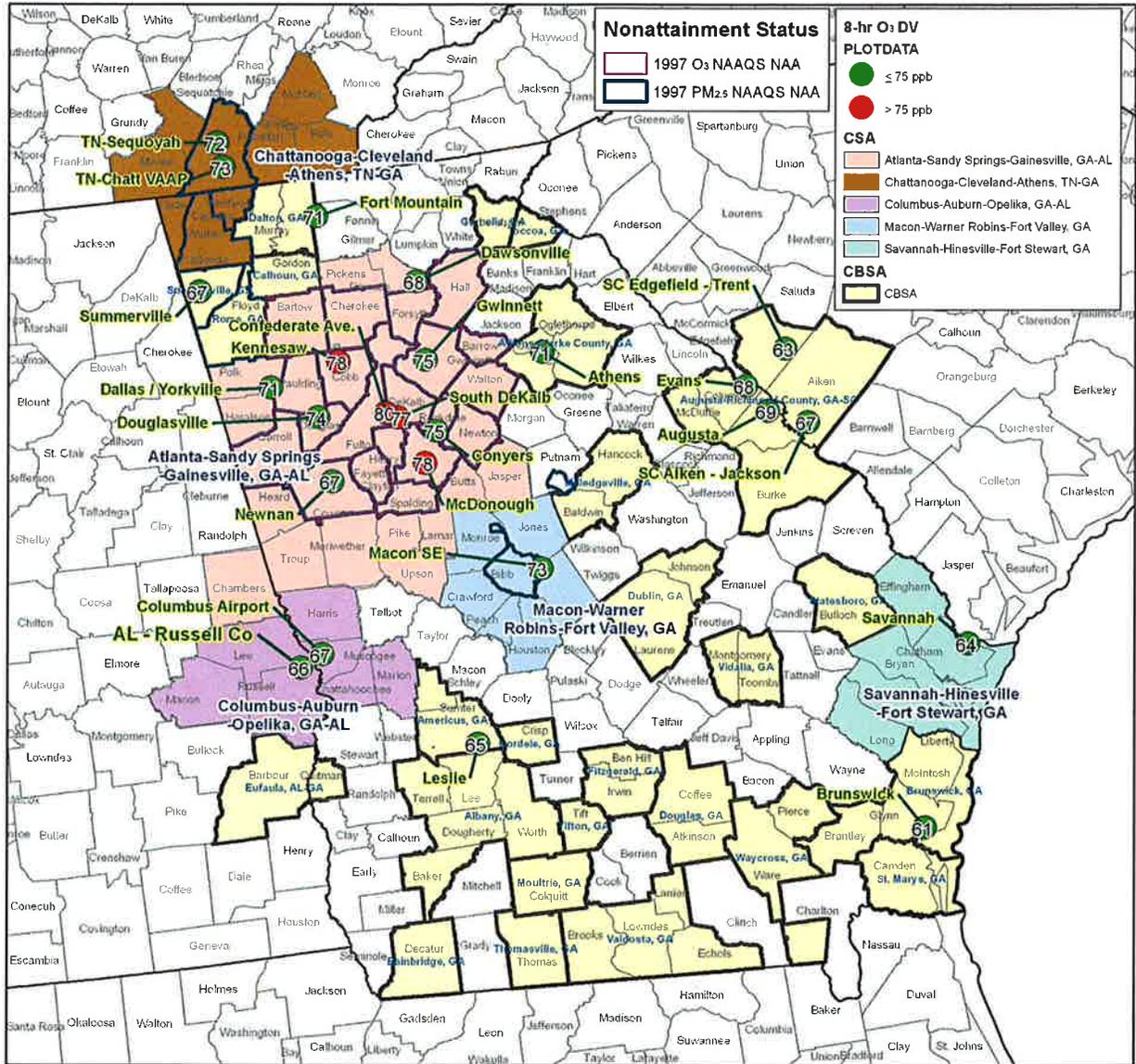


Figure 1. Ozone monitors and CSA/CBSA boundaries associated with potential nonattainment areas in Georgia under the 2008 ozone NAAQS. Ozone design values are based on 2009-2011 ozone data. Nonattainment area boundaries under the 1997 ozone NAAQS are outlined in red, and nonattainment area boundaries under the 1997 PM_{2.5} NAAQS are outlined in blue.



Figure 2: Map of Atlanta nonattainment area recommendations for the revised 2008 ozone NAAQS.

Table 2. RECOMMENDED DESIGNATION STATUS FOR GEORGIA COUNTIES

County Name	Designation Recommendation
Appling	Attainment/Unclassifiable
Atkinson	Attainment/Unclassifiable
Bacon	Attainment/Unclassifiable
Baker	Attainment/Unclassifiable
Baldwin	Attainment/Unclassifiable
Banks	Attainment/Unclassifiable
Barrow	Attainment/Unclassifiable
Bartow	Attainment/Unclassifiable
Ben Hill	Attainment/Unclassifiable
Berrien	Attainment/Unclassifiable
Bibb	Attainment/Unclassifiable
Bleckley	Attainment/Unclassifiable
Brantley	Attainment/Unclassifiable
Brooks	Attainment/Unclassifiable
Bryan	Attainment/Unclassifiable
Bulloch	Attainment/Unclassifiable
Burke	Attainment/Unclassifiable
Butts	Attainment/Unclassifiable
Calhoun	Attainment/Unclassifiable
Camden	Attainment/Unclassifiable
Candler	Attainment/Unclassifiable
Carroll	Attainment/Unclassifiable
Catoosa	Attainment/Unclassifiable
Charlton	Attainment/Unclassifiable
Chatham	Attainment/Unclassifiable
Chattahoochee	Attainment/Unclassifiable
Chattooga	Attainment/Unclassifiable
Cherokee	Attainment/Unclassifiable
Clarke	Attainment/Unclassifiable
Clay	Attainment/Unclassifiable
Clayton	Attainment/Unclassifiable
Clinch	Attainment/Unclassifiable
Cobb	Nonattainment
Coffee	Attainment/Unclassifiable
Colquitt	Attainment/Unclassifiable
Columbia	Attainment/Unclassifiable
Cook	Attainment/Unclassifiable
Coweta	Attainment/Unclassifiable
Crawford	Attainment/Unclassifiable
Crisp	Attainment/Unclassifiable
Dade	Attainment/Unclassifiable
Dawson	Attainment/Unclassifiable

Table 2. RECOMMENDED DESIGNATION STATUS FOR GEORGIA COUNTIES

County Name	Designation Recommendation
Decatur	Attainment/Unclassifiable
DeKalb	Nonattainment
Dodge	Attainment/Unclassifiable
Dooly	Attainment/Unclassifiable
Dougherty	Attainment/Unclassifiable
Douglas	Attainment/Unclassifiable
Early	Attainment/Unclassifiable
Echols	Attainment/Unclassifiable
Effingham	Attainment/Unclassifiable
Elbert	Attainment/Unclassifiable
Emanuel	Attainment/Unclassifiable
Evans	Attainment/Unclassifiable
Fannin	Attainment/Unclassifiable
Fayette	Attainment/Unclassifiable
Floyd	Attainment/Unclassifiable
Forsyth	Attainment/Unclassifiable
Franklin	Attainment/Unclassifiable
Fulton	Nonattainment
Gilmer	Attainment/Unclassifiable
Glascock	Attainment/Unclassifiable
Glynn	Attainment/Unclassifiable
Gordon	Attainment/Unclassifiable
Grady	Attainment/Unclassifiable
Greene	Attainment/Unclassifiable
Gwinnett	Attainment/Unclassifiable
Habersham	Attainment/Unclassifiable
Hall	Attainment/Unclassifiable
Hancock	Attainment/Unclassifiable
Haralson	Attainment/Unclassifiable
Harris	Attainment/Unclassifiable
Hart	Attainment/Unclassifiable
Heard	Attainment/Unclassifiable
Henry	Nonattainment
Houston	Attainment/Unclassifiable
Irwin	Attainment/Unclassifiable
Jackson	Attainment/Unclassifiable
Jasper	Attainment/Unclassifiable
Jeff Davis	Attainment/Unclassifiable
Jefferson	Attainment/Unclassifiable
Jenkins	Attainment/Unclassifiable
Johnson	Attainment/Unclassifiable
Jones	Attainment/Unclassifiable

Table 2. RECOMMENDED DESIGNATION STATUS FOR GEORGIA COUNTIES

County Name	Designation Recommendation
Lamar	Attainment/Unclassifiable
Lanier	Attainment/Unclassifiable
Laurens	Attainment/Unclassifiable
Lee	Attainment/Unclassifiable
Liberty	Attainment/Unclassifiable
Lincoln	Attainment/Unclassifiable
Long	Attainment/Unclassifiable
Lowndes	Attainment/Unclassifiable
Lumpkin	Attainment/Unclassifiable
McDuffie	Attainment/Unclassifiable
McIntosh	Attainment/Unclassifiable
Macon	Attainment/Unclassifiable
Madison	Attainment/Unclassifiable
Marion	Attainment/Unclassifiable
Meriwether	Attainment/Unclassifiable
Miller	Attainment/Unclassifiable
Mitchell	Attainment/Unclassifiable
Monroe	Attainment/Unclassifiable
Montgomery	Attainment/Unclassifiable
Morgan	Attainment/Unclassifiable
Murray	Attainment/Unclassifiable
Muscogee	Attainment/Unclassifiable
Newton	Attainment/Unclassifiable
Oconee	Attainment/Unclassifiable
Oglethorpe	Attainment/Unclassifiable
Paulding	Attainment/Unclassifiable
Peach	Attainment/Unclassifiable
Pickens	Attainment/Unclassifiable
Pierce	Attainment/Unclassifiable
Pike	Attainment/Unclassifiable
Polk	Attainment/Unclassifiable
Pulaski	Attainment/Unclassifiable
Putnam	Attainment/Unclassifiable
Quitman	Attainment/Unclassifiable
Rabun	Attainment/Unclassifiable
Randolph	Attainment/Unclassifiable
Richmond	Attainment/Unclassifiable
Rockdale	Attainment/Unclassifiable
Schley	Attainment/Unclassifiable
Screven	Attainment/Unclassifiable
Seminole	Attainment/Unclassifiable
Spalding	Attainment/Unclassifiable

Table 2. RECOMMENDED DESIGNATION STATUS FOR GEORGIA COUNTIES

County Name	Designation Recommendation
Stephens	Attainment/Unclassifiable
Stewart	Attainment/Unclassifiable
Sumter	Attainment/Unclassifiable
Talbot	Attainment/Unclassifiable
Taliaferro	Attainment/Unclassifiable
Tattnall	Attainment/Unclassifiable
Taylor	Attainment/Unclassifiable
Telfair	Attainment/Unclassifiable
Terrell	Attainment/Unclassifiable
Thomas	Attainment/Unclassifiable
Tift	Attainment/Unclassifiable
Toombs	Attainment/Unclassifiable
Towns	Attainment/Unclassifiable
Treutlen	Attainment/Unclassifiable
Troup	Attainment/Unclassifiable
Turner	Attainment/Unclassifiable
Twiggs	Attainment/Unclassifiable
Union	Attainment/Unclassifiable
Upton	Attainment/Unclassifiable
Walker	Attainment/Unclassifiable
Walton	Attainment/Unclassifiable
Ware	Attainment/Unclassifiable
Warren	Attainment/Unclassifiable
Washington	Attainment/Unclassifiable
Wayne	Attainment/Unclassifiable
Webster	Attainment/Unclassifiable
Wheeler	Attainment/Unclassifiable
White	Attainment/Unclassifiable
Whitfield	Attainment/Unclassifiable
Wilcox	Attainment/Unclassifiable
Wilkes	Attainment/Unclassifiable
Wilkinson	Attainment/Unclassifiable
Worth	Attainment/Unclassifiable