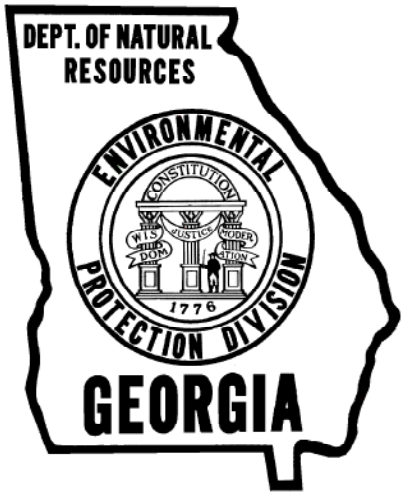
Revision to
Georgia's State Implementation Plan
To Incorporate The Requirements of
Clean Air Act Section 182(b)(2)(A)
For the Group IV Control Techniques Guidelines

****October 20, 2011****



State of Georgia
Department of Natural Resources
Environmental Protection Division
Air Protection Branch

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Clean Air Act (CAA) Section 182(b)(2)(A) provides that for certain nonattainment areas, States must revise their State Implementation Plans (SIPs) to include reasonably available control technology (RACT) for each category of volatile organic compound (VOC) sources covered by a control techniques guidelines (CTG) document issued between November 15, 1990, and the date of attainment. In addition, Section 182(b)(2) requires that a CTG issued between November 15, 1990, and the date of attainment include the date by which States subject to Section 182(b) must submit SIP revisions in response to the CTG.

EPA addressed source categories of VOC emissions in accordance with CAA Section 183(e) on October 7, 2008, by amending 40 CFR Part 59 Subpart A Section 59.1 for Consumer and Commercial Products, Group IV [73 FR 58481]: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives.

States with moderate or above ozone nonattainment areas as of that date were required to submit SIP revisions to EPA addressing these requirements on or before October 7, 2009.

Source categories covered under the "Group IV" heading are:

- Miscellaneous metal and plastic parts coatings;
- Automobile and light-duty truck assembly coatings;
- Fiberglass boat manufacturing materials;
- Miscellaneous industrial adhesives; and
- Aerosol coatings

EPA is addressing the Group IV source category of "aerosol coating" under 40 CFR Part 59 (i.e., as a National VOC Emission Standard).

Georgia EPD undertook the task of reviewing existing VOC control measures for industry groups covered by the federal 2008 Group IV CTGs using the Group IV CTGs and EPA's Blue Book[1]. The location of the industry groups for this study are those located in the current 20-county, Atlanta 8-hour ozone moderate non-attainment area consisting of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale,

[1] Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations-Clarification to Appendix D of November 24, 1987 Federal Register, May 25, 1988, EPA Ozone/Carbon Monoxide Program Branch, Air Quality Management Division, Office of Air Quality Planning and Standards.

Spalding and Walton counties. Each CTG contains applicability, emission limitation, compliance methods, and monitoring guidelines.

Georgia has adopted the Group IV CTGs as follows:

CTG Category	Changes to the Georgia Rules	Adoption Date	Compliance Date
Surface Coating of Miscellaneous Metal and Plastic Parts			
Miscellaneous Metal	Amended 391-3-1-.02(2)(ii)	1/25/2012	1/1/2015
Miscellaneous Plastic	New Rule 391-3-1-.02(2)(vvv)	1/25/2012	1/1/2015
Pleasure Craft	none*	not applicable	not applicable
Surface Coating of Automobile and Light-Duty Truck Mfg	Amended 391-3-1-.02(2)(t)	1/25/2012	1/1/2015
Fiberglass Boat Manufacturing Materials	New Rule 391-3-1-.02(2)(yyy)	1/25/2012	1/1/2015
Miscellaneous Industrial Adhesives	New Rule 391-3-1-.02(2)(zzz)	1/25/2012	1/1/2015

*Georgia is making a negative declaration for the pleasure craft category.

Georgia is submitting this Group IV CTG SIP revision, in accordance with CAA Section 182(b)(2)(A), to address the changes to existing VOC control measures in Georgia Chapter 391-3-1.

It is important to note that the State of Georgia does not rely on the reduction of VOCs as part of its control strategy for the attainment of the National Ambient Air Quality Standards (NAAQS) for 8-hour ozone. Anthropogenic VOCs are overwhelmed by biogenic VOCs in the Southeast, resulting in NOx limited ozone formation as detailed in the Atlanta 8-hour Ozone Attainment Demonstration submitted to EPA on October 21, 2009.

1.0 REGULATORY BACKGROUND

1.1 Atlanta Ozone Nonattainment Area

Under the former 1-hr ozone National Ambient Air Quality Standard (NAAQS), the previous 13-county Atlanta ozone nonattainment area, consisting of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale Counties, was classified as a severe nonattainment area. As a part of the nonattainment designation, Georgia EPD implemented control measures for ozone precursors VOC and NOx that fulfilled the purposes of Section 182(b)(2) for the 1-hour ozone NAAQS. These control measure provisions are still in place as part of the approved 1-hour ozone metro Atlanta maintenance plan.

On April 30, 2004, under the 1997 8-hour ozone NAAQS, the Atlanta nonattainment area was initially designated as a marginal nonattainment area and expanded from the original 13-county area by adding an additional 7-county area consisting of Barrow, Bartow, Carroll, Hall, Newton, Spalding and Walton to a 20-county, nonattainment area. Atlanta was reclassified as a moderate nonattainment area on March 6, 2008.

As presented in the Atlanta 8-hour Ozone Attainment Demonstration submitted to EPA on October 21, 2009, Georgia EPD has demonstrated that the Atlanta Nonattainment area does not rely on VOCs to meet attainment for ozone and is considered a NOx-limited area due to overwhelming naturally occurring biogenic VOCs.

The analyses of ozone, NO, and NOx data using the ozone M.A.P.P.E.R. program showed that ozone formation in Atlanta is generally transitional to NOx-limited, but when the results were binned according to the daily maximum 8-hour ozone, ozone formation wasstrongly NOx-limited on days of elevated ozone. An analysis of weekend/weekday differences in ozone concentration also indicates a generally NOx-limited regime, with ozone formation becoming more NOx-limited in recent years compared to the late 1990s.

These findings are generally in agreement with several studies of the trends and limiting factors for ozone formation in Atlanta. Pun et al. (2003)[2] investigated the weekly patterns of ozone in Atlanta and found elevated midweek concentrations compared to weekends, with stronger weekly patterns in later years (1995-1999 compared to 1986-1990), concluding that the availability of NOx drives the weekly ozone cycle in Atlanta. Analyzing various aircraft measurements, Sillman et al. (1997)[3] conclude that Atlanta ozone is mostly NOx-limited, using various indicator ratios.

[2] Pun, B. K., C. Seigneur, and W. White (2003). Day-of-week behavior of atmospheric ozone in three U.S. cities. J. Air & Waste Management Assoc. 53, 789-801.

[3] Sillman, S., D. He, C. Cardelino, and R. E. Imhoff (1997). The use of photochemical indicators to evaluate ozone-NOx-hydrocarbon sensitivity: Case studies from Atlanta, New York, and Los Angeles. J. Air & Waste Management Assoc., 47, 1030-1040.

1.2 Clean Air Act Section 182(b)(2) Requirements

Section 182(b)(2) of the Clean Air Act (CAA) requires that a federal Control Technique Guideline (CTG) issued between November 15, 1990, and the date of attainment include the date by which States subject to Section 182(b) must submit SIP revisions in response to the CTG to include reasonably available control technology (RACT) for each category of volatile organic compound (VOC) sources covered by a CTG.

RACT is defined as the lowest emissions limitation, that a particular source is capable of meeting, by the application of control technology that is reasonably available considering technological and economical feasibility (44 FR 53762; September 17, 1979). Documents useful in establishing RACT include Control Techniques Guidelines (CTGs), Alternative Control Technique guidance (ACT), Maximum Achievable Control Technology (MACT) standards, New Source Performance Standards (NSPS), and Best Available Control Technology (BACT) determinations. RACT requirements are included in the CAA to assure that significant source categories at major sources of ozone precursor emissions are controlled to a "reasonable" extent, but not necessarily to BACT levels expected of new major sources or major modifications to existing major sources; or to MACT required for major sources of hazardous air pollutants.

EPA addressed the Group IV source categories with promulgation of a "Notice of Final Determination and Availability of Final Control Techniques Guidelines" on October 7, 2008 [73 FR 58481]. States with ozone nonattainment areas classified as moderate or above as of that date were required to submit SIP revisions to EPA addressing these requirements on or before October 7, 2009. Source categories covered under the "Group IV" heading are:

- Miscellaneous metal and plastic parts coatings,
- Automobile and light-duty truck assembly coatings;
- Fiberglass boat manufacturing materials;
- Miscellaneous industrial adhesives; and
- Aerosol coatings.

EPA addressed the Group IV source category of "aerosol coating" under 40 CFR Part 59 (i.e., as a National VOC Emission Standard).

1.3 Conclusion

Georgia EPD undertook the task of reviewing existing VOC control measures for industry groups covered by the federal 2008 Group IV CTGs. This SIP revision contains a chapter for each Group IV CTG.

2.0 MISCELLANEOUS METAL AND PLASTIC PARTS SURFACE COATING

2.1 Regulatory Background - Federal

Miscellaneous metal and plastic parts surface coatings serve decorative, protective, and functional purposes. Coatings protect metal parts from corrosion by providing resistance to moisture, heat, and sometimes the outdoor elements. Plastic parts may be coated to provide color, texture, or protection, thus improving appearance and durability, and can also function to attenuate electromagnetic interference/radio frequency interference (EMI/RFI) signals, and to conceal mold lines and flaws in the substrate surface.

Metal Substrate, Not Including Pleasure Craft: There have been two federal actions that affect miscellaneous metal products surface coating operations prior to 2008. In June 1978, EPA issued a CTG document (1978 CTG) for controlling VOC emissions from surface coating of Miscellaneous Metal Parts and Products.[4] In January 2004, EPA promulgated *40 CFR Part 63 Subpart MMMM - National Emission Standards for Hazardous Air Pollutants* (NESHAP*) for Surface Coating of Miscellaneous Metal Parts and Products.*

Plastic Substrate, Not Including Pleasure Craft: For miscellaneous plastic products, prior to 2008, there have also been two Federal actions that affect surface coating operations. In 1988, the EPA issued a New Source Performance Standard (NSPS), *40 CFR Part 60 Subpart TTT - Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines* that applies to coating booths that began construction, reconstruction, or modification after January 8, 1986. The NESHAP for Plastic Parts and Products, *40 CFR Part 63 Subpart PPPP - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products*, was promulgated April 19, 1994.

The EPA issued an Alternative Control Techniques guideline in 1994 for VOC emissions from the surface coating of plastic parts in the automotive and other transportation equipment and business machine industries.

2.2 Regulatory Background - State

Metal Substrate, Not Including Pleasure Craft: Georgia EPD implemented Georgia Rule 391-3-1-.02(2)(ii) "VOC Emissions from Miscellaneous Metal Parts and Products" [a.k.a. Georgia Rule (ii)] to fulfill the VOC RACT requirements for the 1-hour ozone NAAQS.

Georgia Rule (ii) was based on the 1978 federal CTG, which did not specify an applicability threshold. Because of this, the applicability threshold for Georgia Rule (ii) has varied since November 1980. One difference in the emission standards between the

[4] Guideline Series. Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products. Publication No. EPA-450/2-78-015. U.S. EPA, June 1978.

1978 federal CTG and the emission standards specified in Georgia Rule (ii) is that the rule includes one more coating category than what is found in the CTG. The other coating categories, however, have low solvent coating technology emission limits identical to those specified in the 1978 federal CTG. Georgia Rule (ii) also goes beyond the 1978 federal CTG by specifying additional compliance options that were added by Georgia EPD in 1992.

The 1978 federal CTG did not specify RACT based on coating applicator and neither does Georgia Rule (ii). Additionally, Georgia Rule (ii) has historically included VOC emissions from solvent washing unless the used solvent is transferred to covered storage.

Plastic Substrate, Not Including Pleasure Craft: Georgia EPD implemented Georgia Rule 391-3-1-.02(2)(tt) "VOC Emissions from Major Sources" [a.k.a. Georgia Rule (tt)] to fulfill the VOC RACT requirements for the 1-hour ozone NAAQS for any major source of VOC emissions not covered by a more specific rule. This is used to implement case-by-case RACT analysis for determining control options and has been used in the past to cover the surface coating of plastic parts, products, and/or components. In order to meet the new CTG requirements for plastic substrate coatings, Georgia EPD has developed **a new state rule category** for miscellaneous surface coating of plastic parts and products and this new rule is Georgia Rule 391-3-1-.02(2)(vvv), or Georgia Rule (vvv).

Metal and Plastic Substrate-Pleasure Craft: Pleasure craft coating operations for metal parts fall under this federal CTG. Georgia EPD has used case-by-case RACT analysis under Georgia Rule (tt) to fulfill the VOC RACT requirements for the 1-hour ozone NAAQS for this surface coating category. Since there are no existing pleasure craft manufacturing facilities in the 20-county Atlanta ozone nonattainment area, EPD is making a negative declaration for this category of sources.

2.3 2008 CTG and Existing State Rules

In October 2008, EPA issued an updated CTG document for controlling VOC emissions from miscellaneous metal products surface coating operations. The following table indicates the miscellaneous metal and plastic parts and products covered under this CTG and the existing state rule used to regulate the category. Please note that automobile and transportation parts coating at a facility that is not an assembly plant was previously covered by Georgia Rule (ii) for the coating of miscellaneous metal parts or on a case-by-case basis using Georgia Rule (tt) for plastic parts. Assembly plants were covered under Georgia Rule (t) for automobile and light duty truck manufacturing.

Products, Parts, Components Covered by the 2008 Federal CTG	**Existing State Rule: Metal**	**Existing State Rule: Plastic**
Small farm machinery	Georgia Rule (ii)	Georgia Rule (tt)
Large farm machinery	Georgia Rule (ii)	Georgia Rule (tt)
Commercial Machinery and Equipment	Georgia Rule (ii)	Georgia Rule (tt)
Industrial Machinery and Equipment	Georgia Rule (ii)	Georgia Rule (tt)
Automotive or Transportation Equipment	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (ii) for all other automotive and transportation equipment	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (tt) for all other automotive and transportation equipment
Interior Automotive Parts	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (ii) for all other automotive and transportation equipment	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (tt) for all other automotive and transportation equipment
Exterior Automotive Parts	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (ii) for all other automotive and transportation equipment	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (tt) for all other automotive and transportation equipment
Construction Equipment	Georgia Rule (ii)	Georgia Rule (tt)
Motor Vehicle Accessories	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (ii) for all other automotive and transportation equipment	Georgia Rule (t) for automobile and light duty truck manufacturing Georgia Rule (tt) for all other automotive and transportation equipment
Bicycles	Georgia Rule (ii)	Georgia Rule (tt)
Sporting Goods	Georgia Rule (ii)	Georgia Rule (tt)
Toys	Georgia Rule (ii)	Georgia Rule (tt)
Recreational Vehicles	Georgia Rule (ii)	Georgia Rule (tt)
Pleasure Craft (Recreational Boats) *See* Note 1	Georgia Rule (tt)	Georgia Rule (tt)
Extruded Aluminum Structural Components	Georgia Rule (ii)	Georgia Rule (tt)
Railroad Cars	Georgia Rule (ii)	Georgia Rule (tt)
Heavier Vehicles[5]	Georgia Rule (ii)	Georgia Rule (tt)

[5] Heavier vehicles includes all vehicles that meet the definition of the term “other motor vehicles”, as defined in the National Emission Standards for Surface Coating of Automobile and Light-Duty Trucks at 40 CFR 63.3176.

Products, Parts, Components Covered by the 2008 Federal CTG	Existing State Rule: Metal	Existing State Rule: Plastic
Lawn and Garden Equipment	Georgia Rule (ii)	Georgia Rule (tt)
Business Machines	Georgia Rule (ii)	Georgia Rule (tt)
Laboratory and Medical Equipment	Georgia Rule (ii)	Georgia Rule (tt)
Electronic Equipment	Georgia Rule (ii)	Georgia Rule (tt)
Steel Drums	Georgia Rule (ii)	Georgia Rule (tt)
Metal Pipes	Georgia Rule (ii)	Georgia Rule (tt)
Other industrial and household products	Georgia Rule (ii) if it meets applicability of the rule, otherwise, Georgia Rule (tt)	Georgia Rule (tt)
Small Appliances	Georgia Rule (ii)	Georgia Rule (tt)
Fabricated Metal Products	Georgia Rule (ii)	Georgia Rule (tt)
Note 1: Pleasure Craft are vessels, which are manufactured or operated primarily for recreational purposes or leased, rented, or chartered to a person or business for recreational purposes. The owner or operator of such vessels shall be responsible for certifying that the intended use is for recreational purposes. Coating operations of pleasure craft or their parts and components applies for the purpose of refinishing, repairing, modification, or manufacturing of such craft. For purposes of this analysis this category shall also apply to establishments engaged in activities described in the United States Office of Management and Budget 1987 Standard Industrial Classification Manual, under Standard Industrial Classification (SIC) codes 3732-Boat Building and Repairing and 4493-Marinas. EPD assumes that pleasure craft falls under the exempted source category in Georgia Rule (ii).		

2.4 Does the Existing Georgia 1-hour Ozone RACT fulfill the 8-hour Ozone RACT for this Industry Sector?

Applicability: Tables 2.4.1 through 2.4.3 specify the existing VOC emission applicability thresholds for industries covered under this CTG:

Table 2.4.1 VOC Emission Applicability Thresholds – Metal, excluding pleasure craft

Atlanta Metro Area of Concern	Georgia Rule (ii) Applicability Threshold VOC (tpy)	2008 CTG Recommended Emission Threshold	EPA Blue Book Recommendations	Revised Georgia Rule (ii) Applicability Threshold VOC (tpy)
13-County	PTE: 10	Actual: 15 lbs/day	PTE: 10 tpy Actual: 15 lbs/day	PTE: 10 tpy
7-County	PTE: 100	Actual: 15 lbs/day	PTE: 10 tpy Actual: 15 lbs day	PTE: 10 tpy

Table 2.4.2 VOC Emission Applicability Thresholds – Plastic, excluding pleasure craft

Atlanta Metro Area of Concern	Georgia Rule (tt) Applicability Threshold VOC (tpy)	2008 CTG Recommended Emission Threshold	EPA Blue Book Recommendations	New Georgia Rule (vvv) Applicability Threshold VOC (tpy)
13-County	PTE: 10	Actual: 15 lbs/day	PTE: 10 tpy Actual: 15 lbs/day	PTE: 10 tpy
7-County	PTE: 100	Actual: 15 lbs/day	PTE: 10 tpy Actual: 15 lbs day	PTE: 10 tpy

Affected Owner/Operator: There are fifty one known affected owners/operators subject to Georgia Rule (ii). There are at least three known affected owners/operators subject to the new Georgia Rule (vvv) for plastic surface coating. There are no known affected owners/operators for pleasure craft coating operations.

Emission Standards-Surface Coating of Miscellaneous Metal Parts and Products: EPA recommends separate limits for baked coatings and air-dried coatings for 21 categories of coating used on metal parts. A comparison of the 2008 federal CTG with existing emission standards in Georgia Rule (ii) is illustrated in the following tables. Table 2.4.4 compares VOC limits in pounds of VOC per gallon of coating, while Table 2.4.5 compares the solids equivalent limit or pounds of VOC per gallon of coating solids.

Table 2.4.4 VOC Coating Limits for Metal Substrates, Excluding Pleasure Craft

	Air Dried			Baked		
Coating Category	**2008 Federal CTG** **lb VOC/gal coating**	**Existing Georgia State Rule** **lb VOC/gal coating**	**GA Rule As Stringent?**	**2008 federal CTG** **lb VOC/gal coating**	**Existing Georgia State Rule** **lb VOC/gal coating**	**GA Rule As Stringent?**
General One Component	2.8	3.5	**No.**	2.3	3.0	**No.**
General Multi Component	2.8	3.5	**No.**	2.3	3.0	**No.**
Military Specification	2.8	3.5	**No.**	2.3	3.0	**No.**
Drum Coating, New, Exterior	2.8	3.5	**No.**	2.8	3.0	**No.**
Camouflage	3.5	3.5	Yes.	3.5	3.0	Yes.
Electric-Insulating Varnish	3.5	3.5	Yes.	3.5	3.0	Yes.
Etching filler	3.5	3.5	Yes.	3.5	3.0	Yes.
Extreme High-Gloss	3.5	3.5	Yes.	3.0	3.0	Yes.
Extreme Performance	3.5	3.5	Yes.	3.0	3.0	Yes.
Heat-Resistant	3.5	3.5	Yes.	3.0	3.0	Yes.
High Temperature	3.5	3.5	Yes.	3.5	3.0	Yes.
Metallic	3.5	3.5	Yes.	3.5	3.0	Yes.
Mold-Seal	3.5	3.5	Yes.	3.5	3.0	Yes.
Pan Backing	3.5	3.5	Yes.	3.5	3.0	Yes.
Prefabricated Architectural Multi-component	3.5	3.5	Yes.	2.3	3.0	**No.**
Prefabricated Architectural One-Component	3.5	3.5	Yes.	2.3	3.0	**No.**
Pretreatment Coatings	3.5	3.5	Yes.	3.5	3.0	Yes.

Table 2.4.4 VOC Coating Limits for Metal Substrates, Excluding Pleasure Craft						
	Air Dried			Baked		
Coating Category	**2008 Federal CTG** **lb VOC/gal coating**	**Existing Georgia State Rule** **lb VOC/gal coating**	**GA Rule As Stringent?**	**2008 federal CTG** **lb VOC/gal coating**	**Existing Georgia State Rule** **lb VOC/gal coating**	**GA Rule As Stringent?**
Repair and Touch Up	3.5	3.5	Yes.	3.0	3.0	Yes.
Silicone Release	3.5	3.5	Yes.	3.5	3.0	Yes.
Solar-Absorbent	3.5	3.5	Yes.	3.0	3.0	Yes.
Vacuum-Metalizing	3.5	3.5	Yes.	3.5	3.0	Yes.
Drum Coating, New, Interior	3.5	3.5	Yes.	3.5	3.0	Yes.
Drum Coating, Reconditioned, Exterior	3.5	3.5	Yes.	3.5	3.0	Yes.
Drum Coating, Reconditioned, Interior	4.2	3.5	Yes.	4.2	3.0	Yes.
High Performance Architectural	6.2	6.2	Yes.	6.2	6.2	Yes.

Table 2.4.5-VOC Coating Limits for Metal Substrates, Excluding Pleasure Craft						
	Air Dried			Baked		
Coating Category	**2008 federal CTG** **lb VOC/gal coating solids**	**Existing State Rule** **lb VOC/gal coating solids**	**GA Rule As Stringent?**	**2008 federal CTG** **lb VOC/gal coating solids**	**Existing State Rule** **lb VOC/gal coating solids**	**GA Rule As Stringent?**
General One Component	4.52	6.67	**No.**	3.35	5.06	**No.**
General Multi Component	4.52	6.67	**No.**	3.35	5.06	**No.**
Military Specification	4.52	6.67	**No.**	3.35	5.06	**No.**
Drum Coating, New, Exterior	4.52	6.67	**No.**	4.52	5.06	**No.**
Camouflage	6.67	6.67	Yes.	6.67	5.06	Yes.
Electric-Insulating Varnish	6.67	6.67	Yes.	6.67	5.06	Yes.
Etching filler	6.67	6.67	Yes.	6.67	5.06	Yes.
Extreme High-Gloss	6.67	6.67	Yes.	5.06	5.06	Yes.
Extreme Performance	6.67	6.67	Yes.	5.06	5.06	Yes.
Heat-Resistant	6.67	6.67	Yes.	5.06	5.06	Yes.

Table 2.4.5-VOC Coating Limits for Metal Substrates, Excluding Pleasure Craft						
	Air Dried			Baked		
Coating Category	**2008 federal CTG** **lb VOC/gal coating solids**	**Existing State Rule** **lb VOC/gal coating solids**	**GA Rule As Stringent?**	**2008 federal CTG** **lb VOC/gal coating solids**	**Existing State Rule** **lb VOC/gal coating solids**	**GA Rule As Stringent?**
High Temperature	6.67	6.67	Yes.	6.67	5.06	Yes.
Metallic	6.67	6.67	Yes.	6.67	5.06	Yes.
Mold-Seal	6.67	6.67	Yes.	6.67	5.06	Yes.
Pan Backing	6.67	6.67	Yes.	6.67	5.06	Yes.
Prefabricated Architectural Multi-component	6.67	6.67	Yes.	3.35	5.06	**No.**
Prefabricated Architectural One-Component	6.67	6.67	Yes.	3.35	5.06	**No.**
Pretreatment Coatings	6.67	6.67	Yes.	6.67	5.06	Yes.
Silicone Release	6.67	6.67	Yes.	6.67	5.06	Yes.
Solar-Absorbent	6.67	6.67	Yes.	5.06	5.06	Yes.
Vacuum-Metalizing	6.67	6.67	Yes.	6.67	5.06	Yes.
Drum Coating, New, Interior	6.67	6.67	Yes.	6.67	5.06	Yes.
Drum Coating, Reconditioned, Exterior	6.67	6.67	Yes.	6.67	5.06	Yes.
Drum Coating, Reconditioned, Interior	9.78	6.67	Yes.	9.78	5.06	Yes.
High Performance Architectural	38.0	NA*	**No.**	38.0	NA*	**No.**

*Existing emission standards in Georgia Rule (ii) do not allow for the solids equivalent method of compliance for high performance architectural coatings.

Several coating categories in both the air-dried and the baked coating processes were as stringent as the existing Georgia Rule (ii). For those that were not, Georgia Rule (ii) has been updated to match the 2008 CTG VOC limits as listed in the Tables 2.4.4 and 2.4.5. In cases where compliance with a solids equivalent standard was not allowed in the existing rule (such as high performance architectural coatings), a solids equivalent standard was not included in the updated rule.

Additionally, EPA is recommending VOC content limits for certain motor vehicle materials used at facilities that are not automobile or light-duty truck assembly coating facilities. At these facilities, metal coating operations are currently subject to the general VOC limits of Georgia Rule (ii), and plastic coating operations have been evaluated on a case-by-case basis under Georgia Rule (tt). Georgia EPD has included VOC content

limits for motor vehicle materials in the revised Georgia Rule (ii) for metal parts and in the new Georgia Rule (vvv) for plastic parts.

Emission Standards-Surface Coating of Miscellaneous Plastic Parts and Products:

The 2008 federal CTG for Miscellaneous Plastic Parts and Products specifies VOC content limits for the surface coating of plastic parts and products that fall in the category of automotive/transportation equipment or business machines parts. Those that are not part of automotive/transportation equipment or business machines category have a separate VOC content limit specified in the CTG. Georgia did not have a rule in place specifically for the coating of plastic parts and products, but instead evaluated these sources on a case-by-case basis under Georgia Rule (tt). Illustrated in Tables 2.4.6 through Table 2.4.8 below is a comparison of the 2008 federal CTG with the emission limits from case-by-case determinations as required by Georgia Rule (tt). These emission limits have been incorporated into the permits of affected sources and are not specified in Georgia Rule (tt). The permit limits are noted with an asterisk (*) for clarity.

Table 2.4.6 Miscellaneous Plastic Parts Surface Coating, Excluding Pleasure Craft

Coating Category	**2008 Federal CTG** **lb VOC/gal coating**	**Georgia Rule (tt)** **lb VOC/gal coating**
General One Component	2.3	NA
General Multi Component	3.5	NA
Military Specification	2.8 (1-pack) 3.5 (1-pack)	NA
Metallic	3.5	NA
Extreme Performance (2-pack)	3.5	NA
Multi-Colored Coatings	5.7	NA
Mold Seal	6.3	NA
Optical Coatings	6.7	NA
Vacuum-Metalizing	6.7	NA
Electric Dissipating Coatings and Shock-Free Coatings	6.7	NA

Table 2.4.7 Automotive/Transportation and Business Machine Plastic Parts, Excluding Pleasure Craft			
Coating Category	**2008 federal CTG** **lb VOC/gal coating**	**Georgia Rule (tt)** **lb VOC/gal coating**	**Case-by-Case As Stringent?**
Automotive /Transportation Coatings *See Note 2 below*			
I. High Bake Coatings-Interior and Exterior Parts			
Flexible Primer	4.5	NA	NA
Non-flexible Primer	3.5	NA	NA
Base Coats	4.3	NA	NA
Clear Coat	4.0	NA	NA
Non-basecoat/clear coat	4.3	NA	NA
II. Low Bake/Air Dried Coatings-Exterior Parts			
Primers	4.8	5.0*	**No.**
Basecoat	5.0	4.0*	Yes.
Clear coats	4.5	4.0*	Yes.
Non-basecoat/clearcoat	5.0	4.0*	Yes.
III. Low Bake/Air Dried Coatings-Interior Parts	5.0	NA	NA
IV. Touchup and Repair Coatings	5.2	NA	NA
Business Machine Coatings			
Primers	2.9	NA	NA
Topcoat	2.9	NA	NA
Texture Coat	2.9	NA	NA
Fog Coat	2.2	NA	NA
Touchup and Repair	2.9	NA	NA
Note 2: For red and black automotive coatings, except touchup and repair coatings, the recommended limit is determined by multiplying the appropriate limit in this table by 1.15.			

Table 2.4.8 Automotive/Transportation and Business Machine Plastic Parts, Excluding Pleasure Craft			
Coating Category	**2008 federal CTG** **lb VOC/gal coating solids as applied**	**Georgia Rule (tt)** **lb VOC/gal coating as applied**	**Case-by-Case As Stringent?**
Automotive /Transportation Coatings *See Note 2*			
I. High Bake Coatings-Interior and Exterior Parts			
Flexible Primer	11.58	15.5*	**No.**
Non-flexible Primer	6.67	15.5*	**No.**
Base Coats	10.34	8.76*	Yes.
Clear Coat	8.76	8.76*	Yes.
Non-basecoat/clear coat	10.34	8.76*	Yes.
II. Low Bake/Air Dried Coatings-Exterior Parts			
Primers	13.80	23.8-34.0*	NA
Basecoat	15.59	13.4-19.3*	NA
Clearcoat	11.58	13.4-19.3*	NA
Non-basecoat/clearcoat	15.59	13.4-19.3*	NA
III. Low Bake/Air Dried Coatings-Interior Parts	15.59	NA	NA

Table 2.4.8 Automotive/Transportation and Business Machine Plastic Parts, Excluding Pleasure Craft			
Coating Category	**2008 federal CTG** **lb VOC/gal coating solids as applied**	**Georgia Rule (tt)** **lb VOC/gal coating as applied**	**Case-by-Case As Stringent?**
IV. Touchup and Repair Coatings	17.72	NA	NA
Business Machine Coatings			
Primers	4.80	NA	NA
Topcoat	4.80	NA	NA
Texture Coat	4.80	NA	NA
Fog Coat	4.80	NA	NA
Touchup and Repair	4.80	NA	NA
Note 2: For red and black automotive coatings, except touchup and repair coatings, the recommended limit is determined by multiplying the appropriate limit in this table by 1.15.			

New Georgia Rule (vvv) adopts the most stringent VOC content limit whether it comes from federal CTG or a case-by-case RACT determination for an existing source in Georgia. EPA is also recommending VOC content limits for certain motor vehicle materials used at facilities that are not automobile or light-duty truck assembly coating facilities. Georgia EPD is including these VOC content limits in the new Georgia Rule (vvv) as well as such coating operations that may take place on plastic substrates not located at an automobile or light-duty truck assembly plant.

Emission Standards-Pleasure Craft Coating Operations: EPA has established separate VOC content limits for surface coating of pleasure craft (recreational boats) for eight categories of coatings that could be used on metal **or** plastic substrates. Because of the uncertainty of the technical feasibility of the requirements in the pleasure craft CTG, and since there are no pleasure craft facilities in the nonattainment area, Georgia EPD is making a negative declaration for this source category. There are no existing pleasure craft facilities in the 20-county metro Atlanta ozone nonattainment area. VOC limits for pleasure craft will be addressed when and if a facility submits a permit application to construct and operate a pleasure craft manufacturing facility within the metro Atlanta nonattainment area.

Compliance Methods:
Georgia EPD's updated Georgia Rule (ii), and new Georgia Rule (vvv) incorporates the following compliance options for these categories.

2008 Federal CTG Options	**State Rule – Georgia Rule (ii)** **New State Rule – Georgia Rule (vvv)** **Options**
The application of low solvent coating technology where each and every coating meets the limit expressed in pounds VOC per gallon of coating, excluding water.	The application of low solvent coating technology where each and every coating meets the limit expressed in pounds VOC per gallon of coating, excluding water. Additionally, the rules allow the application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit expressed in pounds VOC per gallon of coating solids; averaging across lines is not allowed.
The application of low-VOC coatings and add-on control equipment on a coating unit.	This option is not spelled out in the rule, but is completely acceptable as a compliance option as long as the coating limits specified in the rule are met.
Use of add-on control equipment with an overall control efficiency of 90 percent in lieu of using low-VOC coatings and specified application methods.	Control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that **90 percent** of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed and that overall VOC emissions do not exceed the solids equivalent limit.

Procedures for Testing and Monitoring: Georgia EPD's **Procedures for Testing and Monitoring** [PTM] specifies testing and monitoring requirements for various state rules. The table below illustrates the section changes that were necessary for the new rules:

PTM Section	**State Rule**	**Notes**
2.052	Georgia Rule (ii)	No changes are necessary
2.126	Georgia Rule (vvv)	New Section

Conclusion: Georgia EPD is implementing the 2008 Federal CTG by updating and adding the following state rules with a compliance date of January 1, 2015:

State Rule Reference	Adoption Date	Compliance Date for Existing Sources*
Georgia Rule (ii) [updated]	1/25/2012	1/1/2015
Georgia Rule (vvv) [new]	1/25/2012	1/1/2015

Miscellaneous Metal Parts:

Prior to January 1, 2015, facilities that coat miscellaneous metal parts, located in the original 13-county nonattainment area whose potential VOC emissions are greater than 10 tons per year will be subject to the original requirements of Rule (ii). Facilities that are located in the seven additional nonattainment counties will be subject to the original requirements of Rule (ii) if their potential VOC emissions are greater than 100 tons per year.

Beginning January 1, 2015, the rule revisions will apply to facilities that coat miscellaneous metal parts within the entire 20-county nonattainment area for those facilities with potential VOC emissions greater than 10 tons per year. The original requirements will continue to apply to counties outside of the nonattainment area for facilities with VOC emissions greater than 100 tons per year.

Miscellaneous Plastic Parts:

Prior to January 1, 2015, facilities that coat miscellaneous plastic parts, located in the 20-county nonattainment area will continue to comply with the provisions of Georgia Rule (tt), if applicable.

Beginning January 1, 2015, the new rule will apply to facilities in the entire 20-county nonattainment area with potential VOC emissions greater than 10 tons per year.

Because the metro Atlanta area has attained the 1997 ozone NAAQS without these rules in place, if the area is re-designated attainment before January 1, 2015, and those counties continue to maintain the standard, the revisions will no longer apply. In the event that the 1997 ozone standard is violated in the specified nonattainment counties, the revised requirements will only be reinstated if they are determined to be a necessary measure to meet the requirements of the maintenance contingency plan.

3.0 AUTOMOBILE AND LIGHT-DUTY TRUCK ASSEMBLY COATINGS

3.1 Regulatory Background - Federal

There have been four federal actions that affect automobile and light-duty truck assembly coating operations. In May 1977, EPA issued a CTG document (1977 CTG) for controlling VOC emissions from surface coating of automobiles and light-duty trucks.[6] In December 1980, EPA promulgated an NSPS for automobile and light-duty truck assembly coating operations (1980 NSPS).[7] In April 2004, EPA promulgated a NESHAP for Surface Coating of Automobiles and Light-Duty Trucks (2004 NESHAP).[8] In September 2008, EPA promulgated an updated CTG document (2008 CTG) for this source category.

The 2008 CTG provides control recommendations for reducing VOC emissions stemming from the use of coatings in automobile and light-duty truck[9] assembly coating operations. The automobile and light-duty truck assembly coatings product category under Section 183(e) of the CAA includes the primary coatings[10] that are applied to (1) new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty truck bodies, and (2) other parts that are coated along with these bodies or body parts. The category also includes additional coatings applied during the vehicle assembly process.[11] Automobile and light-duty truck assembly coatings most commonly are applied at automobile or light-duty truck assembly plants. However, this 183(e) category also includes coatings used in facilities that perform these operations on a contractual basis.

In addition to the coating applications described above, automobile and light-duty truck assembly coating facilities may have separate coating lines on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks (e.g., application of spray primer, color and clear coat to fascia or bumpers) or to aftermarket repair or replacement parts for automobiles or light-duty trucks. The separate coating of

[6] Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks. Publication No. EPA-450/2-77-008. U.S. EPA, May 1977.

[7] Standards of Performance for Automobile and Light-Duty Truck Surface Coating Operations. 40 CFR part 60, subpart MM.

[8] National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks. 40 CFR part 63, subpart IIII.

[9] Automobile means a motor vehicle designed to carry up to eight passengers, excluding vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property. Light-duty truck means vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500 lbs or less.

[10] The primary coatings are electrodeposition primer, primer-surfacer, topcoat, and final repair.

[11] Coatings applied during the vehicle assembly process include glass bonding primer, adhesives, cavity wax, sealer, deadener, gasket/gasket sealing material, underbody coating, trunk interior coating, bedliner, weatherstrip adhesive, and lubricating waxes/compounds.

these other parts and aftermarket or replacement parts is included in the Miscellaneous Metal Products and Plastic Parts Coatings categories under Section 183(e). States may determine whether it is appropriate to give these facilities the option of having their separate coating of other parts and aftermarket repair or replacement parts covered under the State miscellaneous metal and plastic parts coatings RACT rule or the State automobile and light-duty truck assembly coating RACT rule.

3.2 Regulatory Background - State

Georgia EPD implemented Georgia Rule 391-3-1-.02(2)(t) "VOC Emissions from Automobile and Light-Duty Truck Manufacturing" [a.k.a. Georgia Rule (t)] to fulfill the VOC RACT requirements for the 1-hour ozone NAAQS.

3.3 Does the Existing Georgia 1-hour Ozone RACT fulfill the 8-hour Ozone RACT for this Industry Sector?

Applicability: Table 3.3.1 specifies the existing VOC emission applicability thresholds for this industry category.

Table 3.3.1 VOC Emission Applicability Thresholds

Atlanta Metro Area of Concern	Georgia Rule (t) Applicability Threshold VOC (tpy)	2008 CTG Recommended Emission Threshold
13-County	Actual: 15 lbs/day	Actual: 15 lbs/day
7-County	PTE: 100	Actual: 15 lbs/day

Georgia EPD will retain the existing VOC emissions threshold for the 13-county Atlanta area of concern, but is lowering the existing VOC emissions threshold for the 7-county Atlanta area of concern from 100 tpy to 15 lbs/day as specified in the 2008 CTG.

Applicable Affected Units: The Atlanta metro area no longer includes automobile and light-duty truck assembly plants. General Motors operated an assembly plant in DeKalb County (AIRS #08900086) which permanently shutdown. The last day of production at this plant was September 26, 2008. General Motors also operated an assembly plant in Fulton County (AIRS #12100124) which permanently shutdown. The last day of production for this plant was August 6, 1990. Ford Motor Company operated an assembly plant in Fulton County (AIRS #12100364), and this plant closed October 27, 2006.

Emission Standards: Georgia EPD has updated the emission standards in Georgia Rule (t) to be as stringent as the 2008 federal CTG. Georgia EPD has not updated the emission standards in Georgia Rule (t) to account for the less stringent emissions standards noted in Table 3.3.2. A comparison of the 2008 federal CTG with existing emission standards in Georgia Rule (t) is illustrated in the following tables:

Table 3.3.2. Comparison Of The 2008 Federal CTG With Existing Emission Standards In Georgia Rule (t)			
Process or Material	**Existing VOC Limit**	**2008 CTG VOC Limit**	**Notes**
Electrodeposition primer	1.2 lb VOC/gal, less water, as a monthly weighted average	0.7 lb/gal coating solids as applied or other based on formula (lb/gal coating solids as applied)	State rule is less stringent
Primer-Surface Operations	15.1 lbs VOC/gal of applied coating solids as a daily weighted average	12.0 lbs VOC/gal of deposited solids on a daily weighted averaged basis	State rule is less stringent
Topcoat operations	15.1 lbs VOC/gal of applied coating solids as a daily weighted average	12.0 lbs VOC/gal of deposited solids on a daily weighted averaged basis	State rule is less stringent
Final Repair	4.8 lbs VOC/gal of coating. Or 13.8 lbs VOC/gal of coating solids sprayed, as a daily weighted average	4.8 lbs VOC/gal of coating, less water, on a daily weighted average basis or as an occurrence weighted average.	Equal stringency
Combined Primer-Surfacer and Topcoat Operations	NA	12.0 lbs VOC/gal of deposited solids on a daily weighted averaged basis	
Sealer	1.0 lbs VOC/gal of sealer, less water OR 3.5 lbs VOC/gal sealer, less water depending on annual usage	5.42 lbs VOC/gal of sealer, less water (650 grams of VOC/liter of sealer)	State rule is more stringent.
All adhesives except body glass adhesive	3.5 lbs VOC/gal of adhesive, less water	2.08 lbs VOC/gal of adhesive, less water (250 grams of VOC/liter of adhesive, less water)	State rule is less stringent.
Adhesive to bond body glass to the body	1.0 lbs VOC/gal of adhesive, less water	2.08 lb VOC/gal of adhesive, less water (250 grams of VOC/liter of adhesive, less water)	State rule is more stringent.

Table 3.3.2. Comparison Of The 2008 Federal CTG With Existing Emission Standards In Georgia Rule (t)			
Process or Material	**Existing VOC Limit**	**2008 CTG VOC Limit**	**Notes**
Weatherstrip adhesive	3.5 lbs VOC/gal of material, less water	6.259 lbs VOC/gal of adhesive, less water (750 grams of VOC/liter of adhesive, less water)	State rule is more stringent.
Cleaner	6.9 lbs VOC/gal of cleaner, less water	NA	
Glass Bonding Primer	5.5 lbs VOC/gal of primer, less water	7.51 lbs VOC/gal of primer, less water (900 grams VOC/liter of primer, less water).	State rule is more stringent.
Clear Coating to Fascias	4.4 lbs VOC/gal of coating.	NA	
Base Coating to Fascias	4.4 lbs VOC/gal of coating.	NA	
Cavity Wax	3.5 lbs VOC/gal of material, less water	5.42 lbs VOC/gal of material, less water (650 grams/liter)	State rule is more stringent.
Deadener	3.5 lbs VOC/gal of material, less water	5.42 lbs VOC/gal of material, less water (650 grams/liter, less water)	State rule is more stringent.
Gasket/Gasket Sealing Material	3.5 lbs VOC/gal of material, less water	1.669 lbs VOC/gal of material, less water (200 grams/liter, less water)	State rule is less stringent
Underbody Coating	3.5 lbs VOC/gal of material, less water	5.42 lbs VOC/gal of material, less water (650 grams/liter)	State rule is more stringent.
Interior coating	3.5 lbs VOC/gal of material, less water	5.42 lbs VOC/gal of material, less water (650 grams/liter)	State rule is more stringent.
Bedliner	3.5 lbs VOC/gal of material, less water	1.699 lbs VOC/gal of material, less water (200 grams/liter, less water)	State rule is less stringent
Lubricating wax/compound	3.5 lbs VOC/gal of material, less water	5.842 lbs VOC/gal of material, less water (700 grams/liter, less water)	State rule is more stringent.

Compliance Methods: Georgia EPD recommends no change to compliance methods specified in Georgia Rule (t) based on a comparison of the 2008 federal CTG and existing Georgia Rule (t).

Category	2008 Federal CTG	State Rule – Georgia Rule (t)
Electrophoretic Applied Prime Operation	Monthly Weighted Average as provided in NSPS MM.	Monthly Weighted Average
Primer-Surfacer Operations; Topcoat Operations; Combined Primer-Surfacer and Topcoat Operations	Daily Weighted Average as determined by the Procedures in the Revised Automobile Topcoat Protocol.	Daily Weighted Average
Final Repair Operations	Daily Weighted Average	*Low solvent coating use; or *Daily weighted average on a solids equivalent basis.
Sealer	grams of VOC per liter of coating excluding water and exempt compounds, as applied	pounds of VOC per gallon, excluding water, as applied
Adhesive	grams of VOC per liter of coating excluding water and exempt compounds, as applied	pounds of VOC per gallon excluding water, as applied.
Cleaner		pounds of VOC per gallon excluding water, as applied
Glass Bonding Primer	grams of VOC per liter of coating excluding water and exempt compounds, as applied	pounds of VOC per gallon excluding water, as applied
Clear Coating to Fascias		pounds of VOC per gallon excluding water, as applied
Base Coating to Fascias		pounds of VOC per gallon excluding water, as applied, on a daily weighted average basis.

Procedures for Testing and Monitoring: No changes are prescribed for PTM Sections 2.040 and 2.112.

Conclusion: Georgia EPD adopted revisions to Rule Georgia Rule (t) for the 20-county Atlanta ozone nonattainment area on January 25, 2012.

Prior to January 1, 2015, automobile and light-duty truck manufacturing facilities located in the original 13-county nonattainment area whose actual VOC emissions are greater than 2.7 tons per year (l5 pounds per day) will be subject to the original requirements of Georgia Rule (t). Facilities that are located in the seven additional nonattainment counties will be subject to the original requirements if their potential VOC emissions are greater than 100 tons per year.

Beginning January 1, 2015, the rule revisions will apply to automobile and light-duty truck manufacturing facilities within the entire 20-county nonattainment area with actual VOC emissions greater than 2.7 tons per year (l5 pounds per day). The original requirements will continue to apply to counties outside of the nonattainment area for facilities with VOC emissions greater than 100 tons per year.

Because the metro Atlanta area has attained the 1997 ozone NAAQS without these rules in place, if the area is re-designated attainment before January 1, 2015, and those counties continue to maintain the standard, the revisions will no longer apply. In the event that the 1997 ozone standard is violated in the specified nonattainment counties, the revised requirements will only be reinstated if they are determined to be a necessary measure to meet the requirements of the maintenance contingency plan.

4.0 MISCELLANEOUS INDUSTRIAL ADHESIVES

4.1 Regulatory Background - Federal

There are no previous federal actions that affect miscellaneous industrial adhesive application operations. This category includes adhesives (including adhesive primers used in conjunction with certain types of adhesives) used at industrial manufacturing and repair facilities for a wide variety of products and equipment that operate adhesive application processes. This category does not include adhesives that are addressed by CTGs issued under Section 183(e) for aerospace coatings; metal furniture coatings; large appliance coatings; flat wood paneling coatings; paper, film, and foil coatings; offset lithographic printing and letterpress printing; flexible packaging printing, coil coating, fabric coating, and rubber tire manufacturing. Motor vehicle adhesives, glass bonding primers, and weatherstrip adhesives that are used at a facility that is not an automobile or light-duty truck assembly coatings facility, are addressed in this Section 183(e) category.

4.2 Regulatory Background - State

Georgia EPD implemented Georgia Rule 391-3-1-.02(2)(tt) "VOC Emissions from Major Sources" [a.k.a. Georgia Rule (tt)] to fulfill the VOC RACT requirements for the 1-hour ozone NAAQS. Georgia Rule (tt), a case-by-case RACT analysis, was implemented for industrial adhesive applications not covered by another Georgia Rule. Georgia EPD has developed **a new state rule category** for miscellaneous industrial adhesives and this new rule is Georgia Rule 391-3-1-.02(2)(yyy) or Georgia Rule (yyy).

4.3 Does the Existing Georgia 1-hour Ozone RACT fulfill the 8-hour Ozone RACT for this Industry Sector?

Applicability: Tables 4.3.1 specifies the existing VOC emission applicability thresholds for industries covered under this CTG:

Table 4.3.1 VOC Emission Applicability Thresholds

Atlanta Metro Area of Concern	Georgia Rule (tt) Applicability Threshold VOC (tpy)	2008 CTG Recommended Emission Threshold	New Georgia Rule (vvv) Applicability Threshold VOC (tpy)
13-County	PTE: 25	Actual: 15 lbs/day	Actual: 15 lbs/day
7-County	PTE: 100	Actual: 15 lbs/day	Actual: 15 lbs/day

Affected Owner/Operator: There are no known affected owners/operators subject to the new Georgia Rule (yyy) for miscellaneous industrial adhesives.

Emission Standards:- EPA has separate VOC content limits for numerous industrial adhesive categories. Georgia EPD's new Georgia Rule (yyy) incorporates the federal CTG VOC Content limits for this category.

Compliance Methods:

2008 Federal CTG	New State Rule – Georgia Rule (yyy)
The use of low-VOC content adhesives and specified application methods with good adhesive transfer efficiency	New subparagraphs 4 and 5.
Use of a combination of low-VOC adhesives, specified application methods, and add-on controls	New subparagraph 8.
Minimum overall control efficiency of 85%	New subparagraph 8.

Procedures for Testing and Monitoring: Georgia EPD's PTM has been updated by adding new section 2.127 for this federal CTG.

Conclusion: EPD has adopted the new Georgia Rule (yyy) for the 20-county Atlanta ozone nonattainment area on January 25, 2012.

Prior to January 1, 2015, facilities that use miscellaneous industrial adhesives, located in the 20-county nonattainment area will continue to comply with the provisions of Georgia Rule (tt), if applicable.

Beginning on or after January 1, 2015, the new rule will apply to facilities in the entire 20-county nonattainment area with actual VOC emissions greater than 2.7 tons per year (15 pounds per day).

Because the metro Atlanta area has attained the 1997 ozone NAAQS without these rules in place, if the area is re-designated attainment before January 1, 2015, and those counties continue to maintain the standard, this rule will no longer apply. In the event that the 1997 ozone standard is violated in the specified nonattainment counties, the requirements will only be reinstated if they are determined to be a necessary measure to meet the requirements of the maintenance contingency plan.

5.0 FIBERGLASS BOAT MANUFACTURING MATERIALS

5.1 Regulatory Background - Federal

The EPA has not published a previous CTG for fiberglass boat manufacturing materials. The EPA published an assessment of VOC emissions from fiberglass boat manufacturing in 1990, and this assessment defined the nature and scope of VOC emissions from this industry. In 2001, EPA promulgated a NESHAP for Boat Manufacturing, 40 CFR Part 63, Subpart VVV. EPA developed a CTG for this sector in 2008 after reviewing the 1990 VOC assessment, the 2001 NESHAP, existing California district and other State VOC emission reduction approaches, and other information obtained since the issuance of the 2001 NESHAP.

5.2 Regulatory Background - State

Georgia EPD implemented case-by-case RACT analysis, under Georgia Rule 391-3-1-.02(2)(tt) "VOC Emissions from Major Sources" [a.k.a. Georgia Rule (tt)] to fulfill the VOC RACT requirements for the 1-hour ozone NAAQS for fiberglass boat manufacturing. Georgia EPD has developed **a new state rule category** for fiberglass boat manufacturing, and this new rule is Georgia Rule 391-3-1-.02(2)(zzz) or Georgia Rule (zzz).

5.3 Does the Existing Georgia 1-hour Ozone RACT fulfill the 8-hour Ozone RACT for this Industry Sector?

Applicability: Tables 5.3.1 specifies the existing VOC emission applicability thresholds for industries covered under this CTG:

Table 5.3.1 VOC Emission Applicability Thresholds

Atlanta Metro Area of Concern	Georgia Rule (tt) Applicability Threshold VOC (tpy)	2008 CTG Recommended Emission Threshold	New Georgia Rule (zzz) Applicability Threshold VOC (tpy)
13-County	PTE: 25	Actual: 15 lbs/day	Actual: 15 lbs/day
7-County	PTE: 100	Actual: 15 lbs/day	Actual: 15 lbs/day

Affected Owner/Operator: There are no known affected owners/operators subject to the new Georgia Rule (zzz) for fiberglass boat manufacturing.

Emission Standards:- EPA has established VOC content limits for fiberglass boat manufacturing materials. Georgia did not have a rule in place specifically for fiberglass boat manufacturing materials, but instead relied on Georgia Rule (tt) to fulfill the VOC RACT requirements. Georgia EPD's new Georgia Rule (zzz) incorporates the federal CTG VOC Content limits for this category.

Compliance Methods: The compliance method is equivalent to 40 CFR Part 63 Subpart VVV, and Georgia EPD has adopted these compliance methods for the new Georgia Rule (zzz).

Procedures for Testing and Monitoring: Georgia EPD's PTM has been updated by adding new section 2.129 for this federal CTG.

Conclusion: Georgia EPD has adopted the new Georgia Rule (zzz) for the 20-county Atlanta ozone nonattainment area on January 25, 2012.

Prior to January 1, 2015, facilities that use miscellaneous industrial adhesives and are located in the 20-county nonattainment area will continue to comply with the provisions of Georgia Rule (tt), if applicable.

Beginning on or after January 1, 2015, the new rule will apply to facilities in the entire 20-county nonattainment area with actual VOC emissions greater than 2.7 tons per year (15 pounds per day).

Because the metro Atlanta area has attained the 1997 ozone NAAQS without these rules in place, if the area is re-designated attainment before January 1, 2015, and those counties continue to maintain the standard, this rule will no longer apply. In the event that the 1997 ozone standard is violated in the specified nonattainment counties, the requirements will only be reinstated if they are determined to be a necessary measure to meet the requirements of the maintenance contingency plan.

APPENDIX A

RULE LANGUAGE

APPENDIX B

REVISIONS TO GEORGIA'S *PROCEDURES FOR TESTING AND MONITORING AIR POLLUTANTS*

APPENDIX C

POTENTIALLY AFFECTED SOURCE LISTING